EURONEXT

10 YEARS SINCE IPO

2023

UNIVERSAL REGISTRATION DOCUMENT

Including the Annual Financial Statements

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DR Items above in the contents of the Universal Registration Document with the symbol 'DR' concern the Directors' Report within the meaning of Article 2:391 of the Dutch Civil Code

2023 UNIVERSAL REGISTRATION DOCUMENT

including the Annual Financial Statements

Euronext N.V. (the "Company" or "Euronext" and together with its subsidiaries, the "Group") is a Dutch public company with limited liability (naamloze vennootschap), whose ordinary shares are admitted to listing and trading on regulated markets in the Netherlands, France, Belgium and Portugal. The applicable regulations with respect to public information and protection of investors, as well as the commitments made by the Company to securities and market authorities, are described in this Universal Registration Document (the "Universal Registration Document").

In addition to historical information, this Universal Registration Document includes forward-looking statements.

The forward-looking statements are generally identified by the use of forward-looking words, such as "anticipate", "believe", "estimate", "expect", "intend", "plan", "project", "predict", "target", "will", "should", "may" or other variations of such terms, or by discussion of strategy. These statements relate to Euronext's future prospects, developments and business strategies and are based on analyses or forecasts of future results and estimates of amounts not yet determinable. These forward-looking statements represent the view of Euronext only as of the dates they are made, and Euronext disclaims any obligation to update forward-looking statements, except as may be otherwise required by law. The forward-looking statements in this Universal Registration Document involve known and unknown risks, uncertainties and other factors that could cause Euronext's actual future results, performance and achievements to differ materially from those forecasted or suggested herein. These include changes in general economic and business conditions, as well as the factors described in section 2.1 - Risk Factors of this Universal Registration Document .

This universal registration document has been filed with the Stichting Autoriteit Financiële Markten (the "AFM") on 28 March 2024 as competent authority under Regulation (EU) 2017/1129 without prior approval pursuant to Article 9 of Regulation (EU) 2017/1129. This universal registration document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market if approved by the AFM together with any amendments, if applicable, and a securities note and summary approved in accordance with Regulation (EU) 2017/1129.

This copy of the annual financial reporting of Euronext N.V. for the year ended 31 December 2023 is not presented in the ESEF-format as specified in the Regulatory Technical Standards on ESEF (Delegated Regulation (EU) 2019/815). The ESEF single reporting package is available at:
https://www.euronext.com/en/investor-relations/financial-information/financial-reports

A message from Stéphane Boujnah, our Chief Executive Officer and Chairman of the Managing Board

Stéphane Boujnah

"The migration of Borsa Italiana's derivatives to Optiq in Q1 2024 and the expansion of Euronext Clearing to Euronext listed derivatives by Q3 2024 will complete our presence on the entire trading value chain and will position Euronext ideally to capture future growth opportunities.

As we celebrate the 10 year anniversary of our IPO in 2024, I am looking forward to deep-dive into the opportunities that this transformation will offer for Euronext in the coming years at our Investors Day in November 2024."

Dear Shareholders

In 2023, Euronext was able to demonstrate that it is more diversified and stronger than ever.

Euronext reached record revenue close to €1.5 billion in 2023, resulting from the strong performance of our non-volume related activities and excellent performance of our fixed income and power trading franchises. Thanks to our trademark cost discipline, positive FX impacts and a one-off accruals release, we reported lower costs than our 2023 cost guidance. As a result, we achieved an adjusted EBITDA of €864.7 million, which translated into an adjusted EPS of €5.51. Consequently, we will propose a total dividend of €256.8 million at our next annual general meeting to be held in May 2024.

Importantly, in 2023, we were able to demonstrate once again our exceptional integration capabilities. We delivered some of the key milestones of our 'Growth for Impact 2024' strategic plan. With the successful migration of Borsa Italiana's cash markets to Optiq®, Euronext was able to reinforce its leadership in cash equity trading across Europe. We are today uniting 25% of European equity trading on Euronext's single technology platform, forming the largest liquidity pool in Europe.

In November 2023, we established Euronext Clearing as the CCP of choice for Euronext's cash markets, with the expansion of its offering to Belgium, France, Ireland, the Netherlands and Portugal. We also set MTS as a recognized interdealer platform for the implementation of electronic market making on European Union issued debt instruments, with very dynamic first volumes. These projects have contributed to the €74 million of run-rate cumulated EBITDA synergies delivered by end of 2023, above the €70 million 2023 intermediary target. This is already more than the €60 million of run-rate cumulated EBITDA synergies targeted for the end of 2024 we initially announced in April 2021, at the time of the completion of the Borsa Italiana Group acquisition.

Throughout the year, we continued to consolidate our leadership position in the listing of equities in Europe, welcoming 64 new companies on our market, and attracting the majority of international listings in Europe. In addition, we continued to support the financing of the real economy through capital markets, with more than 300 issuers that raised €20 billion on Euronext through follow-on transactions to fund their growth and investment projects. We consolidated our position as the first debt listing venue worldwide, with more than 55,000 total bonds listed on our market. Euronext has also further solidified its position as the world leading venue for sustainable bonds, with more than 450 new ESG bond listings in 2023 raising more than €280 billion.

In July 2023, we disposed our 11.1% stake in LCH SA. Together with our strong cash generation capabilities, this enabled us to perform a €200 million share buy-back programme over the second half of the year. This programme did not impact our deleveraging path. At the end of 2023, our net debt to adjusted EBITDA ratio reached 1.9x. This compares to 3.2x post acquisition of the Borsa Italiana Group in 2021.

In 2024, we will bring the Italian derivatives markets to our single trading platform, Optiq®. Euronext Clearing will become the clearing house for listed derivatives and commodities markets in Q3 2024. This strategic transformation will result in Euronext's presence across the entire trading value chain on the markets it operates, ideally positioned to capture future growth opportunities. We are well on track to deliver on our upgraded target of €115 million of cumulated run-rate EBITDA synergies by the end of 2024, as well as our medium-term revenue and EBITDA growth targets for 2024 set in the 'Growth for Impact 2024' strategic plan.

2024 marks the 10 years anniversary of Euronext since its IPO, and allows us to observe the exceptional growth transformation the group has undergone during the last 10 years. We have expanded across the entire trading value chain, and have extended the range of products we provide to our clients, such as power trading, forex or fixed income. The delivery of the last bricks of our strategic plan will unlock new innovation capabilities for us, which we will further detail with the release of our new strategic plan for 2027 on our investor day in November 2024.

Stéphane Boujnah

S&P upgrades Euronext to 'BBB+', stable outlook

€200 million share repurchase programme completed

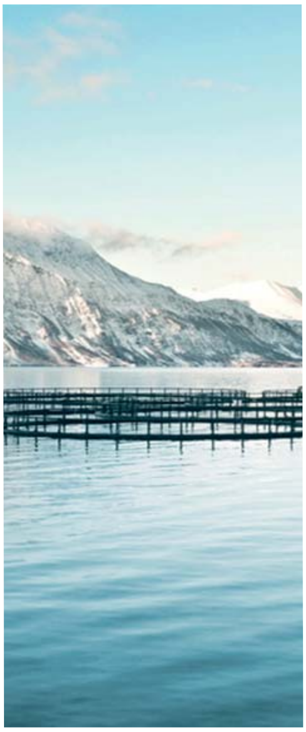
Successful expansion of Euronext Clearing to Euronext Amsterdam, Brussels, Dublin, Paris and Lisbon cash markets

Launch of MTS EU as interdealer platform for the electronic market making on European Union debt instruments

Successful migration of Borsa Italiana cash markets to Euronext's Optiq® trading platform

Expansion of Euronext GEM retail offering for pan-European and US securities

Validation of Euronext's emission reduction targets by the Science Based Target initiative



Signature of the Women's Empowerment Principles by Euronext

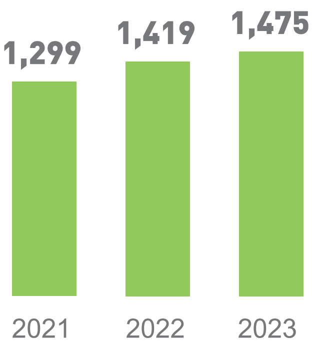
First pan-European Euronext Sustainability Week

First listing venue in Europe

Second edition of Euronext Tech Leaders Campus

A record performance in 2023

Evolution of revenue
in €m



€1,475m
+3.9%
REVENUE

€865m
+0.4%
ADJUSTED EBITDA

58.6%
ADJUSTED EBITDA MARGIN

90.9%[1)]
EBITDA TO NET OPERATING CASH FLOW

€5.51
ADJUSTED EPS

€257m[2)]
DIVIDEND PROPOSED

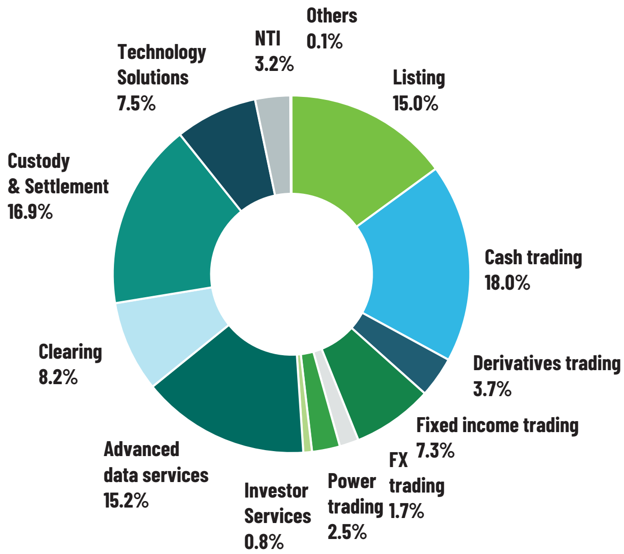
Continued progress on the Borsa Italiana Group integration and strategic projects delivered in 2023

€74m
RUN-RATE SYNERGIES DELIVERED

- Synergies achieved above the interim target of €70 million by end of 2023
- Successful migration of Italian cash markets to Optiq®
- Successful expansion of Euronext Clearing as pan-European clearing house for cash markets
- €103 million of cumulated implementation costs incurred at the end of 2023

The migration of Italian derivatives markets to Optiq in Q1 2024 and the expansion of Euronext Clearing to Euronext listed derivatives by Q3 2024 will significantly contribute to reaching the targeted €115 million run-rate annual EBITDA synergies by end of 2024.

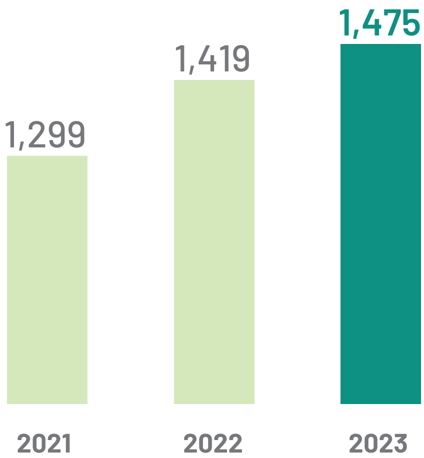
A more diversified revenue base with non-volume related revenue accounting for 60% of total revenue and income of €1,475 m



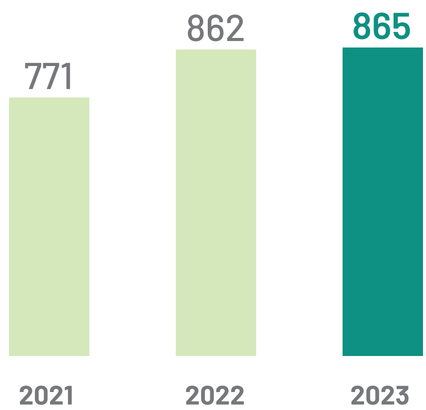
Others includes other income and transitional revenue
1) Excluding the impact on working capital of Nord Pool and Euronext Clearing CCP activities
2) Subject to shareholders approval at the 2024 Annual General Meeting
Underlying revenue and income as well as Adjusted EBITDA are defined in section 5.2 - Other Financial Information

Key figures

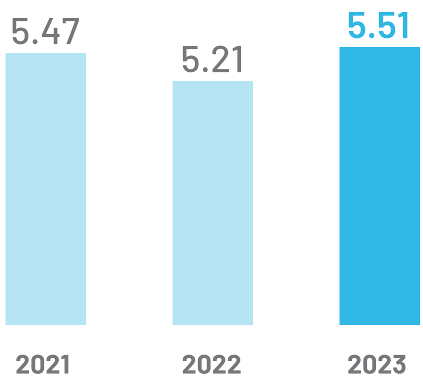
Revenue
€ million



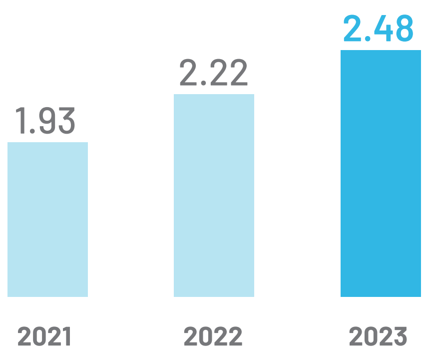
Adjusted EBITDA[a]
€ million



Adjusted EPS[a]
€



Dividend per share[b]
€



60%

Non-volume related revenue[c]

145%

of underlying[a] costs exc. D&A covered by non-volume related revenue[c]

1.9x

Net debt to Adjusted EBITDA at the end of 2023

(a) Definitions in Section 5.2

(b) Subject to shareholders approval at the 2024 Annual General Meeting

(c) Non-volume related revenue include Advanced Data Services, Custody and Settlement, Technology Solutions, Listing exc. IPO fees, Investors Services, fixed fees arising from Clearing activities and NTI through CCP activities

THE LEADING EUROPEAN MARKET INFRASTRUCTURE

OUR AMBITION

Build the leading market infrastructure in Europe

OUR PURPOSE

Shape capital markets for future generations

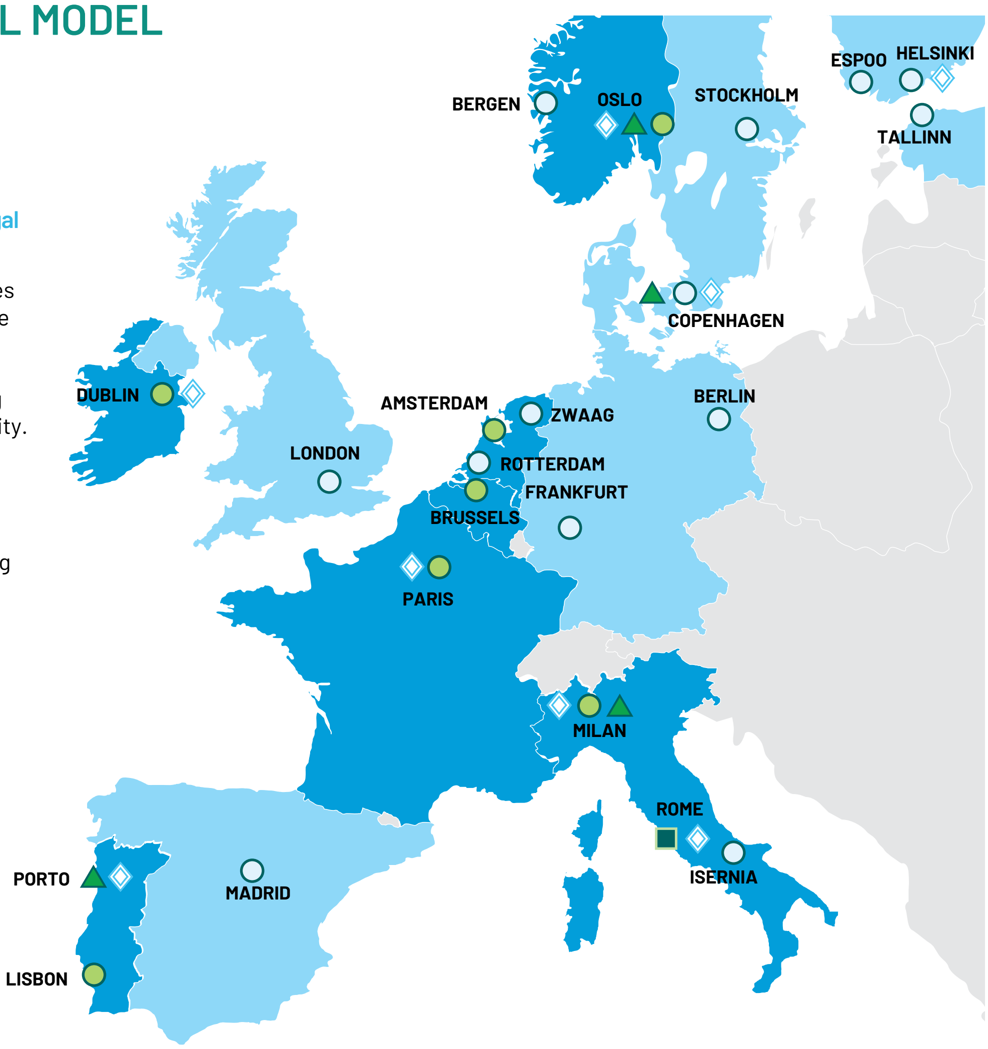
OUR MISSION

Connect European economies to global capital markets, to accelerate innovation and sustainable growth

EURONEXT FEDERAL MODEL

Euronext is the leading European market infrastructure, spanning Belgium, Denmark, France, Ireland, Italy, the Netherlands, Portugal and Norway.

This unique model unites marketplaces that date back as far as the start of the 17th century, and is designed to incorporate the individual strengths and assets of each market, combining heritage and forward-looking modernity. We operate seven national regulated securities and derivatives markets in Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo and Paris, a regulated derivatives market in Bergen, a leading fixed-income trading platform, MTS, as well as four central securities depositories, a clearing house and services across Europe.



OTHER OFFICES

- NEW YORK
- SINGAPORE
- DELHI
- BANGALORE

- Euronext historical presence
- Central Securities Depositories
- 7 Regulated markets
- Technology centers
- Offices
- Clearing house

18 COUNTRIES

2,300+ EMPLOYEES REPRESENTING

63 NATIONALITIES

EURONEXT VALUE CHAIN

Primary markets

Issuers

#1 Equity listing venue in Europe with **64** new listings

Nearly **1,900** issuers representing **€6.6tn** market cap

#1 debt listing venue globally and **#1** for ESG bonds

Secondary markets

Investors

Trading members

#1 trading venue in Europe representing

25% European equity trading

65.1% market share in cash trading

€10.1bn Cash ADV

3,800+ ETFs listed

Leading derivatives franchise

EURONEXT FX

EURONEXT FISHPOOL

NORD POOL

MTS

#1 bond trading venue in Europe for D2D EGB (1)

Powered by

Optiq® trading platform

100% Green Core Data Centre

Colocation services

Services

Euronext Corporate Services

Investor Services

Advanced Data Services

Leading index franchise including the **AEX®, BEL 20®, CAC 40®, ISEQ 20®, OBX®, PSI®** and the **MIB® ESG**

Post-Trade

EURONEXT CLEARING

Clearing services

1 multi asset-class clearing house

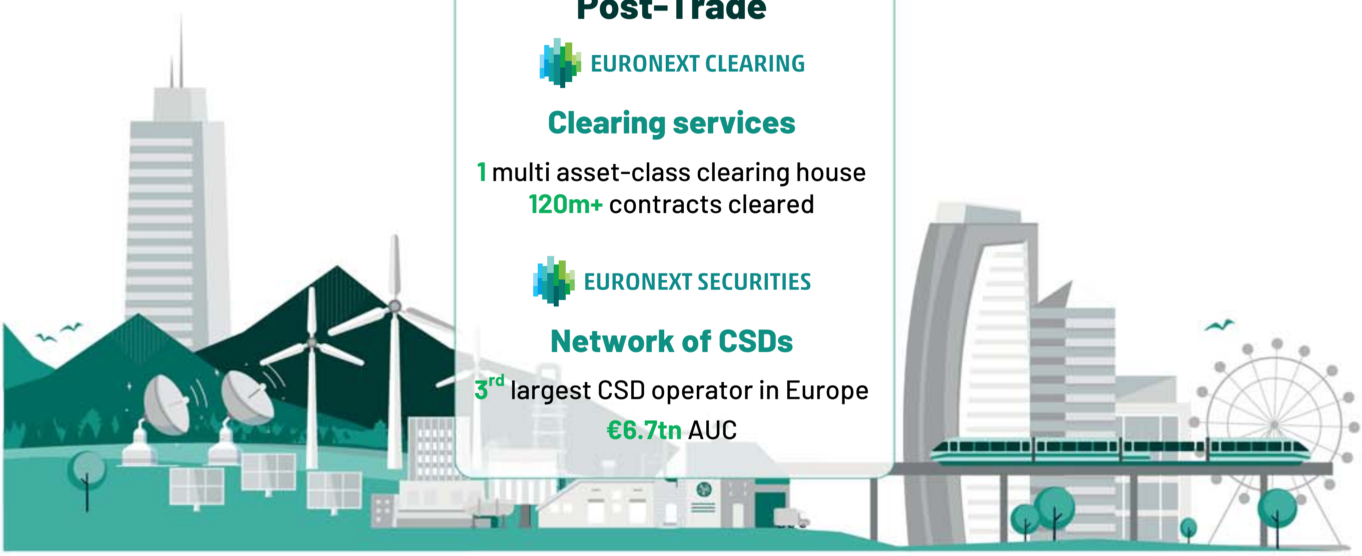
120m+ contracts cleared

EURONEXT SECURITIES

Network of CSDs

3rd largest CSD operator in Europe

€6.7tn AUC



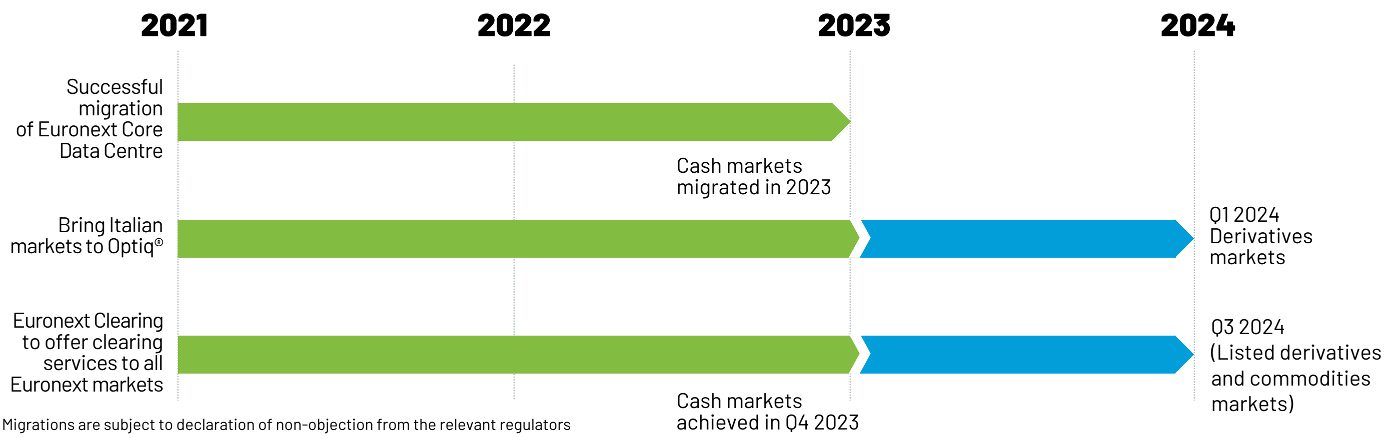
Data as of 31 December 2023

EURONEXT'S 2024 STRATEGIC PLAN GROWTH FOR IMPACT 2024

EURONEXT'S KEY STRATEGIC PRIORITIES

- Leverage Euronext's **integrated value chain**
- Pan-Europanise Euronext **CSDs**
- Build upon Euronext's **leadership** in Europe
- Empower **sustainable finance**
- Execute **value-creative** M&A

Key projects timeline



Migrations are subject to declaration of non-objection from the relevant regulators

Cost guidance for 2024

"IN 2024, EURONEXT WILL CONTINUE ITS COSTS CONTROL POLICY AND EXPECTS THAT SAVINGS AND SYNERGIES WILL OFFSET INFLATION AND 2023 COSTS RAMP-UP. AS A RESULT, EURONEXT EXPECTS ITS 2024 UNDERLYING EXPENSES EXCLUDING D&A TO BE AROUND €625 MILLION, INCLUDING AROUND €10 MILLION TO FINANCE GROWTH PROJECTS AND EXCLUDING POTENTIAL IMPACT FROM FX OVER THE YEAR."

2024 FINANCIAL TARGETS TO SUPPORT OUR AMBITION

	2020 pro forma [1]	2024E targets
REVENUE	€1,352 million	**+3% to 4% CAGR** (2020_{PF}-2024e)
EBITDA	€789 million	**+5% to 6% CAGR** (2020_{PF}-2024e)

- Financial targets solely based on organic growth, excluding any new M&A contributions and driven by higher growth expected in non-volume related activities
- Expected uplift in profitability from the integration of the Borsa Italiana Group combined with continued best-in-class cost discipline
- **Including €115 million of run-rate pre-tax synergies from the integration of the Borsa Italiana Group** [2] and €150 million of non-recurring implementation costs [3].

Unchanged capital allocation policy

	2020 pro forma [1]	2024E targets
CAPEX	3% to 5% of revenue	3% to 5% of revenue
DIVIDEND POLICY	50% of reported net income	50% of reported net income

CONTINUE TO EXECUTE DISCIPLINED AND VALUE-ACCRETIVE M&A

Maintain current rigorous capital allocation policy

- Investment criteria: **ROCE > WACC in years 3 to 5**
- Acquisitions expected to contribute to **higher organic revenue growth**, provide **scalability** and/or improve **exposure to non-volume** related businesses

Take recent successes to the next level

- Corporate Services
- Post-trade solutions
- Investor Services

Continue to review transformational deals

- Strengthen the pan-European infrastructure model
- Diversify the revenue mix

(1) Pro forma for the acquisition of the Borsa Italiana Group, excluding transitional revenue and cost.
(2) Subject to regulatory approvals. Upgraded synergies target from €100 million in February 2023.
(3) Upgraded implementation costs announced in May 2022 (-€10 million compared to implementation costs announced in November 2021).

"FIT FOR 1.5°" CLIMATE COMMITMENT

1 FOR EURONEXT: Commit to the alignment of our own emissions with a **1.5-degree trajectory**, the most demanding climate ambition, under the **Science-Based Targets** initiative.

Emission reduction targets validated by SBTI	Progress achieved in 2023
Operational emission reduction target • 73.5% reduction of Euronext's Scope 1 and Scope 2 market-based greenhouse gas emissions by 2030 compared to 2020 • At least 46.2% reduction of Euronext's Scope 3 travel emissions by 2030 compared to 2019	• **Combined Scope 1 and Scope 2 (market-based) emissions decreased by 79% compared to 2020, primarily attributed to the adoption of green electricity and renewable energy sources** • **Scope 3 travel emissions decreased by 37.6% compared to 2019, signaling progress despite gradual travel resumption**
Supplier engagement target • By 2027, Euronext suppliers, representing 72% of Euronext's greenhouse gas emissions derived from purchased goods and services, must set targets on their Scope 1 and Scope 2 emissions	• **32% of suppliers, representing over 72% of emissions from purchased goods and services, established SBTi targets by December 2023**

Action plan per target

Scope 1	Consolidation and energy efficiency upgrades in the building portfolio, energy efficiency investments, de-commissioning of gas-fired boilers and de-commissioning of vehicle fleet
Scope 2	Moving office space and data centres to renewable energy, including through the move of Euronext's Core Data Centre
Scope 3	Implementation of sustainable travel programme
Supplier engagement	Actively establishing and executing a supplier engagement program aimed at achieving our SBTi supplier engagement target. The initiative includes the implementation of supplier incentives, a specialized training program, and effective communication strategies

The targets will be achieved without purchase of any offsetting credit

2 FOR OUR CLIENTS: Deploy a full suite of **climate-focused products and services**, facilitating the European trajectory towards sustainable growth.

Launched +440 ESG indices

- Euronext Biodiversity Enablers index, 1st world benchmark index on biodiversity
- ESG versions of its benchmark indices, including the CAC® 40 ESG, MIB ESG, AEX® ESG, BEL® ESG, and OBX® ESG, CAC SBT 1.5

Leading venue for ESG bonds

- N°1 worldwide listing venue for ESG bonds in 2023, with almost 500 new bond listings
- N°1 global venue for ESG bond issuers and amount raised, with +2,200 ESG bonds, from +500 issuers, accounting for +1.3tn€

My ESG Profile

- 1st stock exchange to make standardized ESG data of its issuers available
- +1,900 company ESG profiles containing +60,000 data points on Euronext Live

THE DUAL DRIVERS OF OUR MISSION

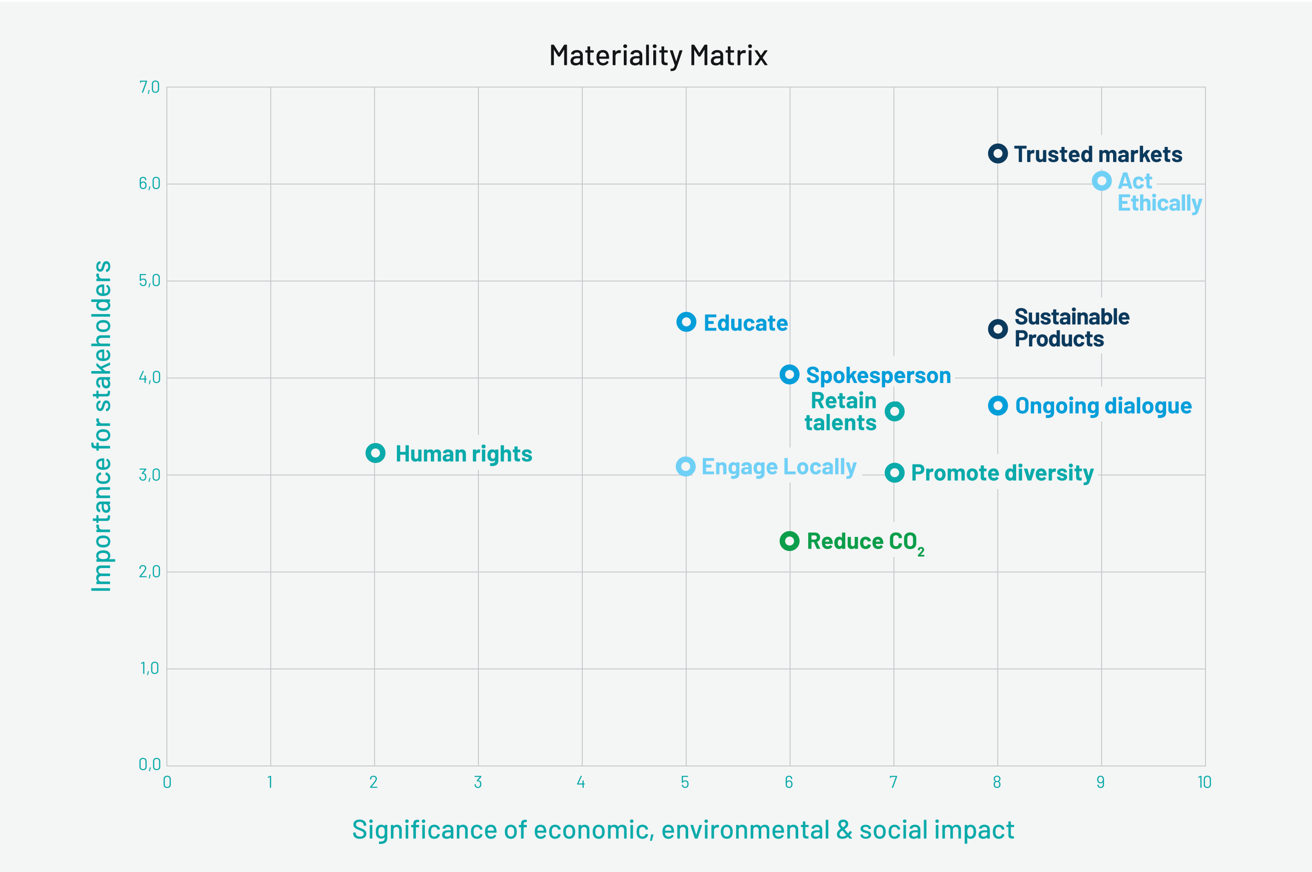
Driving investment in innovative, sustainable products and services through secure and transparent markets, in continuous dialogue between the players of the financial community

Inspiring and promoting sustainable tangible practices within the company and towards our communities, by respecting and developing our people and by supporting our ecosystem

STAKEHOLDERS EXPECTATIONS AND MATERIALITY MATRIX

Euronext conducted a stakeholder consultation in 2018 and 2019 to identify its material ESG issues. Based on the results, eleven key issues were defined and grouped into five material impact areas, ranking them in terms of their importance to stakeholders and the ESG impact they could have. These are illustrated in the below materiality matrix.

Additionally, in 2023, Euronext launched a new stakeholder engagement initiative to conduct a double materiality assessment in accordance with the European Corporate Sustainability Reporting Directive (further information in section 3.1).



5 IMPACT AREAS: Our markets · Our partners · Our people · Our society · Our environment

BUSINESS MODEL

Euronext's mission: to connect local economies to global markets, to accelerate innovation and sustainable growth

Euronext ESG focus: to accelerate the transition to a more sustainable economy

INPUTS

Financial capital

The pool of funds that is available to an organization for use in the production of goods or the provision of services or obtained through financing: Listing fees, trading fees, clearing fees, market data's fees, ...

Intellectual capital

Organizational, knowledge- based intangibles, including intellectual property, such as patents, copyrights, software, rights and licenses

Human capital

Skills, team, people, knowledge, ...

Social capital

The institutions and the relationships within and between communities, groups of stakeholders and other networks, and the ability to share information to enhance individual and collective well-being

Natural capital

All renewable and non-renewable environmental resources and processes that provide goods or services, i.e. energy, database

FIT FOR 1.5°

- Develop capital market solutions for a carbon neutral European economy
- Implement a forward-looking and outcome-based approach across all its impact areas, including human capital, community investment and governance issues that are material to its industry with a view to improving its overall ESG ratings relative to peers
- Commit to setting science-based quantitative climate targets by signing the "Business Ambition for 1.5°C"

DRIVERS OF THE MISSION

Our mission **to connect local economies to global markets, to accelerate innovation and sustainable growth** is driven by **internal** and **external** factors that guide our actions and shape our goal **to accelerate the transition to a more sustainable economy**.

- Driving investment in innovative, sustainable products and services through secure and transparent markets, in continuous collaboration with the financial community
- Inspiring and promoting sustainable tangible practices within the company and towards our communities, by respecting and developing our people and by supporting our ecosystem.

8 SDGs identified based on our impact areas

11 KEY ISSUES

5 IMPACT AREAS

OUR MARKETS

- Organise a trusted, fair, transparent and efficient market, thereby enhancing access to capital
- Promote and develop sustainable and innovative products

OUR PARTNERS

- Foster "Issuer-Investor" dialogue
- Maintain an ongoing dialogue with multi-stakeholder partnerships
- Educate partners on financial literacy and Regulations

OUR PEOPLE

- Develop skills and retain talents in an open culture of dialogue
- Promote diversity
- Respect human rights and local labour laws

OUR SOCIETY

- Act ethically, with integrity and the highest standards in terms of good governance
- Educate and engage with local communities

OUR ENVIRONMENT

- Reduce our own carbon footprint and contribute to the protection of the environment

OUTPUTS

Financial capital
Net operating income, Dividend, Capital raised, Market cap, EPS, Share price

Social capital
Access to capital, Shareholder value, Transparent and reliable market place, Services to issuers, Sustainable products, Deep liquidity pool

Human capital
Talent development, Financial education

Natural capital
Carbon footprint reduction

Intellectual capital
Development of new products and services

Euronext N.V. is a Dutch public company with a two-tier governance

Euronext Supervisory Board at a glance

10
Members

70%
Independent members

8
Nationalities

40%
Women

61.5
Average age

9
Supervisory Board meetings held in 2023

99%
Attendance rate

Euronext Supervisory Board and Committees

			Independent	Committees of the Supervisory Board			
				Audit	Risk	Remuneration	Nomination & Governance
Piero Novelli *Chair*	58	♂	☑			●	Chair
Dick Sluimers *Vice-Chair*	70	♂	☑	Chair	●		
Nathalie Rachou	66	♀	☑			Chair	●
Morten Thorsrud	52	♂	☑	●	Chair		
Rika Coppens	51	♀	☑			●	●
Manuel Ferreira Da Silva	66	♂	☑	●	●		
Padraic O'Connor	74	♂	☑			●	●
Alessandra Ferone	53	♀		●	●		
Olivier Sichel	56	♂					
Diana Chan	69	♀		●	●	●	●

Euronext Managing Board

	Name			Position
	**Stéphane Boujnah**	59	♂	CEO and Chairman of the Managing Board
	**Delphine D'Amarzit**	50	♀	CEO Euronext Paris
	**Fabrizio Testa**	55	♂	CEO Borsa Italiana and Head of Fixed Income Trading
	**Simone Huis In't Veld**	53	♀	CEO Euronext Amsterdam
	**Simon Gallagher** Appointment *subject to shareholders approval in May 2024*	50	♂	CEO Euronext London and Head of Global Sales
	**Øivind Amundsen**	56	♂	CEO Oslo Børs
	**Isabel Ucha**	58	♀	CEO Euronext Lisbon
	**Daryl Byrne**	52	♂	CEO Euronext Dublin
	**Benoît van den Hove**	48	♂	CEO Euronext Brussels
	**Manuel Bento**	49	♂	COO

Permanent attendees to the Managing Board

Senior management			Role	Senior management			Role
Giorgio Modica	50	♂	Group CFO	**Angelo Proni**	57	♂	CEO of MTS
Sylvia Andriessen	58	♀	General Counsel	**Mathieu Caron**	45	♂	Head of Primary Markets
Camille Beudin	39	♂	Head of Diversified Services	**Aurélie Cohen**	36	♀	Chief Communications and Investor Relations Officer
Amaury Houdart	48	♂	Chief Talent Officer	**Pierre Davoust**	37	♂	Head of CSDs
Tatyana Valkova	40	♀	Head of Compliance and Risks	**Daniela Melato**	47	♀	Head of Group Data Services
Anthony Attia	49	♂	Global Head of Derivatives and Post-Trade	**Nicolas Rivard**	46	♂	Global Head of Cash Equity and Data Services

Shareholding structure as of December 2023

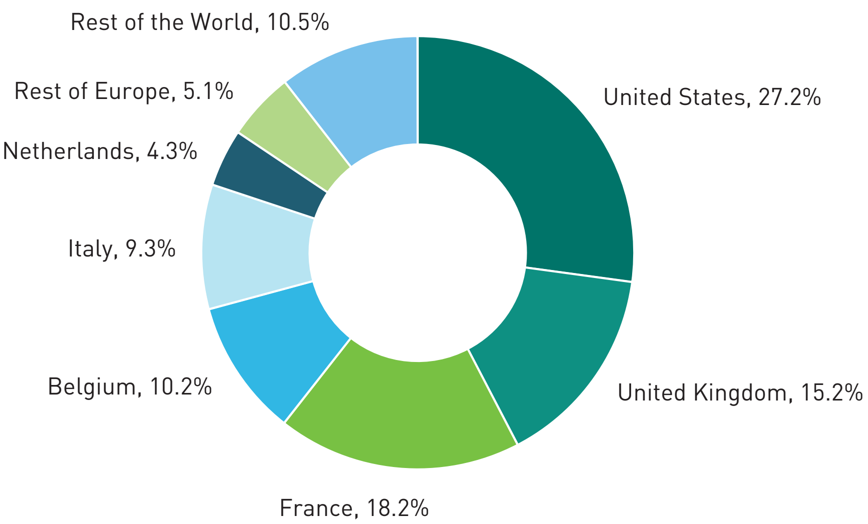
The shareholding structure as of 31 December 2023 was as follows.

Shareholder	Number of shares	% of capital
Reference shareholders (a)	25,501,046	23.81%
Treasury Shares	3,440,126	3.21%
of which shares repurchased under the share repurchase programme	*2,870,632*	2.68%
Employees	123,015	0.11%
Free float	78,042,107	72.86%
TOTAL	**107,106,294**	**100.00%**

(a) Only includes the shares held within the Reference Shareholders Agreement

(b) Treasury shares include shares acquired as part of the share repurchase programme, carried between 31 July 2023 and 4 January 2024, which will be cancelled

Geographic breakdown of the shareholders as of 31 December 2023



Source: Euronext shareholders identification data

Euronext Reference Shareholders as of 31 December 2023

Name of reference shareholder	Number of shares	Individual shareholding (% of capital)
Caisse des Dépôts et Consignations	7,840,000	7.32%
CDP Equity	7,840,000	7.32%
Euroclear S.A./N.V.	4,284,252	4.00%
Société Fédérale de Participations et d'Investissement/ Federale Participatie- en Investeringsmaatschappij	3,391,200	3.17%
Intesa SanPaolo	1,606,594	1.50%
ABN AMRO Bank N.V. through its subsidiary ABN AMRO Participaties Fund I B.V.	539,000	0.50%
TOTAL SHAREHOLDING (a)	**25,501,046**	**23.81%**

(a) Only includes the shares held within the Reference Shareholders Agreement.

On 8 March 2024, an announcement was published confirming that Société Fédérale de Participations et d'Investissement, Caisse des Dépôts et Consignations and CDP Equity agreed with Euroclear S.A./N.V. to acquire from Euroclear respectively 2,142,126, 535,531 and 535,531 shares in the share capital of Euronext N.V., representing respectively 2.0%, 0.5% and 0.5% of the share capital of the Company.

Euronext share

Euronext shares are listed on Euronext Amsterdam, Euronext Brussels, Euronext Lisbon and Euronext Paris since June 2014.

Euronext share price performance since IPO

ENX LISTED EURONEXT

€8.4bn market capitalisation as of 31/12/23

+13.7% share price evolution in 2023

ENX:FP on Bloomberg

ENX.PA on Reuters

Company Information

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- Phone: +31 (0)20 72 14 400
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Investors Relations

- Website: https://www.euronext.com/en/investor-relations
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- Phone: +33 (0)1 70 48 24 17

Indices

Euronext is part of more than 140 indices, including the CAC Next 20, SBF 120, MSCI Standard Series, Stoxx 600 Financial Services, Euronext Equileap Gender Equality France 40 and CAC SBT 1.5

2024 Financial Calendar

Financial release	Date
First Quarter 2024 Results	14 May 2024
Annual General Meeting	15 May 2024
Second Quarter and First Half 2024 Results	25 July 2024
Third Quarter 2024 Results	7 November 2024


EURONEXT
BEURSPLEIN 5

1

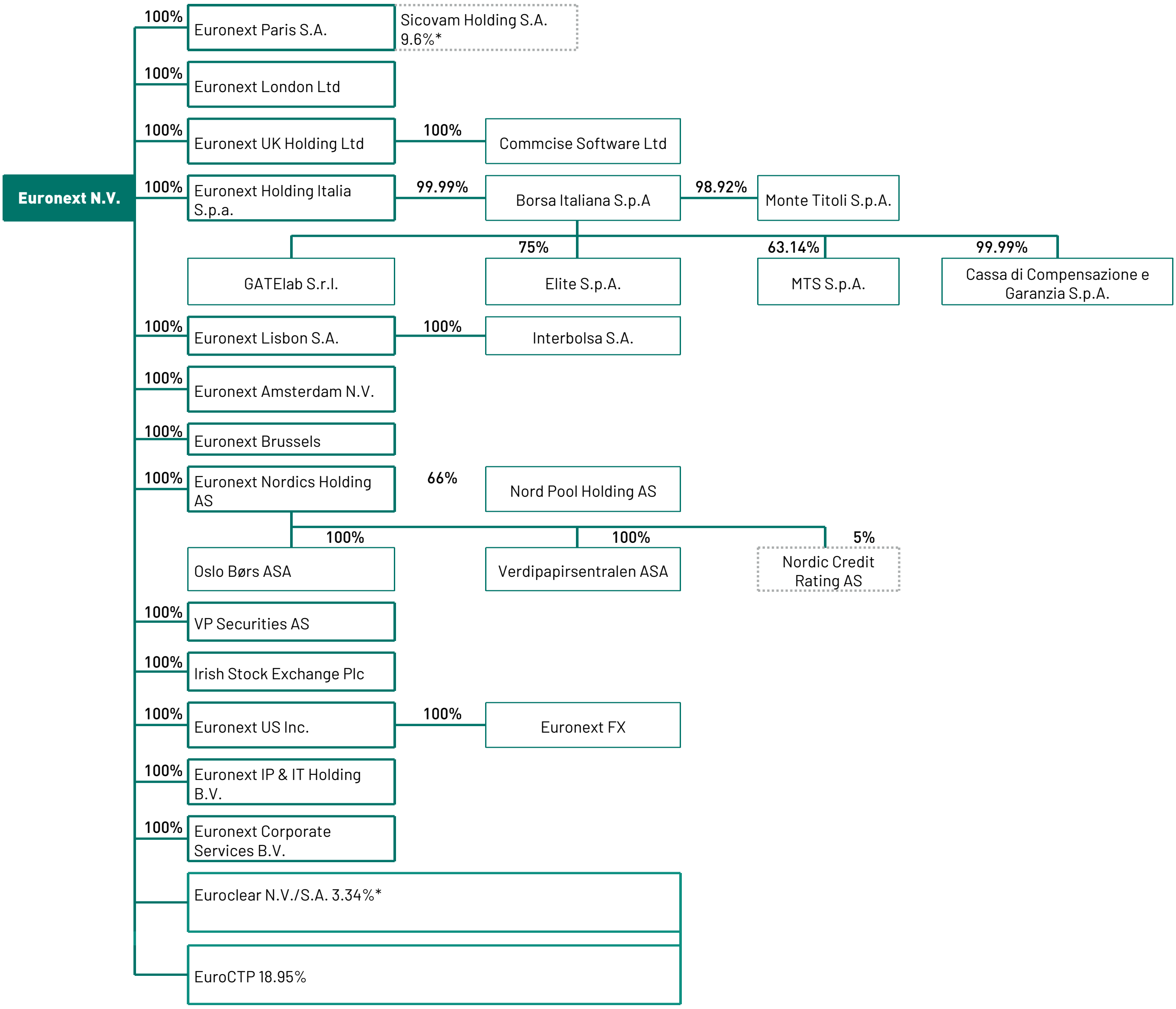
1. PRESENTATION OF THE GROUP DR

1.1 Company Profile

Euronext N.V. is a Dutch public company with limited liability (*naamloze vennootschap*) with its registered office in Amsterdam. the Netherlands, Euronext N.V. is registered with the trade register of the Chamber of Commerce for Amsterdam, the Netherlands, under number 60234520. Euronext N.V. has its main subsidiaries in Belgium, Denmark, France, Ireland, the Netherlands, Norway, Portugal, Italy, the United Kingdom and the United States. Euronext N.V. has diversified its activities and services offering through selected acquisitions (please refer to section 1.1.1 - History) and expanded its European federal model, with the acquisition of 100% of the Irish Stock Exchange on 27 March 2018, 100% of Oslo Børs VPS on 4 July 2019, 100% of VP Securities, in Copenhagen, on 4 August 2020 and 100% of London Stock Exchange Group Holdings Italia S.p.A. (renamed Euronext Holding Italia S.p.A. after the acquisition) and its subsidiaries (Borsa Italiana Group) on 29 April 2021.

Euronext N.V. has a two-tier governance structure with a Supervisory Board and a Managing Board.

Euronext was incorporated under the name Euronext Group N.V. on 15 March 2014 in the context of a demerger of Euronext N.V., which was a company owned by ICE. Euronext Group N.V. changed its name to Euronext N.V. on 2 May 2014. The following chart provides an overview of Euronext N.V. main entities as of 31 December 2023. Percentages refer to both share of capital and voting rights.



**Sicovam owns a 15.89% stake in Euroclear and Irish Stock Exchange plc owns 0.19% in Euroclear*

1.1.1 HISTORY

Today, Euronext is the leading pan-European market infrastructure, offering a diverse range of products and services across the value chain and notably operating transparent and efficient equity, fixed income securities and derivatives markets in Amsterdam, Brussels, Dublin (since March 2018), Lisbon, Milan (since April 2021), Oslo (since June 2019) and Paris. Euronext's businesses comprise equity, debt, fund and ETF listing, corporate and investor services, cash trading, foreign exchange trading, derivatives trading, fixed income trading, power trading, advanced data services and post-trade services (including clearing across Euronext markets and custody and settlement in Denmark, Italy, Norway and Portugal) as well as technology solutions. As of the end of December 2023, Euronext has close to 1,930 listed equity issuers totalling around €6.6 trillion in combined market capitalisation, positioning it as the largest equity listing venue in Europe, and attracting the majority of listings from domestic and international companies in Europe. The Group is also the leading bond and ESG bond listing venue globally with over 55,000 bonds listed. Further, Euronext is the largest equity lit trading venue in Europe, processing over 25% of on-exchange lit trading flows in 2023. On the seven national markets it operates, the Group reported on average a 65.1% market share on cash equity lit trading. Euronext is about to be present on the full trading value chain, ranging from listing to custody and settlement, following the clearing migration in 2023 and its second phase planned for 2024.

Euronext in its original form was created in 2000 and takes its roots from the European construction. It began as the result of a three-way merger of the Paris, Amsterdam and Brussels exchanges, which were combined into a unique federal model with unified rules and a Single Order Book, operating on the same electronic trading platform and cleared by LCH S.A. central counterparty (CCP). This created the first genuinely cross-border exchange in Europe, pre-dating all initiatives by policy makers to allow for the creation of pan-European market places. This was complemented soon after by the acquisition of the London-based derivatives market, LIFFE, and the merger with the Portuguese exchange.

In May 2006, Euronext entered into an agreement with NYSE group for the combination of their respective businesses. The new holding company of these combined businesses, NYSE Euronext, was subsequently listed on the New York Stock Exchange and on Euronext Paris.

In 2010, NYSE Euronext launched Euronext London, a London-based securities market aiming at attracting international issuers looking to list in London and benefit from Euronext's value proposition[1].

In November 2013, ICE, an operator of global markets and clearing houses, acquired NYSE Euronext. A key element of the overall transaction was the separation and IPO of NYSE Euronext's continental European exchanges as a stand-alone entity. In order to do this, ICE carved out the continental European operations of NYSE Euronext and Euronext London into a newly formed entity, which was subsequently renamed Euronext N.V. Since its successful IPO on 20 June 2014, Euronext N.V. has been an independent listed company.

In May 2016, Euronext N.V. launched its strategic plan named "Agility for Growth" which defined its growth ambitions for 2019, both through organic growth and bolt-on acquisitions. In 2017, Euronext N.V. diversified its revenue, through the acquisition of 90% of the shares of the spot forex platform FastMatch (subsequently renamed Euronext FX), and by investing in corporate services companies.

In 2018, Euronext N.V. expanded its listing franchise, welcoming a new exchange to its federal model with the acquisition of the Irish Stock Exchange, now Euronext Dublin. The Group also strengthened its Corporate Services offering with the acquisition of InsiderLog and widened its product offering with the launch of Investor Services through the acquisition of Commcise in December 2018.

In 2019, Euronext N.V. pursued the expansion of its federal model with the acquisition of Oslo Børs VPS, strengthening its capital markets footprint and its post-trade franchise and marking the first step in its Nordic expansion ambitions. In October 2019, Euronext launched its strategic plan, "Let's Grow Together 2022" under which Euronext built the leading pan-European market infrastructure, and which targets have been achieved two years in advance.

In 2020, Euronext N.V. pursued both its Nordic and federal model expansion. The Group acquired a majority stake in Nord Pool, a leading power trading infrastructure operating in the Nordic region, Baltics and the Central and Western Europe region, widening its range of asset classes. The Group also strengthened its post-trade offering with the acquisition of VP Securities, now Euronext Securities Copenhagen, the Danish domestic CSD, and expanded its corporate services franchise with the acquisition of Troisième Sens and Ticker.

In 2021, Euronext N.V. pursued both its federal model and asset class expansion with the transformational acquisition of 100% of the issued share capital of London Stock Exchange Group Holdings Italia S.p.A., the holding company of the Borsa Italiana Group. The transaction, which was completed on 29 April 2021, significantly enhances the scale of Euronext, diversifies its business mix into new asset classes and strengthens its post-trade activities, especially in clearing. In November 2021, Euronext N.V. launched its new strategic plan "Growth for Impact 2024", which sets out the Group's ambition to build the leading market infrastructure in Europe. Under this plan, Euronext N.V. will continue to pursue its mission to connect European economies to global capital markets, to accelerate innovation and sustainable growth. The Group aims to make an impact on its industry and its ecosystem to shape capital markets for future generations.

In 2023, Euronext N.V. delivered on significant milestones of its "Growth for Impact 2024" strategic plan. Euronext successfully completed the migration of the cash markets of Borsa Italiana to Euronext's state-of-the-art trading platform Optiq®. This paved the way for the expansion of Euronext Clearing to Euronext Amsterdam, Brussels, Dublin, Paris, and Lisbon cash markets. These two major projects contributed to the €74 million synergies delivered as of end of 2023.

The Borsa Italiana Group integration programme is well advanced and has allowed Euronext to upgrade its 2024 cumulated run-rate annual EBITDA synergy target since the closing of the Borsa Italiana acquisition in April 2021 to €115 million, representing twice the amount announced in October 2020, when the acquisition was first announced (€60 million).

1.1.2 AMBITION

Euronext is the leading pan-European market infrastructure. Its core mission is to connect European economies to global

[1] Ceased activities June 2020

capital markets, to accelerate innovation and sustainable growth. The Group's ambition and driver of its strategy is to build the leading market infrastructure in Europe. In 2023, Euronext confirmed its positioning as the leading European listing and trading venue with 64 new equity listings and average daily cash trading volumes of €10.1 billion.

As a European group with a profile that is 'united in diversity', Euronext aims to play a constructive role in its local ecosystems and act as an industry problem-solver while contributing to making Europe an attractive block in a multipolar world. Euronext believes that the Group's model is best suited to contribute to the construction of a true European market. It operates regulated markets in Belgium, France, Ireland, Italy, the Netherlands, Norway and Portugal, all of which are connected via a unique, single trading platform, with a central order book and with a harmonised regulatory framework[2]. Euronext has a proven track record in connecting other independent exchanges to its single trading platform, as demonstrated with the migration of Euronext Dublin in 2019 and the migration of Oslo Børs markets in 2020, as well as the migration of Italian cash markets to Optiq® in 2023. Euronext's unique central order book allows investors to benefit from being able to trade, clear and settle in a uniform way throughout various jurisdictions while also accessing a broad and deep pool of liquidity.

As an operator of regulated capital markets, Euronext brings together buyers and sellers in venues that are transparent, efficient and reliable. The Group combines cash, fixed income securities and derivatives markets in its seven locations together with a global foreign exchange trading venue. Euronext's broad portfolio of products, services and platforms covers the full capital markets value chain and range of market services, including the provision of market information, the development and operation of information technology systems, investor services and easy access to settlement and clearing facilities.

Euronext migrated on 6 June 2022 its Core Data Centre from Basildon, in the United Kingdom, to Bergamo, in Italy. The migration is in response to multiple factors, including the dynamic created by Brexit and a strong rationale to locate the Group's Core Data Centre in a European Union country where Euronext operates a large business, and an ESG commitment. This transformative move, managed in collaboration with clients, marks a milestone in bringing back to the European continent the data centre that handles 25%[3] of European trading volumes.

Euronext announced the launch of Euronext Mid-Point Match, including Dark, Mid-Point and Sweep functionalities in Q1 2024. The whole Euronext ecosystem of trading members, local brokers, market makers and global banks, will benefit from zero latency in pegging to Euronext midpoint, and zero latency for sweeping from dark to lit on Euronext stocks.

Euronext has also reinforced its retail ambition with the expansion of the Global Equity Market (GEM) retail offering to pan-European and US stocks in November 2023.

In recent years, Euronext has expanded into fast-growing revenue services and new asset classes. Euronext has built a complete Corporate Services offering through successive bolt-on deals. This offering, also aimed at non-issuers, was designed to meet clients' needs in critical areas such as regulation, governance, communication, and compliance.

Euronext has also entered new asset classes to diversify its business with the acquisition of Euronext FX (formerly FastMatch) in 2017, expanding into the FX market, and in 2020 with the acquisition of Nord Pool, a leading power trading infrastructure in the Nordics, expanding into the power market. These acquisitions enabled Euronext to target a new set of clients around the globe.

With the acquisition of the Irish Stock Exchange, now Euronext Dublin, in 2018, Euronext became the global leader in the listing of debt and funds securities.

Since April 2021, Euronext is the majority owner of MTS S.p.A., the leading fixed income trading platform in Europe, number one for Dealer-to-Dealer (D2D) European Government bonds trading, number one in Italian repo trading and number three in Europe in Dealer-to-Client (D2C) European Government bonds trading. Euronext will strengthen its leading position in D2D, through an extended geographical reach and an expanded offering with new services. Its buy-side reach will be expanded through MTS BondVision together with the deployment of an added-value data offering. MTS will expand across the full value chain, by exploring opportunities to deploy new and existing solutions to meet the needs of its clients. In November 2023, MTS has launched MTS EU, a central limit order book for the European Union Primary Dealer Network, following the appointment of MTS as a recognised interdealer platform by the European Union for the implementation of electronic market making on debt instruments issued by the European Union.

With Interbolsa in Portugal (now Euronext Securities Porto), and the acquisition of VPS (Euronext Securities Oslo) as part of Oslo Børs VPS in Norway in 2019, VP Securities (Euronext Securities Copenhagen) in Denmark in 2020 and Monte Titoli (Euronext Securities Milan) in Italy in 2021, Euronext has positioned itself as a leading central securities depository (CSD) operator in Europe. Euronext has combined its four CSD brands into Euronext Securities, an umbrella brand for its CSD business, while keeping a strong local presence and identity. The Group aims to expand its post-trade services, harmonise processes and enhance the client experience.

Through the acquisition of CC&G (Euronext Clearing) in April 2021, Euronext is now the owner of a multi-asset clearing house and is thus in a position to directly manage its clearing activities to complete its value chain. Euronext is determined to directly manage the clearing of its cash and derivatives flows. Euronext has grown CC&G into Euronext Clearing, making it Euronext's central counterparty (CCP) of choice for its cash equity markets, and the planned migration of listed derivatives and commodities markets to Euronext Clearing in Q3 2024[4]. Euronext continues to offer an open access CCP model for cash equity clearing.

These successful integrations highlight Euronext's value proposition to benefit from Euronext's extended client base and several cross-selling opportunities.

Euronext aims to be the trusted choice for its clients providing them with access to European financial markets. It has transformed from an exchange into a market infrastructure, boosting its presence across the full value chain of financial markets, offering best-in-class services to all its clients.

[2] Borsa Italiana cash markets migrated in 2023 and the migration of derivatives markets to the Optiq® trading platform is planned from Q1 2024.
[3] In 2023
[4] Subject to regulatory approvals

1.1.3 BUSINESS ENVIRONMENT

As a market infrastructure, Euronext's operations and performance depend significantly on market and economic conditions in Europe, but also the United States, Asia and the rest of the world. Euronext operates in a business environment that is best described as a complex non-linear system with dependencies on the decisions of policy makers and regulators worldwide, with subsequent developments in the legal, regulatory and tax environment as well as the macroeconomic environment both in Europe and abroad.

Competition

On the corporate listing side, competition between exchanges for domestic issuers is rare. When a domestic issuer lists on another exchange, it tends to be on a sector specific market rather than on another European stock exchange, in particular in for global companies and SMEs in the technology sector. As part of its strategy, Euronext strives to attract issuers from new markets: Euronext has an office in a European city outside its core markets – in Madrid (Spain) – to assist Tech companies in developing their business on a greater scale through capital markets and has launched in 2022 its Euronext Tech Leaders initiative to attract even more Tech companies. Euronext has confirmed its leadership position as the main listing venue in Europe with 64 listings in 2023. The aggregated market capitalisation of Euronext listed companies is twice the size of its main competitors, the London Stock Exchange Group and Deutsche Boerse[5].

In recent years Euronext has faced increased pressure on pricing and market share in equity trading, in particular from new entrants to the market that have fee structures that are significantly lower than the Company's fee structure and a reduced cost structure aligned with their narrower service offering. However, Euronext remains the largest liquidity pool in Europe, with market share on its cash equity markets averaging 65.1% in 2023.

Competition in fixed income continues to be fierce. MTS' main competitors in both D2D (Dealer-to-Dealer) Cash and Repo are BrokerTec (owned by CME Group) and the voice brokers. In addition, local operators such as BME (owned by SIX) in Spain and HDAT in Greece continue to provide competition in the respective domestic markets. Bloomberg also competes in emerging and small-scale markets as well as for the Primary Auction business.

Notwithstanding this, MTS continues to be the number 1 D2D venue for European Government Bonds, achieved by leveraging its global offering to incentivise and reward liquidity provision. Within D2C (Dealer-to-Client), the main competitors for MTS' BondVision are Bloomberg, MarketAxess and TradeWeb (majority owned by LSEG). Euronext's retail businesses face significant competition from Banks' Systematic Internalisers as well as from Bloomberg, MarketAxess and TradeWeb. In Italy, the main competitor in the retail business, Vorvel, has increased its market share but remains a relatively small market presence.

The competition for proprietary real-time market data is still limited as trading participants prefer to receive and use market data from the home exchange rather than using substitute pricing. However, Euronext is experiencing increasing pressure, both from a regulatory perspective (MiFID II) and a competitive perspective (alternative trading platforms, including Multilateral Trading Facilities ("MTFs") such as Cboe Europe, that focus on the most liquid blue chip stocks). Nevertheless, Euronext believes that diversity in the wide range of stocks listed on its markets is its strength in this increasingly competitive environment and will help Euronext retain its position as the preferred data source.

In less time-critical areas such as non-real-time data, where there is a heightened competition among participants who are seeking a unified European feed from a single source, Euronext has been working on the integration of reference, corporate actions and historical data of Borsa Italiana into Euronext products to expand the contents of its data products enabling Euronext to offer a more complete, attractive and competitive set of products from a unique direct source.

In the clearing space, MiFID II / MiFIR provides open access provisions for cash equity clearing which leads to fragmentation and reduced profitability, as central counterparties (CCPs) may connect to multiple trading venues, creating pressure on fees. Derivatives clearing operates through vertical integration, whereby the overall trading and clearing value proposition serves as the primary driver to capture flows and market share. Euronext believes that with Euronext Clearing servicing all Euronext trading venues and asset classes, clients will benefit from an easier and streamlined access to Euronext's liquidity pool, delivering operational efficiencies, margin efficiencies and competitive clearing fees while providing a robust and resilient risk management framework, being the core function of a CCP.

Since 2014 and the entry into force of the Central Securities Depository Regulation (CSDR), CSDs can compete against each other across the EU. Euronext CSDs can thus offer issuance, custody and settlement for securities issued outside of Portugal, Norway, Denmark and Italy whereas other CSDs can provide such services to issuers in these markets. Euronext CSDs have been able to maintain their strong local positions thanks to their ability to manage local specificities in each market as well as the network effect they have created over time.

As for market operator technology, the market for financial information technology is intensely competitive and characterised by rapidly changing technology and new entrants. Euronext has built its next generation trading platform, Optiq®, and is well positioned to benefit from its state-of-the-art stability, scalability and latency.

Regulated Markets

Regulated Markets are markets constituted in an EEA Member State's territory that meet the criteria of MiFID. Regulated markets have higher disclosure and transparency requirements than Multilateral Trading Facilities. Trading on Regulated Markets is subject to stricter rules than on other types of trading venues.

A Regulated Market cannot operate without securing prior authorisation from its regulator(s). Authorisation is subject to compliance with organisational requirements pertaining to conflicts of interest, identification and management of operational risks, systems resilience, the existence of transparent and non-discriminatory trading rules, as well as sufficient financial resources.

[5] At end of December 2023 according to data from the Federation of European Securities Exchanges, FactSet and Euronext data

Multilateral Trading Facilities

Multilateral Trading Facilities (MTFs) are primarily institutional investor-focused marketplaces offering trading in pan-European securities on low-latency, low-cost platforms. They are usually operated by financial institutions (e.g. banks and brokerages) or operators of regulated markets. MTFs are also subject to less stringent disclosure, transparency and trading rules than regulated markets and have more discretion to operate and organise themselves.

Euronext operates a number of MTFs, including its SME and midcap-dedicated marketplace Euronext Growth (formerly Alternext) (in Belgium, France, Portugal, Norway, Ireland, and Italy), Euronext Access (formerly the Marché Libre) in Belgium, Portugal and France, and Euronext Expand in Norway. Euronext also operates two MTFs in Ireland: the Global Exchange Market, for the listing of debt securities and investment funds, and the Atlantic Securities Market, for US listed companies seeking to access euro pools of capital. In Norway, Euronext operates Euronext NOTC (short for Norwegian OTC-list), a platform to provide quotes and allow non-listed firms to benefit from a certain level of liquidity. Lastly, Euronext operates Euronext Global Equity Market (GEM) enabling retail investors to trade a broad range of European and US stocks in euro, with strong focus on retail flow.

Systematic Internalisers

The systematic internaliser (SI) regime was introduced by MiFID in 2007. It defines an SI as an investment firm which, on an organised, frequent systematic and substantial basis, deals on an own account basis when executing client orders outside a regulated market, an MTF or an organised trading facility (OTF) without operating a multilateral system. SIs are bilateral trading platforms usually operated by banks or brokers and offering them the possibility to match client orders against their own capital, as an alternative to sending their orders to multilateral trading venues such as regulated markets or MTFs. SIs are subject to much lighter organisational, disclosure, and transparency requirements than regulated markets and MTFs while some elements of the framework may be amended (see *Chapter 2 - Risk Management & Control Structure*).

Over-the-counter (OTC)

In all asset classes, Euronext is faced with competition from unlicensed marketplaces operating over-the-counter.

1.2 Strategy: “Growth for Impact 2024” Strategic Plan

1.2.1 “GROWTH FOR IMPACT 2024”, A PATH TO BUILD THE LEADING MARKET INFRASTRUCTURE IN EUROPE

Since its initial public offering (IPO) in 2014, through optimal resource allocation and cost control, as well as stronger development of underexploited businesses, Euronext has strived to deliver its solutions for the real economy.

Following the delivery of its IPO objectives a year in advance, in May 2016 Euronext published its strategic plan, "Agility for Growth", outlining its growth ambitions to 2019. Euronext achieved most of its "Agility for Growth" ambitions one year in advance, and announced in October 2019 its next strategic plan, "Let’s grow together 2022", introducing its growth ambition to 2022. Under this plan, Euronext has successfully delivered its ambition to become the leading pan-European market infrastructure, through a combination of organic growth, the acquisitions of Nord Pool[1] and VP Securities (Euronext Securities Copenhagen), and the transformational acquisition of the Borsa Italiana Group. Euronext achieved its 2022 financial targets two years in advance in 2020, thanks to strong organic revenue growth.

Euronext now operates seven national markets, four central securities depositories (CSDs) and one multi-asset clearing house in Europe, as well as various trading infrastructures, giving it the ability to manage the entire capital markets value chain for the first time since its IPO. Euronext can now more than ever be bold and strategically ambitious, leveraging its strengths and greater scale to deliver on its new ambition: build the leading market infrastructure in Europe.

In November 2021, Euronext released its three-year strategic plan, "Growth for Impact 2024". Under this plan, Euronext intends to grow and leverage its scale for the benefit of its clients, team members, shareholders and stakeholders. Euronext's mission is to connect European economies to global capital markets, to accelerate innovation and sustainable growth.

"Growth for Impact 2024" sets out the Group's ambition to build the leading market infrastructure in Europe. The Group aims to make an impact on its industry and its ecosystem fulfilling its purpose to shape capital markets for future generations.

The “Growth for Impact 2024” strategic plan is built on the following strategic priorities:

- **Leverage Euronext’s integrated value chain**, through the European expansion of CC&G (renamed Euronext Clearing) clearing activities, the Core Data Centre migration to the European Union, and the international expansion of MTS;
- **Pan-Europeanise Euronext CSDs** through the expansion of services across its four CSDs in Portugal, Norway, Denmark and Italy, the harmonisation of processes and enhancement of the client experience;
- **Build upon Euronext’s leadership in Europe**, to further develop its leading listing and trading venues, to accelerate the delivery of innovative products and services thanks to technology, and to scale up advanced data services, corporate and investor services;
- **Empower sustainable finance** through an ambitious climate commitment for Euronext that aims to make

[1] 66% of the capital

a tangible impact on its partners and clients, with the launch of the Fit for 1.5° climate commitment, and also through an enhanced inclusive people strategy; and

- **Execute value-creative M&A** by continuing to seek external diversification opportunities, in line with Euronext's strict investment criteria and its commitment to maintain an investment grade rating.

Euronext's 2024 strategic priorities

I. Leverage Euronext's integrated value chain

European expansion of CC&G (Euronext Clearing) clearing activities to all Euronext markets[2]

Euronext was, until 2021, the only market infrastructure that did not directly manage its clearing activities for its listed derivatives markets. Since 2003, Euronext has relied on a third-party clearing house, LCH S.A., for the clearing of most of its cash and derivatives trading flows on its markets, with a revenue sharing agreement. Euronext has proposed on various occasions to take control of LCH S.A., unsuccessfully. Today, for the first time, thanks to the acquisition of Euronext Clearing in April 2021, Euronext is the owner of a multi-asset clearing house and is thus in a position to directly manage its clearing activities to complete its value chain. Euronext is determined to directly manage the clearing of its cash and derivatives flows. Therefore, it decided to expand Euronext Clearing clearing activities across Europe[3].

Euronext is making Euronext Clearing Euronext's central counterparty (CCP) of choice for its cash equity, listed derivatives and commodities markets in Europe. Euronext continues to offer an open access CCP model for cash equity clearing.

Euronext is positioning Euronext Clearing as a European clearing house. Euronext Clearing was enhanced with a new Value at Risk framework. Euronext Clearing will be reinforced by cutting-edge technology in line with its new international ambitions. The European clearing organisation has teams in Italy and France.

This strategic ambition allows Euronext to directly manage another core service for clients and create value through a harmonised clearing framework across Euronext venues. It will allow Euronext to align strategic priorities between trading and clearing, and significantly increase its footprint in the post-trade space. In addition, Euronext will be in an ideal position to innovate and improve time-to-market, notably on derivatives products, to serve the evolving needs of its clients. Revenue and costs contribution for this key project are part of the increased Borsa Italiana Group synergies target. Similarly, the necessary one-off costs to execute this project are included in the 2024 guidance[4].

In January 2023, Euronext sent notice of termination to LCH S.A. for its derivatives clearing agreements and confirmed the expansion of Euronext Clearing to listed derivatives and commodities markets for the third quarter of 2024. In November 2023, Euronext Clearing was expanded as the CCP of choice for Euronext cash markets in Amsterdam, Brussels, Dublin, Lisbon and Paris.

Migration of the Core Data Centre to Italy

Euronext announced in April 2021 the strategic decision to migrate its Core Data Centre from Basildon, in the United Kingdom, to Bergamo, in Italy.

The migration is a response to multiple factors, including the dynamic created by Brexit and a strong rationale to locate the Group's Core Data Centre in a European Union country where Euronext operates a large business. This transformative move, managed in collaboration with clients, marks a milestone in bringing back to the European continent the data centre that handles 25% of European trading volumes.

This migration allows Euronext to fully control and directly manage its core IT infrastructure, and a key service to clients, which was previously outsourced. This also allows the generation of colocation revenues, embedded in the upgraded synergies. Clients are benefitting from a state-of-the-art colocation facility. Since this data centre is 100% powered by renewable energy sources, clients see their own carbon footprints reduced.

The Group Core Data Centre migration was completed in June 2022. This migration was timed to be ready for the migration of the Borsa Italiana equity and derivatives markets onto the Optiq® trading platform in 2023 and 2024.

Migration of Borsa Italiana equity and derivatives markets to Optiq®

Borsa Italiana joined the Euronext central order book, which offers a unique gateway to investors accessing the largest liquidity pool in Europe. This single liquidity pool is powered by Optiq®, Euronext's proprietary state-of-the-art technology, offering a unique entry point to Euronext's securities and products for both local and global institutional investors and for retail investors. Issuers are benefiting from this increased visibility towards international investors, while Italian brokers and investors will benefit from a single access point to trade the securities of seven European countries.

Borsa Italiana cash markets migrated to the Optiq® trading platform in 2023, and the migration of derivatives is targeted for Q1 2024.

Expand the European footprint of MTS and enhance value

MTS is the leading fixed income trading platform in Europe, number one in Europe for Dealer-to-Dealer (D2D) European Government bonds trading, number one in Italian repo trading and number three in Europe for Dealer-to-Client (D2C) European Government bonds trading. As part of its mission to finance the real economy, Euronext has proposed to the European Commission the use of the MTS platform for the secondary market, and transparent negotiation, of bonds issued within the NextGenerationEU recovery programme.

Euronext will strengthen its leading position in D2D, through extended geographical reach and an expanded offering with new services. Its buy-side reach will be expanded through MTS BondVision together with the deployment of an added-value data offering. MTS will expand across the full value chain, by exploring opportunities to deploy new and existing solutions to meet the needs of its clients.

The European Union has recognised MTS EU as an interdealer platform for the implementation of electronic market making

[2] Subject to regulatory approvals
[3] Subject to regulatory approvals
[4] To highlight its underlying performance, since Q1 2022 Euronext is adjusting its operating expenses and publishes an adjusted EBITDA excluding non-recurring items, such as implementation costs for the strategic projects announced. For more information on the guidance see 1.2.3 - Strategic Targets and Prospects in 2023.

on European Union issued debt instruments. This new market was launched very successfully in November 2023.

The incremental revenue from MTS's expansion strategy is included in the €115 million Borsa Italiana Group targeted synergies.

II. Pan-Europeanise CSDs through the expansion of services, the harmonisation of processes and enhancement of the client experience

Euronext operates a leading CSD network representing €6.7 trillion in assets under custody, 120 million yearly settlement instructions and more than 7,700 issuers[5]. The Group is now the third-largest CSD operator in Europe. Euronext has combined its four CSD brands into Euronext Securities, a new umbrella brand for its CSD business, while keeping a strong local presence and identity.

This new positioning will help Euronext gain new business and diversify its activity in Europe through the expansion of added-value services for financial institutions such as tax reporting services, compliance, data products and asset servicing. Euronext will also make new services available to issuers, especially SMEs, leveraging its fully digital issuance capabilities.

Euronext Securities will also streamline processes to better serve local and international customers, gradually mutualising its infrastructure, applications, and functionalities to facilitate access to the local markets served by Euronext Securities and to support Euronext issuance and trading businesses across Europe.

Finally, Euronext will roll out new targeted client interfaces and a client service model addressing the needs of both local and global clients.

III. Build upon Euronext's leadership in Europe

Build upon our position as the leading European primary markets venue to create a global champion

Euronext is the leading equity listing venue in Europe with close to 1,930 issuers representing €6.6 trillion of aggregated market capitalisation[6]. Euronext is also the world's leader in debt listing with more than 55,000 listed securities[7].

Euronext's size makes it by far the largest liquidity pool in Europe, providing an integrated "one-stop-shop" for local and global issuers, to cover their equity and debt financing needs, and corporate services.

Building on its geographic expansion, with the recent additions of the Irish, Norwegian and Italian markets, Euronext will continue to expand its pan-European reach and will welcome top international issuers, leveraging its unique liquidity pool and sectorial strengths.

With close to 1,500 SMEs listed on Euronext markets, the Group is committed to financing the real economy and will further simplify access to equity and bond financing by increasing the competitiveness of its listing venues. Euronext will expand Borsa Italiana's STAR segment and grow the ELITE network to deepen its relationships with SMEs. Euronext's successful pre-IPO programmes will be strengthened, notably with specific ESG modules to support issuers in their ESG transition and to comply with non-financial disclosure requirements. Euronext is Europe's leading venue for Technology companies, with over 700 issuers listed on its markets across clean technologies, life sciences, technology, media and telecom (TMT), bio-technologies, medical technologies, and other sectors. Euronext will continue to grow this franchise, notably by continuing to invest in dedicated pre-IPO programmes, such as IPOready, which now counts over 920 alumni and more than 80 partners. Euronext has launched in June 2022 Euronext Tech Leaders initiative, including a segment and index dedicated to highlighting the visibility and attractiveness of high-growth listed Tech companies among international investors, together with a suite of services to support them through their financial journey. Alongside this segment, Euronext plans to launch a full suite of pre-IPO services to attract private Tech listing candidates to Euronext's markets, supporting their growth financing needs.

Euronext has the ambition to become the leading global ESG financing venue, and the partner of choice for issuers in the sustainable transition. The Group has launched My ESG Profile, making individual data of issuers available on the Euronext website in a standardised form, using more than 60,000 ESG data points. Euronext has also expanded ESG bonds to track the 1.5-degree ambitions of ESG bond issuers, flagging taxonomy-eligible issuers to increase their visibility to investors. Please refer to *section 3 - Empower Sustainable Finance* for more details.

Capitalising on accelerated trends towards digitalisation, Euronext Corporate Services has successfully delivered 24% revenue compound annual growth rate (CAGR) between 2018 and 2021, and it now serves over 4,800 clients in 30 countries, spanning listed and private companies, as well as public sector entities. Euronext Corporate Services has transformed several single-product companies into a pan-European multi-product business, supporting clients' needs in compliance, communication, governance, and investor relations. Euronext will continue to grow Corporate Services further by consolidating its position in core domestic countries, growing internationally in new strategic markets, and continuously developing the portfolio of solutions, with a specific focus on Compliance.

Leverage our scale as the leading European venue for trading

Euronext operates seven regulated markets and is the number one European cash equity trading venue, with €10.1 billion of cash average daily volumes (ADV)[8], representing a quarter of European lit volumes. Euronext has shown a unique track record in the management of cash trading market share and value extraction. Euronext has leveraged its unified markets with a standardised approach across Europe, while protecting local specificities and ecosystems. Euronext wishes to consolidate its European scale and maximise touchpoints upstream in the value chain. This strategy, combined with the Core Data Centre migration, the migration of Borsa Italiana capital markets to Optiq® and the European expansion of Euronext Clearing clearing activities, aims to build the launchpad for an integrated European market.

Euronext aims to continue to be the most liquid and largest trading venue in Europe, and to extract superior value from cash trading activities. It will develop a new generation of pricing strategies, built on its years of expertise, to support yields and market quality. It will continue to support diversity of flows by offering a trading model that meets the needs of both local and global players to offer a best-in-class trading experience for retail and institutional investors.

[5] At end December 2023
[6] At end December 2023
[7] At end December 2022
[8] In 2023

The derivatives franchise will be strengthened by expanding to new geographies and leveraging Borsa Italiana markets, and by developing more ESG-related products. The European expansion of the Euronext Clearing clearing operations will give Euronext the flexibility to develop products to meet client demand quickly and efficiently.

Euronext offers its clients the option of exposure to crypto-assets through a suite of new products. After the recent success of the listing of cryptocurrency exchange traded products (ETPs) on Euronext, the Group will continue to expand its crypto-tracking ETP offering. Euronext proposes a new family of Euronext branded crypto-indices to support the launch of related products. Moving forward, Euronext will provide its clients with exposure to crypto-assets with the same level of regulatory security and operational efficiency as on Euronext's core markets.

Scale up our Advanced Data Services

Euronext's Advanced Data Services business will scale up by leveraging the most comprehensive cash equity data in Europe, its fast-growing index franchise, and new datasets from recent acquisitions. Euronext aims to become the number one European ESG index provider, leveraging national brands, strong local presence and its ecosystem of innovative ESG data partners (refer to *section 3 - Empower Sustainable Finance* for more details). Euronext will build on recent successes to further deepen its relationship with exchange traded fund (ETF) issuers and asset owners. It will take its data analytics offering to the next level by building on leading quant capabilities and the most advanced data products tailored to end-user client segments. And Euronext will also monetise non-public proprietary data and extend its expertise to new datasets from recently integrated businesses, such as fixed income.

Euronext will support the evolving use of market data and adapt its product suite and commercial policies to new usage demands. It will leverage technology, both cloud and digital, to transform data servicing and data distribution, benefiting from the Group's new scale.

Leverage scale in technology to deliver innovative products and services

Euronext continually develops its existing architecture and ensures business scalability using cloud, microservices and application programming interface services. Harmonisation of its infrastructure, especially across Euronext's CSD network, will permit further efficiencies. Euronext will also harness data science to develop innovative solutions, products and services.

Euronext has consistently invested in resiliency and platform stability, and its proprietary Optiq® trading platform handled trading volatility peaks seamlessly in 2020, 2021 and 2022. To continuously improve the monitoring of its IT systems along the trading chain, Euronext has developed a set of best practices supported by a comprehensive data-driven operational risk framework.

Euronext has significantly invested in and improved its crisis management framework. It performs regular stress training, relying on a robust playbook for decision-making and a comprehensive crisis communication plan. In the years to come, Euronext will continue to invest to deliver best-in-class resiliency and stability for its platform, while offering new services and products. Furthermore, Euronext will extend the use of artificial intelligence to improve data analysis and infrastructure agility.

Customer satisfaction is at the centre of Euronext's strategy. Investment in enhanced digital tools will allow the Group to offer a better and more unified customer experience.

IV. Empower sustainable finance through an ambitious environmental, social, and governance (ESG) strategy

"Growth for Impact 2024" builds on Euronext's strong focus on ESG since its IPO.

Climate

The world has entered a decisive decade for the achievement of the objective of the Paris Agreement to keep the global temperature increase at well below 2 degrees compared to pre-industrial levels. Urgent action is required now, from companies and from the financial sector more broadly, to avoid the negative effects of climate change.

Against this backdrop, Euronext is leveraging its ESG performance to build an impactful ESG strategy. The new sustainability strategy focuses on accelerating climate action both in Euronext's operations and through the role it plays in empowering sustainable finance across all its markets.

Euronext is proud to announce the launch of its "Fit for 1.5°" climate commitment, for itself, its partners and its clients.

Euronext has set science-based quantitative climate targets by signing the "Business Ambition for 1.5°C", a campaign led by the Science Based Targets initiative (SBTi)[9] in partnership with the United Nations Race to Zero campaign.

Applying the SBTi methodology to Euronext emissions led to the formulation of the following targets that have been validated by SBTi in February 2023:

- By 2030, Euronext will reduce its Scope 1 and Scope 2 market-based greenhouse gas emissions by 73.5% compared to 2020;
- By 2030, Euronext will reduce its scope 3 business travel emissions by at least 46.2% compared to 2019;
- By 2027, Euronext suppliers, representing 72% of Euronext's greenhouse gas emissions derived from purchased goods and services, must set targets on their Scope 1 and Scope 2 emission .

The relocation of Euronext's Core Data Centre to a green facility has been the first move to follow through on this transformational commitment. The new data centre is powered 100% by renewable energy sources, much of which is self-produced through solar panels and hydroelectric power stations. The migration to a sustainable data centre sets the standard for the industry and provides clients with concrete tools to improve their own carbon footprint.

Furthermore, Euronext is developing services and products to accelerate the transition to a European economy aligned with a 1.5-degree trajectory. This will help drive investment towards decarbonised assets and support Euronext's clients on their ESG journey. Solutions supporting the strategy include, among others, the creation of a climate transition market segment, dedicated to issuers committed to science-based targets, the creation of climate and ESG versions of Euronext's national benchmark indices, revised ESG reporting guidance for issuers focusing on climate, and low-carbon colocation services.

Euronext will complement this environmental focus by implementing a forward-looking and outcome-based

[9] sciencebasedtargets.org/business-ambition-for-1-5c

approach across all its impact areas, including human capital, community investment and governance issues that are material to its industry with a view to improving its overall ESG ratings relative to peers.

People

Euronext is diverse by nature and by commitment, with 63 nationalities across 18 countries, and a genuinely inclusive culture, embedded in its federal model. The Euronext Managing Board, Senior Leadership Team and Supervisory Board have reached their gender diversity targets in two years, with 30%, 30% and 40% gender diversity respectively already delivered. Euronext will go further, and will reach a 30% target in average on local Boards by 2024 and has extended its 30% targets to the management levels below the Senior Leadership Team in 2023.

Building on the success of Euronext's Diversity Day and International Women's Day initiatives, each Euronext country has taken the commitment to reinforce local diversity partnerships with schools and recruitment providers, as well as early mentoring programmes as part of the Group's financial literacy initiatives. Euronext sees all forms of diversity, including disability, gender, sexual orientation, age, and cultural background, as a key success factor of its federal model, and is committed to further improve diversity practices in the next three years. This commitment will be reinforced in all its people practices through its people integration programme across Europe.

V. Continue to execute value-creative M&A

Euronext will pursue its growth strategy through high value-added acquisitions aimed at diversifying and strengthening the business profile of the Group, with a specific focus on Europe.

Euronext will maintain a rigorous investment policy, with a targeted return on capital employed (ROCE) of acquisitions above weighted average cost of capital (WACC) between years 3 to 5. As a key market infrastructure, Euronext expects to maintain its investment grade while leveraging its financial flexibility to capture market opportunities that arise. On 9 February 2023, Euronext has been upgraded by S&P to a BBB+ rating.

Euronext 2024 financial targets[10]

Euronext's growth ambition is reflected in the 2024 financial targets and a rigorous capital allocation strategy.

- Revenue is expected to grow by +3% to +4% CAGR2020$_{\text{Proforma}}$-2024$_{\text{E}}$, excluding potential acquisitions, driven by (i) organic growth, especially in services, and (ii) growth initiatives related to Borsa Italiana integration.
- EBITDA is expected to grow by +5% to +6% CAGR$_{\text{2020PF-2024E}}$, excluding potential acquisitions, driven by (i) continued best-in-class cost discipline, (ii) investments in operational excellence and (iii) uplift profitability of already-acquired companies to Euronext's level.
- Euronext expects to achieve €115 million of run-rate pre-tax synergies related to the Borsa Italiana Group acquisition by 2024 (€100 million previously announced on November 2021), up c. 92% compared to the €60 million of synergies announced at the time of the acquisition in April 2021, to incur €150 million of non-recurring implementation costs (€160 million previously announced on November 2021). More than 60% of those synergies are related to growth projects.
- Capex is confirmed at between 3% and 5% of revenue.
- Dividend policy is set at 50% pay-out of reported net income.

1.2.2 STRATEGIC DEVELOPMENTS IN 2023

'Growth for Impact 2024' achievements

In 2023, Euronext pursued its ongoing work on the key projects announced at its 2021 investor day, as follows:

- the migration of Italian cash markets to the Optiq® trading platform; and
- the European expansion of Euronext Clearing clearing activities (completed for cash markets in 2023 and planned for derivatives by Q3 2024)

In March 2023, Euronext completed the migration of equity and ETF markets of Borsa Italiana to Optiq. This was followed by Borsa Italiana Fixed Income, Warrants and Certificates markets in September 2023.

In July 2023, Euronext completed the sale of its 11.1% stake in LCH SA to LCH Group, for a cash consideration of €111 million. As a result, in Q3 2023, Euronext reported a €41.6 million capital gain.

In October 2023, Euronext Clearing introduced the innovative VaR-based margin methodology on Euronext Milan equities, ETF and financial derivatives markets.

These steps allowed the successful expansion of Euronext Clearing to Euronext cash markets in Amsterdam, Brussels, Dublin, Lisbon and Paris in November 2023.

The various strategic projects have allowed Euronext to reach €74 million run-rate annual EBITDA synergies by end of 2023.

2023 cost guidance

To highlight its underlying performance, Euronext started in the first quarter of 2022 to adjust its operating expenses and publish an adjusted EBITDA excluding non-recurring items, such as implementation costs related to the Borsa Italiana Group integration.

In 2023, Euronext expected its underlying operating costs excluding depreciation and amortisation (D&A) to be around €630 million, compared to the annualised second semester of 2022 underlying expenses excluding D&A of €620 million. The slight expected increase in costs resulted from costs related to non-volume related revenue growth initiatives. Savings and synergies were expected to entirely compensate inflation and business development costs.

On 8 November 2023, Euronext announced it expected a full-year positive impact of €12 million from the NOK depreciation on the cost base.

On 15 February 2024, Euronext consequently reported better than expected underlying costs excluding D&A of €610.0 million, thanks to continued cost control and a one-off release of €6.3 million.

[10] Proforma 2020 revenue and 2020 EBITDA for the acquisition of the Borsa Italiana Group, excluding transitional revenue and cost.

1.2.3 STRATEGIC TARGETS AND PROSPECTS IN 2024

2024 strategic plan and Borsa Italiana Group integration

In 2024, Euronext will pursue ongoing work on key projects announced at its 2021 investor day, as follows:

- the migration of Italian derivatives markets to the Optiq® trading platform in Q1 2024;
- the European expansion of Euronext Clearing clearing activities by the third quarter of 2024 for listed derivatives and commodities.

As a result of this ongoing work, Euronext, expected to reach around €115 million of cumulated run-rate synergies by the end of 2024.

2024 cost guidance

In 2023, underlying expenses excluding D&A were positively impacted by a one-off release of €6.3 million and by a positive impact of €11.4 million from the NOK depreciation. Consequently, Euronext reported €610.0 million underlying expenses excluding D&A in 2023, compared to an initial guidance of €630 million.

In 2024, Euronext will continue its costs control policy and assumes that savings and synergies will offset inflation and 2023 costs ramp-up. As a result, Euronext expects its 2024 underlying expenses excluding D&A to be around €625 million, including around €10 million to finance growth projects and excluding potential impact from FX over the year.

In addition, Euronext expects to incur non-recurring implementation costs in 2024, that are already included in the announced €150 million of targeted non-recurring implementation costs to deliver on the "Growth for Impact 2024" strategic plan. These implementation costs reflect the ongoing work of the Euronext teams to deliver on the key strategic projects announced in November 2021 and mentioned above.

1.3 Description of the Business

In accordance with Article 19 of Regulation (EU) 2017/1129, the following information is incorporated by reference in the Universal Registration Document:

For Financial Year 2022

The description of principal activities of the Company for the financial year 2022, presented on pages 26 to 46 of the 2022 Universal Registration Document filed with the Autoriteit Financiële Markten on 31 March 2022 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2023-08/EUR_2022_URD_MEL%20FINALE_AUG.pdf

For Financial Year 2021

The description of principal activities of the Company for the financial year 2021, presented on pages 24 to 43 of the 2021 Universal Registration Document filed with the Autoriteit Financiële Markten on 31 March 2022 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2022-04/2021%20URD%20-%20ENX%20-%20PDF_1.pdf

1.3.1 BUSINESS OVERVIEW

Euronext is the leading pan-European market infrastructure offering a diverse range of products and services and combining transparent and efficient equity, fixed income securities and derivatives markets in Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo and Paris. Euronext operates various businesses in 18 countries. Euronext's businesses comprise listing, cash trading, derivatives trading, spot FX trading, fixed income trading, power trading, investor services, advanced data services, post-trade, technologies & other.

Euronext is the leading listing venue in Europe and attracted 64 new equity listings in 2023. Euronext markets provide the leading listing venues in continental Europe based on the number of companies listed as of 31 December 2023. Close to 1,930 issuers representing a combined market capitalisation of approximately €6.6 trillion were admitted to trading on Euronext's markets as at 31 December 2023. As of 31 December 2023, Euronext ranked first in Europe in terms of market capitalisation of listed companies and first among the largest exchange groups in Europe in terms of number of companies listed, excluding Bolsas y Mercados Españoles (on which a large proportion of listed issuers are open-ended investment companies, limiting comparability). In addition, the Company has over 3,800 exchange traded products (ETPs)[1] and close to 2,500 funds listed on its markets as of 31 December 2023.

Euronext ranked first among all trading venues in Europe in terms of monthly lit continuous & auctions order book trading volume in equities for the last 12 months ended 31 December 2023 among all trading venues in Europe.

Euronext's pan-European cash equities trading venue is the market leader in cash equity trading in its seven home continental European markets of Belgium, France, Ireland, Italy, the Netherlands, Norway and Portugal, as of 31 December 2023. Average Daily Value on cash trading amounted to €10.1 billion in 2023, representing around 25% of the total European lit equity trading markets. Euronext market share in cash equities trading of the securities listed on its markets reached 65.1% over 2023. Euronext provides multiple marketplaces including its Multilateral Trading Facilities (MTFs), for investors, broker-dealers and other market participants to meet directly to buy and sell cash equities, fixed income securities and exchange traded products (ETPs).

Euronext is also the number one venue for the listing of bonds globally, with over 9,700 new bond listings in 2023 and a total number of listed bonds exceeding 55,000 at the end of 2023, surpassing 2022's total of more than 53,000 listed bonds. Bond listing is an international business activity with over 4,000 issuers coming from more than 100 jurisdictions across the globe.

[1] Including exchange traded funds (ETF), exchange traded commodities (ETC) and exchange traded notes (ETN)

Euronext, with its regulated markets (in Paris, Brussels, Milan, Amsterdam, Lisbon) and MTFs (EuroTLX, ExtraMOT, Growth, Access, GEM) is a leading European platform for the electronic trading of fixed income securities in retail size / odd-lots. In 2023, average daily volume for retail fixed income trading on Euronext markets reached €1.3 billion.

Euronext's derivatives trading business has a strong market position in futures and options on benchmark indices such as the CAC 40®, AEX®, BEL 20®, ISEQ®, OBX® and PSI® and FTSE® MIB, single stock options and futures and commodity derivatives. It ranks second among European exchange groups in terms of open interest of derivatives traded as at 31 December 2023. Euronext offers options contracts based on all of the blue-chip equities listed on Euronext, thereby reinforcing liquidity for those equities. This includes the components of Euronext's flagship national indices such as the CAC 40®, the second most traded national index in Europe. The commodity derivatives offered by the derivatives trading business include the milling wheat futures contract which is a world-class contract for the European Union agriculture market.

Since April 2021, Euronext is the owner of MTS[2], the leading European fixed income trading platform, number one in Europe for Dealer-to-Dealer (D2D) European Government bonds trading, number one in Italian repo trading and number three in Europe for Dealer-to-Client (D2C) European Government bonds trading.

Euronext's advanced data services business distributes and sells real-time, historic and reference data to global data vendors, such as LSEG Refinitiv and Bloomberg, as well as to financial institutions and individual investors. With a portfolio of over 1,250 benchmark indices, including the CAC 40® index in France and AEX® index in the Netherlands, Euronext is a leading provider of indices and a provider of advanced analytics products. Euronext's blue-chip index franchise was enriched in 2023 through the addition of the CAC SBT 1.5 index family. Euronext is one of the leading ESG index issuers in Europe, with more than 18 new ESG indices launched in 2023 and a strong pipeline.

Post trade is an important part of the services Euronext provides to its clients. In 2013, the Company entered into a clearing agreement with LCH S.A., the Paris-based clearing house of LCH Group Limited (LCH Group), for the clearing of Euronext's cash products. In 2017, Euronext renewed the separate derivatives clearing agreement with LCH S.A. that provides for a revenue sharing arrangement in respect of the clearing of Euronext listed derivativesl. On 29 April 2021, Euronext acquired the multi-asset clearing house CC&G, which it will grow into Euronext Clearing, making it by 2024 Euronext's CCP of choice for its cash equity, listed derivatives and commodities markets. In January 2023, Euronext has decided to terminate the existing derivatives clearing agreement (the "Agreement") with LCH SA, under the terms of the Agreement. Therefore, on 16 January 2023, Euronext served LCH SA notice of termination for the purposes of the Agreement. Since 2016, Euronext also offers user choice in clearing for the equity markets within the Eurozone, through the implementation of a preferred Central Counterparty (CCP) model followed by a fully interoperable service. Euronext continues to offer an open access CCP model for cash equity clearing.

In addition, Euronext owns and operates Euronext Securities Porto, the Portuguese national Central Securities Depository (CSD); Euronext Securities Oslo, the Norwegian national CSD; Euronext Securities Copenhagen, the Danish national CSD; and Euronext Securities Milan, the Italian national CSD. The Group is now the third-largest CSD operator in Europe. Euronext has combined its four CSD brands into Euronext Securities, a new umbrella brand for its CSD business, while keeping a strong local presence and identity.

Euronext Technology Solutions & other comprises Euronext's commercial technology solutions and services business, and former Borsa Italiana businesses including Gatelab and Integrated Technology Services 'X2M'. Euronext offers custom solutions and cost-effective services to exchanges, venue operators, and financial institutions, who require advanced functional capabilities, and low latency processing across multiple-asset classes surrounded by exchange grade business services used to operating within highly regulated environments.

The successful migration of the Euronext Core Data Centre facility from Basildon, in the United Kingdom, to Bergamo, in Italy has provided clients with a state-of-the-art colocation facility and connectivity services fully managed by Euronext within a data centre powered by renewable energy. Colocation and connectivity services have become an important source of revenue for Euronext Technology Solutions.

1.3.2 STRENGTHS

1. Present on the entire value chain
2. Focus on core European markets
3. Resilient model delivering consistent growth and profitability
4. Liquidity and transparency to all market participants through regulated exchanges
5. Offering of a wide range of products
6. United in diversity with an open federal model

[2] Euronext owns 62.52% of MTS

Presence on the entire value chain

Euronext operates seven national markets, one multi-asset clearing house and four central securities depositories (CSDs) across Europe. The Group therefore has the ability to directly manage the entire capital markets value chain and intends to grow and leverage its scale and presence for the benefit of its clients, team members, shareholders and stakeholders. This presence on the entire value chain notably allows Euronext to align strategic priorities between its trading and post-trade activities supporting innovation for the benefit of its clients.

Strong European anchorage

Euronext operates the largest liquidity pool in Europe, whose platform Optiq® attracted 25% of European share trading activity in 2022. Euronext benefits from a diverse client base, both in terms of geographic distribution and type of trading flow. The Company has an established European and United Kingdom client base, representing 66% of cash trading average daily volume and 71% of derivatives trading average daily volume for the year ended 31 December 2023. United States clients accounted for 34% of Euronext's cash trading average daily volume and 29% of its derivatives trading average daily volume for the year ended 31 December 2023.

Resilient Model Delivering Consistent Growth and Profitability

Euronext's sources of revenues are diversified across the businesses, markets and client segments. For the year ended 31 December 2023, approximately 60% of the Company's revenues were generated by its non-volume related businesses. Non-volume related businesses include advanced data services, investor services, listings excluding initial public offerings (IPOs), custody and settlement, net treasury income through central counterparty (CCP) business, and Euronext Technology Solutions & Other. This helps to limit Euronext's exposure to cyclicality in demand for particular products or services or in individual markets.

The following table sets out information relating to the sources of total revenue for the year ended 31 December 2023 and for the year ended 31 December 2022:

	Year ended 31 December 2023		Year ended 31 December 2022	
In thousands of euros	Revenue	% of total revenues	Revenue	% of total revenues
Listing	220,642	15.0%	218,380	15.4%
Trading revenue	490,008	33.2%	514,125	36.2%
of which:				
■ *Cash trading*	265,439	*18.0%*	*301,714*	*21.3%*
■ *Derivatives trading*	54,168	*3.7%*	*58,380*	*4.1%*
■ *Fixed income trading*	107,425	*7.3%*	*92,951*	*6.6%*
■ *Spot FX trading*	25,556	*1.7%*	*28,406*	*2.0%*
■ *Power trading*	37,420	*2.5%*	*32,674*	*2.3%*
Investor services	11,375	0.8%	9,596	0.7%
Advanced data services	224,774	15.2%	212,053	14.9%
Post-trade	370,183	25.1%	364,519	25.7%
of which:				
■ *Clearing*	121,283	*8.2%*	*121,393*	*8.6%*
■ *Custody and Settlement*	248,900	*16.9%*	*243,126*	*17.1%*
Euronext Technology Solutions & other	109,894	7.5%	100,101	7.1%
Net treasury income through CCP business	46,660	3.2%	(4,913)	(0.3%)
Other income	1,171	0.1%	4,949	0.3%
TOTAL REVENUE AND INCOME	**1,474,707**		**1,418,810**	

Euronext's businesses are characterised by recurring revenue streams which generate resilient and robust free cash flow[3] and allow Euronext to operate and invest in its business with flexibility. The Group's market expertise and proven, multi-asset class technology infrastructure allow Euronext to launch new products without substantial additional capital expenditure. Further, the Company's trading businesses do not expose it to credit risk or counterparty risk, which is borne by the counterparties to the trade and not by the markets. Euronext believes that its capital-light business and resilient free cash flow generation provide the potential for attractive return for shareholders while observing its regulatory capital requirements.

Liquidity and transparency to all market participants through regulated exchanges

Euronext's cash equities markets have a diverse member base by geography and trading profile, making for a particularly rich and diversified order book.

The combination of Euronext's position as a leading pan-European trading venue, the quality of its markets and the expertise of the Company's teams has enabled Euronext to increase its market share in cash equities trading of the securities listed on its markets from 60% in 2011 to more than 65% in 2023.

The relative share of trading on competing platforms has been relatively stable over the past five years. The primary tool for supporting market share is the flagship Supplemental

[3] *As defined in section 5.2 - Other Financial information*

Liquidity Provision programme, which rewards liquidity providers for ensuring Euronext's market quality remains high, whilst balancing against yield management considerations. Further tools have been developed to support market share such as dedicated fee schemes for non-member proprietary flows or retail flows. Euronext continues to provide excellent market quality and best execution principles to retail investors through its functionality Best of Book.

Optiq®

Euronext has upgraded its core trading platform with Optiq®, an enhanced, multi-market trading platform, providing customers with maximum flexibility, simplified and harmonised messaging as well as high performance and stability. Optiq® combines the latest technologies with in-house expertise.

Optiq® was rolled out across the Euronext markets to replace the Euronext Universal Trading Platform (UTP) in a phased implementation process. Market data has been managed through Optiq® for both cash and derivatives since July 2017, already delivering significant benefits to clients. In April and June 2018, the Optiq® trading engine went live for fixed income and cash markets, with impressive stability and performance. Euronext Dublin markets migrated to Optiq® in 2019. In December 2019, Euronext completed the successful completion of the roll-out of its Derivatives market to Optiq®. Oslo Børs markets migrated to Optiq® in 2020, just 17 months after the closing of the acquisition. As part of the integration of the Borsa Italiana Group, Italian cash markets migrated to Optiq® in 2023 and Italian derivatives markets will follow in Q1 2024.

Some of the third-party exchanges using UTP or former Euronext solutions have already migrated to Optiq®. Other exchanges and market operators have also shown interest in this best-of-breed solution.

Offering of a Wide Range Of Product Services and Platforms

Euronext's issuer base is diverse, comprising around 1,930 companies from within its home markets as well as elsewhere in Europe and internationally. It spans ten industry classification benchmark sectors. Euronext's corporate issuers differ in size and represent a combined market capitalisation of €6.6 trillion as of the end of December 2023.

The Company is the largest Regulated Market for Exchange Traded Products (ETPs) in continental Europe by number of trades, the second largest by volume with more than 3,800 listed ETPs and an average daily trading value of more than €560 million from January to December 2023. Euronext is the second-largest warrants and certificates Exchange in Europe with over €26.9 billion turnover and nearly 4 million trades. Nearly 410,000 new instruments were listed in 2023 and over 120,000 live instruments were available at the end of December 2023 to investors in Belgium, France, Italy, Luxembourg, the Netherlands and Portugal.

Euronext is also a leading European derivatives trading venue, with derivatives trading activities across financial and commodity derivative products. The Group has established the CAC 40® futures contract as the second most traded national index in Europe, with an equivalent of €6.0 billion in nominal value on an average daily basis in 2023. The milling wheat contracts which are the leading wheat derivatives in continental Europe, as well as the rapeseed commodity contracts continue to be included in recognised commodity benchmarks such as the S&P World Commodity Index and Rogers International Commodity indices.

Euronext operates an important bond market in Europe with more than 55,000 corporate, financial institutions, structured and government bonds listed on its markets and an internationally recognised derivatives platform. Euronext is also the majority owner of MTS. MTS is the leading fixed income trading platform in Europe, number one in Europe for Dealer-to-Dealer (D2D) European Government bonds trading, number one in Italian repo trading and number three in Europe for Dealer-to-Client (D2C) European Government bonds trading. As part of its mission to finance the real economy, Euronext has been appointed by the European Commission for the secondary market, and transparent negotiation, of bonds issued within the NextGenerationEU recovery programme in 2023.

Euronext FX is an Electronic Communication Network (ECN) for foreign exchange, precious metals and NDF trading (the latter through its subsidiary Euronext Markets Singapore). Powered by FastMatch® technology, Euronext FX offers customers access to large pools of diversified and bespoke liquidity, transparency, flexibility in trading protocols and unique order types. Its award-winning technology provides unparalleled speed and the capacity to handle thousands of orders simultaneously for Euronext FX clients, which include financial institutions, banks, asset managers, hedge funds, proprietary trading firms and retail brokers.

Euronext owns 66% of Nord Pool, which operates a leading physical power market in Europe. Nord Pool operates both core intraday and day-ahead markets in the Nordics, Baltics, the UK and Ireland, France, Germany, Belgium, the Netherlands, Austria, Luxembourg and Poland.

Euronext also operates one of the leading structured products trading venues in Europe with around 130,000 instruments available for trading. Euronext's hybrid market model, also known as the Request For Execution market model, is widely recognised as one of the most advanced market models for trading structured products and more specifically warrants & certificates. In 2020 Euronext released additional features allowing for an optimised and more efficient post-trade model as well as the possibility for investors to trade these instruments until 22:00 CET, paving the way for a truly pan-European structured products market.

Euronext operates a multi-asset clearing house, Euronext Clearing, which provides proven risk management capabilities across a range of trading venues including Euronext regulated markets, MTS, BrokerTec and Hi-mtf. Asset classes cleared include equities, ETFs, Closed-end Funds, Financial Derivatives, Commodities (Agricultural & Energy) and Fixed income (Cash and Repos markets). In 2023, Euronext Clearing cleared c. 83 million transactions on shares, c.25 million lots on derivatives and more than €27 trillion of notional on repo. The CCP also held an average of €24 billion of margins to cover its clients' activities.

"United in Diversity" with an Open Federal Model

Euronext is the only European exchange operating across multiple jurisdictions with a harmonised regulatory framework, a central order book for its exchanges in Amsterdam, Brussels, Dublin, Lisbon, Oslo, Paris and soon Milan and a single trading platform offering access to all markets through a single connection. The central order book consolidates liquidity in each multi-listed security to tighten spreads and increase market depth and achieves optimal price formation. Issuers listing on more than one of the Group's markets benefit from enhanced visibility, qualification for inclusion in more local indices and greater exposure for their volumes and prices. The migration of Italian cash markets occured in 2023 and the migration of Borsa Italiana derivatives markets is currently planned from the first quarter of 2024.

The Group has generated sustainable and diversified cash flows across institutional, high frequency and algorithmic trading, own account, agency brokerage and retail client classes. The single liquidity pool model and pan-European technology are key to Euronext's unique federal market structure. This structure enables the Company to integrate its constituent markets while they remain subject to regulation by national regulators. As a reminder, Euronext is also regulated by a College of Regulators at Group level (see section *1.4.2 - European Regulation)*.

1.3.3 LISTING

1.3.3.1 Listing – Products and Services

The Group's issuer base is diverse, comprising around 1,930 companies from within its home markets as well as elsewhere in Europe, and across the globe. Euronext's corporate issuers differ in size and represent a combined market capitalisation of €6.6 trillion. Euronext's listing franchise includes around 400 large cap companies (companies with a market capitalisation above €1 billion) and 1,500 small & mid capitalisation companies as of 31 December 2023.

At the end of December 2023 Euronext's listed equity issuers accounted for 62% of Euro STOXX 50 component securities, and 33% of Euro STOXX 600 component securities. Euronext equity issuers are eligible to join a family of leading index products in each of Euronext's national markets including the AEX® in the Netherlands, BEL 20® in Belgium, CAC 40® in France, ISEQ® in Ireland, MIB® ESG in Italy, PSI® in Portugal and the OBX® in Oslo. Euronext's family of index products provides investors and issuers with benchmarks enabling them to measure and trade the performance of key segments and strategies. The Group also offers extensive trading opportunities to investors, such as single stock derivatives on the underlying securities listed on its markets.

In addition, Euronext is the number one venue for the listing of bonds globally, with over 9,700 new bond listings in 2023 and a total of bonds exceeding 55,000 as of the end of 2023, surpassing 2022's total of 53,000+ listed bonds. Euronext lists all types of fixed income instruments, with global leadership in structured products, commercial papers, government bonds and ESG debt securities.

Furthermore, Euronext advocates for its issuer community's interests.

The leading listing venue in Europe

A market for each step of a company's growth

Euronext operates different kinds of markets to suit the evolving financing needs of companies at various stages of growth. These markets enable corporate clients at different stages of their development, whether early stage growth companies or more established businesses, to access capital from a broad range of investors and provide access to capital.

(i) Regulated markets:

In Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo and Paris, Euronext operates European regulated markets as defined under MiFID. These are suited to medium and large sized companies with substantial financing requirements. These regulated markets provide access to a large range of international investors and the possibility of inclusion in well-known European indices. Euronext lists a wide variety of securities, including domestic and international equity securities, convertible bonds, debt securities (including corporate and government bonds), structured products (including warrants and certificates and structured notes), exchange traded funds (ETFs), open-ended and closed-ended investment funds.

Euronext regulated markets are segmented according to market capitalisation:

- compartment A: companies with a market capitalisation of more than €1 billion;
- compartment B: companies valued between €150 million and €1 billion;
- compartment C: companies with a market capitalisation of less than €150 million.

(ii) Multilateral trading facilities: Euronext Growth, Euronext Access, Euronext Global Equity Market (GEM)

Euronext Growth (Brussels, Dublin, Lisbon, Milan, Oslo and Paris), the pan-European Multilateral Trading Facility (MTF) dedicated to small & mid-caps, has been officially registered as an "SME Growth Market", as defined under MiFID, for both shares and bonds by the competent authorities in Belgium, France, Ireland, Italy, and Portugal. This status, introduced under MiFID II, has been designed to facilitate access to capital markets for European SMEs by further developing qualified markets to cater to the specific needs of small and medium-sized companies.

Euronext Growth is dedicated to fast-growing small and mid-caps seeking to raise funds to finance their growth. It offers lighter requirements than Euronext's regulated markets while still providing access to a significant number of European investors focused on SMEs. Listed companies have greater flexibility in their choice of accounting standards and are subject to less extensive post-listing reporting requirements than companies listed on regulated markets. Euronext Growth lists a wide variety of securities, including domestic and international equity securities, convertible bonds and corporate bonds.

Euronext Access markets are designed especially for start-ups and SMEs that wish to join a stock exchange to finance growth and gain the reputational advantages of listing but do not meet the criteria for admission to Euronext's regulated markets and Euronext Growth. These markets are open to any company, regardless of size, performance, maturity or industry. Corporate bonds and structured products are also traded on Euronext Access. Euronext Access+ is a special compartment of Euronext Access tailored to the needs of start-ups and SMEs. Launched in 2017, Euronext Access+ helps smaller companies make a smooth transition to other Euronext markets, notably in terms of investor communications and transparency. This compartment, which is part of Euronext Access, serves as a springboard to other Euronext markets.

Euronext Global Equity Market (GEM) is a Multilateral Trading Facility based in Milan, to trade major pan-European and US stocks. It is aimed at retail investors who can now trade, in euros, 230+ US stocks and 120+ stocks from Germany, Spain, Finland and Sweden. Among GEM stocks, 250+ were added in November 2023. In addition, these stocks are available to trade after hours on the Trading After Hours (TAH) market from 18:00 to 20:30pm CET.

(iii) Other alternative markets

Euronext also offers alternative markets such as:

- Trading Facility, an MTF in Belgium;
- Euronext Expert Market, based in Brussels, which enables negotiation of prices for unlisted products – such as shares, real estate certificates notes and bonds – once a week;
- NOTC: the Oslo platform for the provision of quotes to allow non-listed firms to benefit from a level of liquidity.
- The Global Exchange Market (GEM) is a Multilateral Trading Facility based in Dublin, for listing debt securities and investment funds. GEM is the largest MTF listing venue in Europe counting almost 29,000 bonds (with approximatively two thirds of total Dublin bond listings) and 1,500+ investment funds classes listed.

Added-value services for Issuers

Euronext provides a range of services to its issuers including:

(i) ExpertLine

ExpertLine is a team of market professionals who provide issuers with feedback on real-time events that may affect their share price. ExpertLine also acts as a first port of call for issuers listed on all Euronext markets, listing sponsors and other intermediaries, and the team develops and provides issuers with a suite of services such as the Connect web portal that Euronext updates and enriches regularly.

(ii) Connect

Companies listed on Euronext markets have access to Connect, a secure web portal that provides issuers with market intelligence. Connect is also a publication tool, enabling issuers to upload and publish press releases, maintain their financial calendar and update their company's profile on Euronext's website.

(iii) Pre-IPO programmes

Euronext offers educational programmes for businesses aspiring to go public. Executives attend a 6-month training course during which they receive tools and insights, while accessing a network of advisors and experts to optimise their contemplated IPO. In 2023, Euronext pre-IPO programmes consolidated under one brand, "IPOready".

The programme has been widely enriched to address the needs of SMEs from all sectors, as well as Tech scale-ups, and is active across 9 locations in Europe. In addition to covering the fundamentals of IPO readiness and the listing process, the programme offers a range of advanced topics such as investor relations, corporate governance, ESG, and life as a listed company.

Listing venue of choice for SMEs

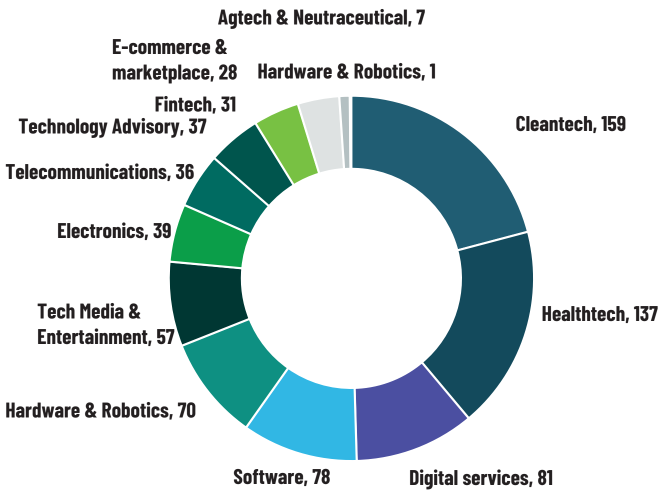
Euronext is the listing venue of choice for small and mid-cap companies in Europe with approximately 1,500 SMEs listed on Euronext markets representing a total market capitalisation of €219 billion as of 31 December 2023.

Over the past few years, Euronext has strengthened its franchise of small and medium-sized companies by adapting financing solutions to match the profile of small and medium-sized companies, and by supporting them with tailored support and initiatives.

Boosting the financing of the Tech sector

Euronext is the leading European platform for fast-growing technology companies. In 2023, 22 Tech companies went public on Euronext markets, choosing Euronext to facilitate and support their strategic growth ambitions. Euronext's pan-European platform spans a wide range of subsectors with 700+ listed Tech companies in Digital Services, Cleantech, Biotech, Medtech, technology, media and telecom (TMT), Software, IT Consulting and Technology Hardware. These companies represent a total market capitalisation close to €1,302 billion as at 31 December 2023.

All Tech sectors are represented on Euronext markets (number of issuers by sector)



Euronext helps private companies reach the next stage of development with IPOready, a six-month educational and mentoring programme aimed at familiarising key executives (CEOs, CFOs, founders) with capital markets. The participants the technology industry, including the following verticals: biotech, software, medtech, electronics, hardware, cleantech, e-commerce and fintech.

Active in all Euronext countries, but also in Spain and Germany, the programme supports key executives from fast-growing companies through a combination of academic seminars, workshop sessions and individual coaching. IPOready is now a unique Tech network gathering 80+ partners from the financial industry and 920+ alumni, of which 28 alumni have listed on Euronext, 3 of these in 2023: Florentaise, QEV and Yakkyo.

Euronext Tech Leaders is a new segment and index launched in 2022 and dedicated to Tech issuers. 120+ high-growth and leading Tech companies are benefiting from new services such as:

- the Euronext Tech leaders index;
- a full suite of advisory and communication services to raise the international profile of listed European Tech companies;
- an exclusive access to top-tier events organised by Euronext and its network of partners, including the Euronext Tech Leaders Campus, the annual meeting of the leading private and public European Tech companies; and
- improved trading conditions on Euronext Tech Leaders stocks for retail investors as well as analytics coverage, thanks to Euronext's partnership with Early Metrics.

Market activity in 2023

Euronext markets in 2023 recorded a resilient financing activity through its 7 listing venues amid challenging market conditions, confirming its leading position in Europe for equity listing and globally for debt listing.

Over the course of 2023, Euronext welcomed 64 new listed companies, representing an aggregated market capitalisation at listing of €50 billion, which raised €2.5 billion.

The Tech industry continues to be a strong franchise for Euronext markets with more than a third of new listings carried out by Tech companies andover 700 Tech companies listed on Euronext in 2023.

In 2023, Euronext welcomed notably:

- Seacrest Petroleo (€356 million of market capitalisation, €221m raised at listing), a large Brazilian oil and gas operator, listed on Euronext Oslo;
- Lottomatica (€2.2 billion of market capitalisation, €600m raised at listing), the leading Italian operator in the legal gaming market, completed a private placement on Euronext Milan;
- Ferrovial (€21.0 billion of market capitalisation), a leading global infrastructure operator based in Spain, opted for a direct listing on Euronext Amsterdam;
- Coty Inc. (€10.0 billion of market capitalisation, €339m raised at listing) listed on Euronext Paris, and became the first US company to successfully raise capital through a simultaneous EUR and USD offering at the occasion of a European listing;
- Syensqo (€8.8 billion of market capitalisation at listing), the specialty chemicals spin-off from Solvay, listed on Euronext Brussels and Euronext Paris.

Moreover, 300+ issuers have raised €20 billion through follow-on transactions, to fund their growth and investment projects. Argenx, the largest European biotech, listed on Euronext Brussels, raised €1.1 billion through an all-primary share offering. EDP Renováveis, a cleantech listed on Euronext Lisbon, raised €1.0 billion to further develop their renewable energy production capacities. Neoen, an independent producer of renewable energy listed on Euronext Paris, raised €750 million through a rights issue, to further accelerate its growth in renewable energy production.

	Euronext – Total money raised through equity (€bn)
2019	22.3
2020	43.6
2021	109.4
2022	32.3
2023	**23.6**

(a) Figures consider money raised through listings and follow-ons

In addition, the Euronext debt listing business has also grown in 2023, reinforcing its worldwide leadership position with over 9,700 new bond listings in 2023, surpassing 2022's total of 53,000+ listed bonds. Euronext's leadership position in ESG bonds has been strengthened with more than €290 billion in amount issued and an impressive growth stemming from 496 new ESG bonds in 2023, bringing the amount raised through ESG bonds on Euronext markets to c. €1.3 trillion.

Empowering Sustainable Finance

Euronext's "Growth for Impact 2024" strategic plan made environment, social, and governance (ESG) one of its priorities, empowering sustainable finance through an ambitious climate commitment for Euronext that aims to make a tangible impact on its partners and clients, with the launch of the "Fit for 1.5°" climate commitment, and also through an enhanced inclusive people strategy.

As expectations on transparency and sustainability continue to increase within the investor community, Euronext's first step was to equip listed companies by publishing guidelines for ESG reporting in January 2020 and updated in May 2022. The guide was designed to help issuers in their interactions with investors and the wider ESG community, to help them understand how to address ESG issues as a key component of investor relations, as well as the main principles to consider when preparing an ESG report. ESG reporting can appear particularly complex for smaller issuers in the absence of a clear set of globally used standards.

The Euronext guide focuses on three elements:

1. Materiality: the importance of identifying what is material for a business given its size, nature and geographic coverage whether for management or stakeholders
2. Investor Relations: the key and increasing role ESG reporting plays into feeding information to investors and nurturing financial communication
3. Transparency: insight and tools to support the reporting process (key concerns and questions, illustrative indicators, details of international standards, etc.)

In November 2023, Euronext released My ESG Profile, a new tool showcasing listed companies' extra-financial performance to the market. For all Euronext issuers, 60,000 ESG data points are made available in a standardised form on Euronext website.

The incorporation of ESG factors into investment decision-making is the first step to make finance more sustainable, to ensure better allocation and channeling of capital towards sustainable and transitioning assets:

1. Euronext's remains the leading market for ESG bond issues in 2023.
2. Euronext is Europe's leading exchange for financing the sustainability transition, with 159 cleantech companies representing an aggregated market capitalisation of €97 billion as at 31 December 2023.
3. Cleantech companies are also well represented among Euronext Tech Leaderss, benefitting from increased investor visibility and a dedicated service offering. 26 Tech Leaders are cleantechs, featuring an aggregated market capitalisation of €46 billion.

Latest developments on Euronext Tech Leaders

In June 2022, Euronext launched the Euronext Tech Leaders segment, dedicated to high-growth and leading Tech companies, with key partners active in private and public equity markets.

The segment provides listed Tech companies with a suite of services to support them throughout their financial journey and a full suite of pre-IPO services to attract private Tech listing candidates to Euronext's markets, supporting their growth financing needs. Euronext Tech Leaders benefit from an enhanced visibility among Euronext's large international investor base, as well as access to the largest financing liquidity pool in Europe, which attracted 25% of European lit continuous and auction equity trading activity in 2023 via the Optiq® trading platform. Euronext has developed these new services in close cooperation with both public and private institutions.-

The Euronext Tech Leaders segment is composed of innovative and high-growth Tech companies that are listed on Euronext markets and comply with a set of financial and non-financial criteria. Tech companies listed on this segment benefit from increased visibility towards investors and services to facilitate their access to financing throughout their growth journey.

Since the launch of the initiative, Euronext has welcomed 20 new Euronext Tech Leaders to its markets, bringing the total for the segment to 120+ issuers, with an aggregated market capitalisation of €0.9 trillion as of 31 December 2023. This initiative further strengthens Euronext's Tech ecosystem of 700+ listed Tech companies, 980+ private companies that are alumni of its pre-IPO programmes and a large base of international investors financing all types of Tech company growth profils.

In 2023, Euronext hosted the second edition of the Euronext Tech Leaders Campus in Paris. More than 180 meetings were organised between investors and Euronext Tech Leaders companies, accelerating the Group commitment in supporting European high-growth tech companies. 17 issuers joined the segment in 2023.

MyEuronext API for structured debt listings via MTM programmes

In line with its commitment towards driving innovation and delivering exceptional client listing experience, Euronext developed within MyEuronext portal an API solution for high frequency issuers. This new suite of automated and secured connectors caters to listing and post-listing services, notably supporting a fully-automated listing solution for structured debt instruments. MyEuronext portal already serves as a comprehensive and efficient single-entry point for debt issuers in Milan and Paris, enabling seamless listing procedures across these markets, and it will be expanded to other Euronext listing venues.

Users of the MyEuronext platform benefit from superior customer support, allowing them to comfortably scale up their issuing volumes while achieving significant operational cost reduction. The platform supplies multiple access options, including a user-friendly graphical interface, file transfer capabilities and API protocols, providing flexibility and convenience to users.

Societe Generale was the first debt issuer to connect to MyEuronext via API, demonstrating its ambition to fully automate the structured debt business from product origination to listing, post-listing and distribution. This new cost-effective model is expected to be replicated by other financial issuers.

Euronext Access Milan

Euronext Access Milan was launched in September 2023, as a result of the successful reconversion of the Italian debt Multilateral Trading Facility (MTF) ExtraMOT into a new and more agile MTF. The new debt listing venue is a fast, efficient and reputable market which will serve as a gateway to Italian debt capital markets for all Italian and international debt issuers, by offering:

- Access to a pan-European capital markets and diversified professional investor base
- Streamlined listing process and admission rules
- Regulation in line with European best practices
- Access to complementary financial services from the Euronext Group
- Distribution and trading on Europe's leading trading platform

Major Italian companies – notably including Campari, ENI and SNAM - have already repatriated their debt listing activity to Euronext Access Milan.

1.3.3.2 Euronext Corporate Services

Euronext Corporate Services is a fully-owned subsidiary of the Euronext Group launched in 2016 with the ambition to help listed companies make the most effective use of capital markets and support organisations with innovative solutions and tailor-made advisory services in Governance (iBabs), Compliance (ComplyLog), Communication (Company Webcast), Investor Relations (Advisory and IR Solutions). Corporate Services already serves more than 4,500+ clients in over countries, of which over 1,000+ are listed companies. Euronext Corporate Services helps listed companies make the most effective use of capital markets, from blue-chip large caps to SMEs, located across all Euronext markets and beyond (Sweden, the United Kingdom, Germany, and Spain).

Euronext Corporate Services offers a unique and comprehensive value proposition based around five main pillars:

1. Investor Relations:
   - tailor-made advisory, market intelligence, decision making analytics and ESG advisory services for listed companies;
   - complete and intuitive investor relationship management and targeting platform;
   - dynamic and strategic analysis of shareholding structure;
   - flexible and customised market data components for listed companies' investor relations websites;
   - regulatory news services for listed companies to distribute announcements to the market;
2. Communication: comprehensive range of webcast, webinar and conference call services for all types corporate events (investor relations, internal communication, marketing, training, etc.);
3. Governance: digital board portal solution helping organisations to secure their board meetings and to streamline their decision making processes;
4. Compliance:
   - innovative solution to automate the management of insider lists in a way that both saves time and ensures compliance with the requirements of the Market Abuse Regulation;
   - whistleblowing solution that allows safe, anonymous reporting of all potential ethical violations and wrongdoing;
   - automated employee trade monitoring tool;
   - digital liability register that saves municipalities time when ensuring compliance with the Finnish Municipality Act;
5. Academy:
   - corporate training centre providing best-in-class capital markets training courses and programmes

This offering has been built through a combination of organic developments and acquisitions. To achieve its ambition, Euronext has notably acquired four companies providing innovative solutions for corporates:

- Company Webcast (100%-owned), a leading company specialising in professional webcast and webinar services;
- IR.Manager (100%-owned), an investor relations CRM platform supporting IR team workflow and providing an investor targeting tool;
- IBabs (100%-owned), a leading Dutch provider of dematerialised and secured board portal solutions for corporate and public organisations;
- Complylog (100%-owned), a leading provider of specialised compliance solutions that enable compliance teams to meet EU regulatory requirements with lower risk and higher efficiency.

1.3.4 Trading

Euronext is the leading trading venue in Europe. It provides multiple marketplaces for investors, broker-dealers and other market participants to meet directly to buy and sell cash equities, derivatives, agricultural commodities, power, FX, fixed income securities, securitised derivatives, and exchange traded products (ETPs). One of the primary functions of the Group's markets is to ensure that orders to purchase and sell securities are executed in a reliable, orderly, liquid and efficient manner. Order execution occurs through a variety of means and Euronext continually seeks to develop additional and more efficient trading processes.

1.3.4.1 Cash Trading

Products and services

Equities

The Company is the market leader in cash equity trading in its seven home markets of Belgium, France, Ireland, the Netherlands, Portugal, Norway and Italy. Over 2023, Euronext market share in cash equities trading of the securities listed on its markets averaged 65.1% and the Company had a strong blue chip issuer presence. At the end of December 2023, Euronext's issuers accounted for 62% of Euro STOXX 50 component securities and 33% of the Euro STOXX 600 component securities.

Euronext is ranked first in Europe as measured by domestic market capitalisation and first by average daily lit and auction equity trading value. In addition, the Group has a solid exchange traded product (ETP) trading franchise based on over 3,000 ETPs listed on its markets. In 2023, the total Euronext transaction value on equities was €2,393 billion. In equities, Euronext outperforms peer exchanges in yield extraction while maintaining high market share. This is achieved through a combination of superior execution quality, sophisticated liquidity schemes and advanced pricing segmentation. Euronext offers a compelling value proposition across the transaction chain, from blue chips to small companies, with tailored market models to maximise the depth and quality of liquidity available for trading those companies on the secondary market and to best adapt to the different types of client order flows as necessary.

Since the introduction of new European Union legislation in 2007, via MiFID, competition for share trading has been intense. Yet Euronext has been successful in maintaining market share above 60% throughout the past decade demonstrating the resilience of its core business. Euronext's product, pricing and client strategy and the execution thereof are vital to maintain the high quality of execution and broad diversity of clients active on Euronext's markets.

Euronext operates equity markets of which the main financial instruments are shares. Shares are any share of capital stock or any other equity securities issued by a corporation or other incorporated business enterprise.

Since 2017, Euronext's competitive position in equities has been enhanced due to the evolution of its blue-chip liquidity scheme, a new best execution service for retail investors (Best of Book), a new fee scheme for non-member proprietary flow (Omega), a Local Fee Scheme dedicated to national local clients and new incentives embedded in the agency tariff to attract incremental flow from trading members. Euronext has re-positioned both the equity and warrants business to ensure its offering to local members in Euronext's home markets is attractive and that flow from the local client community is either retained or repatriated. These initiatives enable Euronext to continue enhancing execution quality available on Euronext's markets which is key to add value to clients and to compete effectively.

Best of Book service for retail best execution

Since 2017, Euronext has offered a best execution service for retail orders. In partnership with dedicated liquidity providers, Best of Book offers price improvement in the central order book for retail brokers by adding a layer of liquidity at a price equal to or better than the price in the central order book exclusively for retail flow. This helps ensure best execution for brokers executing orders on behalf of retail clients, in a way that ensures compliance and that the end investor achieves an optimum result. The service promotes and strengthens the diversity of Euronext's order book to the benefit of the whole market.

Omega Fee Scheme for non-member proprietary trading flow

In 2016, Euronext launched a new pilot fee scheme for non-member proprietary trading flow. Non-member proprietary firms wishing to participate in the Omega fee scheme enter into a tripartite arrangement with Euronext and the member intermediary. This scheme provides non-member firms with improved value when trading on Euronext markets while promoting and strengthening the diversity of Euronext's order book to the benefit of the whole market.

Dark and Midpoint functionalities

Dark trading venues have become crucial alternatives to regulated markets, and MiFID II regulatory changes have further solidified the need for such platforms. Investors continue to seek efficient mechanisms to source liquidity and execute trades safely.

In 2024, Euronext will offer dark and midpoint trading functionalities to all Euronext members, as such pool of liquidity will be embedded in the Euronext Central Limit Order Book, and not on a separate MTF. All Euronext members may benefit from an integrated solution to contribute or remove liquidity from the platform and deliver value to their customers.

Exchange Traded Funds

Euronext, the leading European Regulated Market for Exchange Traded Products (ETPs) in 2023 as measured by number of trades (Source: FESE), offers a comprehensive solution for multi-national listing and trading in ETPs. In 2023, in combination with the migration of Borsa Italiana's cash franchise onto Euronext's Optiq trading platform, Euronext took the opportunity to harmonise its markets from a functionality as well as pricing point of view for issuers and trading members. Euronext markets are supported by robust infrastructure where product supply and demand meet within a framework of deep liquidity and advanced price formation. Euronext develops and maintains relations not only with issuers, but also liquidity providers, intermediaries, investors, regulators and other in the ETF community to understand their challenges and needs, providing strong alignment with Euronext's business goals and a strong foundation to co-create new products to accelerate growth in the ETF industry with the support of its major participants.

Euronext's client alignment is demonstrated by Euronext being consistently recognised as the Best European Exchange for Listing ETFs.

Open Ended Investment Funds

The Euronext Fund Services (EFS) offer asset managers ways to achieve better operational efficiency and enhance asset gathering opportunities. By engaging in active discussions with key stakeholders, the Company believes its offering is a relevant choice for any issuer considering fund distribution in Europe.

The services include the Euronext Fund Service Amsterdam, first launched in 2007, which enables Fund Managers to further extend the geographic reach of their funds across Europe and will include a broader choice of trading solutions;

EFS enables both local and global asset managers to list their funds (whether large or small) on Euronext's regulated platform, enhancing the profile of the funds and helping to attract higher levels of investment into those funds.

Securitised Derivatives (Warrants and Certificates)

Euronext operates a retail structured products business across its continental European franchise, servicing the needs of retail investors via intermediary service provision, namely listing warrants, certificates and structured notes, developing Euronext's market model for high quality liquidity provision and ensuring execution by retail brokers is cost efficient. Euronext develops relationships with its issuers not only to expand their usage of existing tailored services but also to create new and innovative services for operational efficiency and business expansion such as bilateral settlement (optimizing the settlement model and costs) and trading until 22.00 CET (allowing investors to trade securitised derivatives in Europe up until the close of US markets).

Cash Market structure and functionality

Cash trading on Euronext's markets is hosted on the proprietary strategic architecture Optiq®. The Group's trading rules provide for an order-driven market using an open electronic central order book for each traded security, various order types and automatic order matching and a guarantee of full anonymity both for orders and trades. While the core trading system is built on this order-driven principle, the flexibility of Euronext's technology enables Euronext to develop different types of matching algorithms and functionalities to suit the different price formation mechanisms that exist amongst the different cash asset classes and to cater for different market participant needs. For example, Euronext continued to develop its best execution service for retail investors, Best of Book, which brings retail brokers an additional layer of liquidity specifically aimed at offering price improvement for retail order flow. This service is integrated into Euronext's central order book enabling members to interact with this liquidity through the same connection as for the core market.

The Company also operates a sophisticated liquidity provider programme for blue chips and liquid mid-cap equities which aims at ensuring Euronext offers superior market quality. Euronext's equity markets continue to yield the best market quality metrics amongst its competitors. These metrics include, amongst others, spread, market depth, best price setting and presence time at the best bid and offer spread. The programme encompasses both a presence time obligation at the best bid and offer spread and a minimum passive volume obligation. This volume obligation is of particular interest as, in combination with the presence time obligation, it creates order persistence and therefore increases probability of execution. In a fragmented trading environment, market quality metrics are actively used by trading firms as decision making parameters embedded in their order routing systems and therefore contribute to maintaining Euronext's market share. Furthermore, dark and midpoint functionalities will be launched in 2024 and fully embedded on Optiq®.

Cash Market trading members

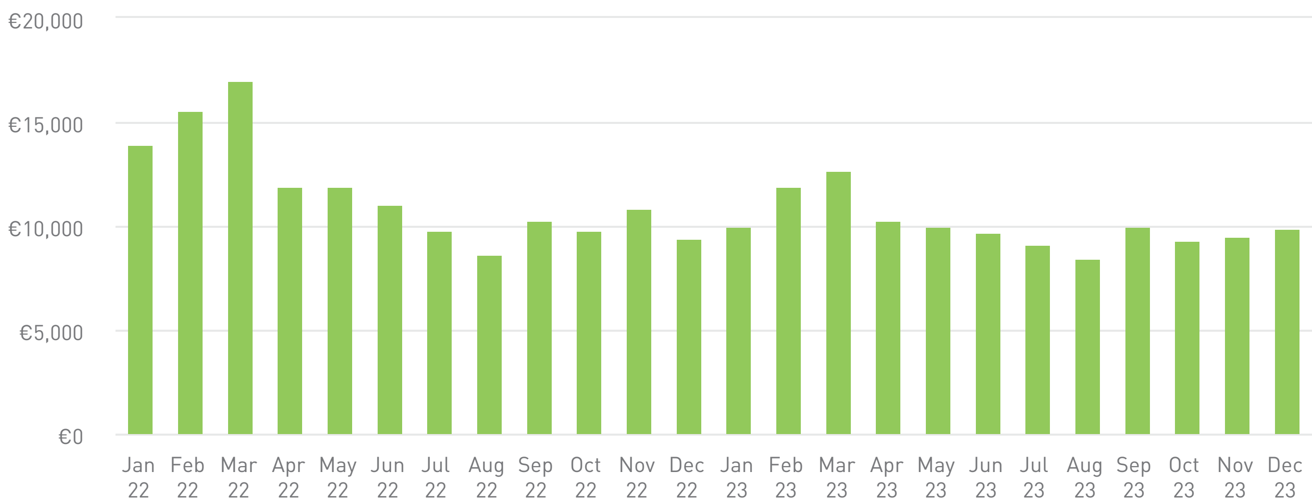
The Group has a diverse member base, from retail, large investment banks or regional banks and brokers, with a strong presence in its seven domestic markets.

Cash trading average daily volume by geographic origin of customers

The average daily volume on Euronext's cash trading markets (including equities, ETFs and structured products) for the last twelve months ended 31 December 2023 amounted to €10.0 billion (single counted).

For the last twelve months ended 31 December 2023, 65% of cash trading on Euronext originated from Europe, 34% from the United States and 1% from the United Kingdom (based on location of customers worldwide headquarters).

Cash trading average daily traded volumes, in million



Advanced pricing strategy

During 2023, Euronext continued to optimise and adjust its pricing strategy on several key components of the tariff structure. The flagship liquidity provision programme (Supplemental Liquidity Programme) continued to help in delivering a strong performance in the quality of Euronext's cash market while delivering substantial yield. Furthermore, as part of the "Growth for Impact 2024" strategic plan, Euronext committed to 'capitalise on its federal model', incentivising 'natural' flow from local and regional brokers and the buy-side in each market. Euronext succeeded in maintaining for cash trading an average market share greater than 63% (precisely 65.1% average in FY 2023) and revenue capture above the 0.52bps committed levels following the migration of Borsa Italiana cash markets to Optiq®.

1.3.4.2 Derivatives Trading

Products and services

Euronext is a leading pan-European derivatives trading venue with trading activities across financial and commodity derivatives products.

Euronext offers financial derivatives trading in its markets in Amsterdam, Brussels, Lisbon, Oslo, Paris, and Milan with Borsa Italiana. Euronext was the second largest market for equity and index derivatives in Europe in number of contracts. Euronext offers local markets access to the trading of futures and options based on global equities, dividends, local market indices including the AEX®, BEL 20®, CAC 40®, ISEQ®, PSI®, OBX®, FTSE MIB and established pan-European equity indices such as the Euronext® Eurozone Banks Index Derivatives or FTSEurofirst and FTSE EPRA/NAREIT real estate indices.

Starting 2023, Euronext began transforming its distribution network with the launch of the first version of Euronext Trader, a new web-based trading interface. Developed by Gatelab, a subsidiary of Euronext, this platform simplifies access to Euronext's comprehensive product range. Euronext Trader not only enables members to cross outrights and numerous strategies but also offers a Total Return Future pricer that converts basis points into index points, and vice versa. In 2023, eight members were fully onboarded. More than €16.9 billion in nominal value was traded through Euronext Trader, amounting to 770,000 contracts. This includes 173,000 index futures and 597,000 equity options. The Euronext Derivatives team is currently focused on expanding the client base for this tool, aiming to significantly increase trading volumes.

Euronext also offers commodity derivatives trading with futures and options based on milling wheat, corn, rapeseed, and durum wheat. The Group is the leading agricultural commodity franchise in Europe and its core commodity contracts have long been relied upon as trusted global and European benchmarks. Euronext also offers trading in financial salmon futures contracts through its subsidiary Fish Pool.

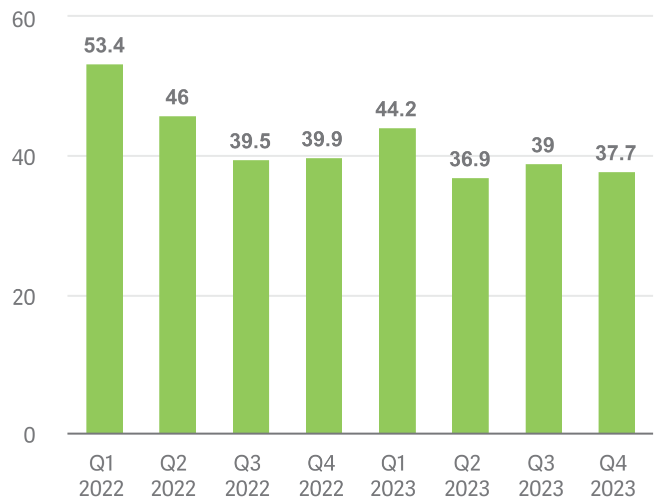
In 2023, the notional value of the financial derivatives traded on Euronext's derivatives markets was €4.4 trillion, equivalent to an average of €19.7 billion per day.

Euronext's derivatives team has a mission to bring innovation and agility to the derivatives markets. Since Euronext's IPO in June 2014, Euronext has focused on researching and developing new derivatives products together with its client community. Euronext continues to expand its capabilities and make its business work better for Euronext's customers.

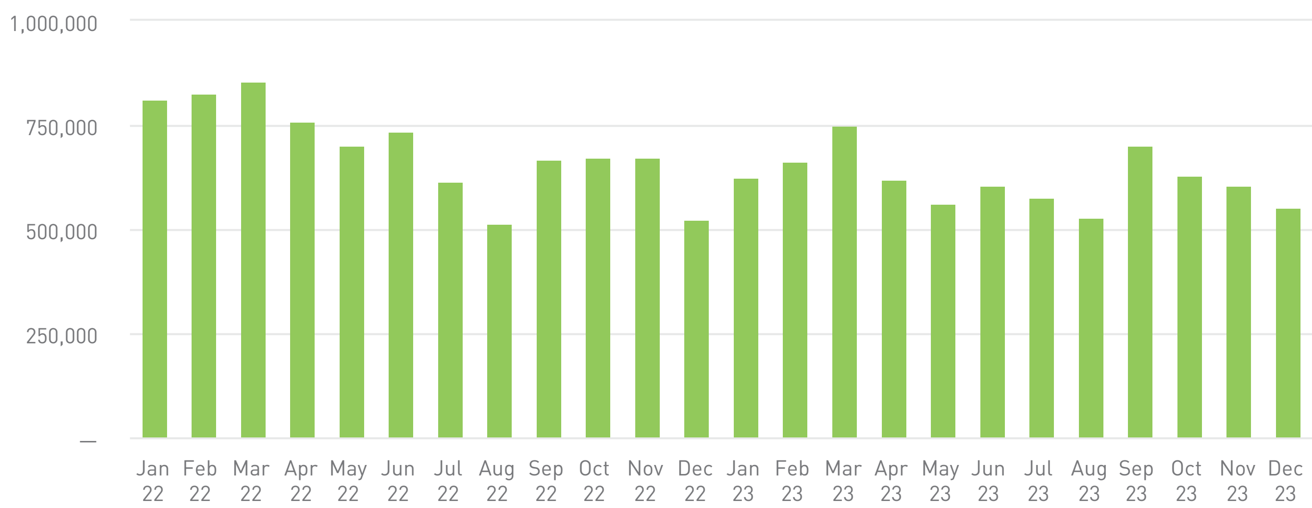
Euronext is pursuing the expansion of its commodity derivatives strategy along three axes:

1. focus on the core European agricultural markets;
2. innovation and diversification with cash-settled commodities;
3. enhanced client centric approach.

Number of contracts traded, in millions of lots



Average daily volumes traded on derivatives, in lots



Both graphs include financial and commodities derivatives.

Financial Derivatives

Equity products: versatility and leverage

Equity options and futures enable holders to hedge against, or take position on, changes in the underlying share. More than 540 equity options and over 550 equity futures can be traded on Euronext, making the Company one of the leading markets for equity derivatives trading. Equity options trading has historically been particularly active in Amsterdam due to high retail participation.

Equity index products: hedging against fluctuations in the European equity market

Equity index derivatives allow holders to hedge against, or take position on, changes in the future level of a particular index, the investor paying or receiving a cash sum representing their loss or gain on the future or option. Euronext's equity index derivatives allow customers to hedge against fluctuations in a range of European stock market indices and the European equity market as a whole, and many are available as weekly or daily contracts as well as the more usual monthly contracts.

Euronext's flagship equity index products encompass the CAC 40® index future, the FTSE MIB index future, and the AEX® index option. These contracts rank among the most actively traded national index derivatives on European exchanges. Additionally, Euronext offers mini and micro index derivatives. These allow investors to pursue similar investment strategies with lower initial margin requirements or smaller trading amounts.

Dividend products: Hedging dividend risk and reducing volatility exposure

Dividend index futures and stock dividend futures allow holders to hedge against, or take position on, changes in the dividend of a particular index or underlying share. Euronext's dividend products include the CAC 40® and AEX® dividend index futures, and more than 330 single stock dividend futures (including 70 contracts on US names, 22 on Swiss names and 26 on Swedish names...), making up the broadest offering in Europe.

Total Return product: a listed solution to access implied equity repo

The Total Return Future ("TRF") on the CAC 40® Index launched in October 2018 has been developed by Euronext in order to meet clients' need for a listed solution to trade total return swaps. With increased capital requirements being imposed by Basel III and EMIR, the new total return future contract offers strong netting advantages while providing a transparent and secure trading environment to access the implied equity repo rate on the constituents of the CAC 40® index. Euronext has been the first exchange to launch a TRF on a national benchmark. In 2023, the CAC 40 TRF reached a significant milestone by exceeding 1 million lots traded, with record-breaking monthly volumes in January and February. Since launch, a total of 1,400,000 contracts have been traded, representing a nominal value of €99 billion. The contract continues to gain traction among the buy-side community, largely due to the introduction of extended maturities of up to 10 years at the end of 2022. These longer maturities have significantly contributed to the observed increase in trading volume this year.

Commodity derivatives

Euronext is a leading provider of agricultural commodity derivatives with several of the Company's contracts established as global price benchmarks for the international commercial and financial community. During the 2021-2023 period the franchise successfully remained open every trading day despite extremely volatile conditions with the outburst of the Russian-Ukrainian war which has direct consequences on grain markets and the Euronext milling wheat futures has confirmed its role as principal instrument of hedging for the global wheat market. Euronext made a strong commercial push concentrating on both the mainly European commercial clients and also with a set of focused incentive programmes for international financial operators. This delivered concrete results including:

- record total volumes in 2023 with 23.1 million lots traded across the board, up +15% compared to 2022;
- July 20th 2023 was an all-time daily volume record with 252,179 lots traded across the products, including an individual record on the milling wheat futures contract with 187,898 lots (equivalent to 9.4 million tonnes traded on the day);
- November 2023 is a new all-time record volume month with 2,453,760 lots of futures and options traded (+2.1% compared to the previous record month in November 2021).

The volumes of the flagship milling wheat futures contract increased by +16% in 2023 and reached an average level of more than 65,000 lots traded on a daily basis, representing the equivalent of 3.2 million tonnes of wheat or 6.2 times the total quantity of EU milling wheat annual production traded over the course of the year. The rapeseed futures contract increased by 40% over the year. The 2024 commodity development strategy builds on recent activity and focuses on:

- the launch of a cash-settled platform starting with outright contracts and then extending to more complex spread-based contracts. Durum wheat is the first of these outright priced contracts followed by the integration of the existing Fish Pool cash-settled contract;
- improvement of the current offer to clients with some new technical upgrades. This will improve the existing performance;
- innovation with an internal and efficient clearing solution, Euronext Clearing, where Euronext will also continue to improve its contract physical delivery and settlement processes.[1]

Derivatives trading members

Trading members on Euronext's derivative markets fall into categories such as dealers, brokers, or a combination of both. Their activities encompass a wide range, including retail broking, investment banking, dealing, algorithmic trading, high-frequency trading, and international physical trading. Euronext's client base is notably diverse, both in client types and geographical spread. Trading members have the option to serve as market makers or liquidity providers, roles that are vital for the efficient functioning of the price formation process in derivative instruments. In these roles, members enter into agreements with Euronext, which outline their

[1] Subject to regulatory approval

responsibilities regarding liquidity display and spread maintenance. Furthermore, market makers and liquidity providers leverage mass quotes to place multiple orders simultaneously. This capability enables them to transmit buy and sell orders across various contract months in a single message. This approach significantly enhances the efficiency of updating prices for Euronext's extensive derivatives range in a timely manner.

1.3.4.3 Fixed Income trading

Euronext Fixed Income trading is made up of two parts: 1) MTS[2] (wholesale) and 2) retail.

MTS

MTS is a leading operator of regulated electronic platforms for European rates, credit and money markets, supporting daily transaction volumes of more than €180 billion (notional). MTS Cash is a comprehensive and professional cash securities trading environment for the interdealer marketplace. MTS Repo is a venue for professional repo trading. MTS BondVision is a trusted and efficient multi-Dealer-to-Client electronic cash bond and repo trading platform, providing buyside clients with real-time pricing and the ability to trade with the major dealers.

Market volatility and higher interest rates continued to support robust volumes throughout 2023, with MTS Cash volumes increasing +22% year-on-year, from €18.9bn in 2022 to €23.0bn per day in 2023. MTS Repo notional volume increased +12% from €149 billion per day in 2022 to €167 billion in 2023.

Throughout 2023, MTS continued to grow and develop its business. MTS EU, a new D2D market, was successfully launched in November 2023 following recognition as a trading platform for the implementation of electronic market making on EU issued debt instruments by EU Primary Dealers. The launch was very successful with robust trading volumes from day 1.

Retail

Euronext, with its regulated markets (in Milan, Paris, Brussels, Amsterdam, Lisbon) and MTFs (EuroTLX, Growth, Access) is a leading European platform for the electronic trading of fixed income securities in retail size/odd-lots. 103 members trade 9,766 corporate, financial institutions and government listed bonds, representing a 2023 total turnover of approximately €274.0 billion [3]. Euronext also operates an Off-book On-Exchange ("OBOE") reporting business in Oslo with 13 members reporting a monthly average of €18.3 billion [4].

In 2023, MOT registered a robust performance driven by sustained favorable market conditions, including high inflation, rising interest rates and increased volatility. These factors sparked growing investors interest, particularly in government bonds. The MOT average daily volume was €1,015.1 million (+58% vs 2022) and the average daily trades 31,127 (+65% vs 2022). The successful public distribution/ offering of 6 bonds (3 corporate and 3 Italian government bonds) led to a total of roughly €46 billion raised.

On EuroTLX-BondX, there has been a slight decline of the trading activity in 2023 compared to the levels observed in 2022. The persistent illiquidity conditions in the credit secondary market continue to exert negative pressure on both trading volumes and market-making activities. The average daily volume was of €46 million (-9% vs 2022) and an average daily trade of 1,745 (-14% vs 2022).

In 2023, Euronext Fixed Income Regulated Markets (FI RM) saw an increase in trading activity compared with 2022 (if the group exclude the exceptional event of the French government tender offer on EDF convertible bond) due to sustained positive market conditions. The FI RM average daily volume was €17.6 million (+44% vs 2022) with 1,005 average daily trades (+17% vs 2022), it is noteworthy that the activity was mainly focused on government and financial bonds.

1.3.4.4 FX trading

In 2023, Euronext FX – Euronext's Electronic Communication Network (ECN) for spot foreign exchange (FX), precious metals, and its ECN for non-deliverable forwards (NDFs) through Euronext FX's Euronext Markets Singapore subsidiary – continued to improve their respective market share as a result of continued growth in client acquisition and effective liquidity management for existing clients.

In 2023, $22.4 billion of spot FX were traded on average daily on Euronext FX across 137 currency pairs. Metals trading reached an all-time high of $780million in 2023.

In August 2023, Euronext FX launched Collapse-to-Mid (CTM), a peg order that can be triggered at mid if there is opposing interest. CTM users can experience faster fill times, low market impact and the ability to earn spread.

Euronext FX also offers real time and historical market data, as well as a new derived data set, launched in 2023, FX Market Flow™, which has seen increasing subscription by quant funds.

1.3.4.5 Power trading

Euronext operates power markets through Nord Pool, of which it owns 66%. Nord Pool operates the leading power market in Europe and operates across 16 European countries including the Nordics, Baltics, and the UK in addition to France, Germany, Austria, Belgium, the Netherlands, Luxembourg and Poland, while also servicing power markets in Croatia, Bulgaria and Romania. Nord Pool offers platforms for power trading – day-ahead and intraday (continuous trading) – and clearing and settlement, compliance, transparency and data services. Nord Pool delivers simple, efficient and secure multi-market power trading.

Nord Pool operates the physical power market, a short-term market where financial settlement takes place at the same time as physical delivery. As the central counterpart for all trades, Nord Pool ensures that all members are secured via bank guarantees or pledged cash and follows up, on a daily basis, to ensure that all members' payments are executed in accordance with the settlement schedule. Nord Pool has more than 30 years of power market experience built on offering flexibility, transparency, innovation, greater choice and participation to its customers. In 2023, ~400 companies from more than 20 countries traded on Nord Pool's markets.

During 2023, a total of 1,1034.8 TWh[5] of power was traded through Nord Pool. The aggregated Day-ahead volume was 1,030.3 TWh and the 2023 volumes on the intraday markets

[2] MTS is 63.1% owned by Euronext
[3] Excluding OBOE /TCS
[4] Single counted
[5] Trading volume quoted for Nord Pool's markets comprises all buy volume (total volume bought per hour by market participants) plus all sell volume (total volume sold per hour by market participants) within each bidding zone

marked a record year with an increase of 95% compared to 2022. The total Intraday volume for 2023 was 73.6 TWh.

1.3.5 ADVANCED DATA SERVICES

1.3.5.1 Market Data

Euronext's market data portfolio provides a wide range of data products to the global investment community, including pre- and post-trade market prices, index composition, and reference data spanning its Cash and Derivatives markets in Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo and Paris. The data is used by traders and investors to make buy or sell decisions with confidence, and by issuers to create new tradable products such as ETFs. Euronext's market data clients range from the largest investment banks in the world to individual investors trading from their front room.

Euronext's market data business consists of two product and service categories:

Real-Time Market Data

Euronext's main data offering involves the distribution of real-time market data. This data includes price, trade and order book data on all instruments traded on the cash and derivatives markets, as well as information about Euronext's indices. The data is marketed through different information products which are packaged according to the type of instrument, the depth of the information, and the type of customer. Euronext continues to invest in its trading and information platforms to ensure both execution and data services are of the highest quality and value. In 2023, Euronext has successfully completed the technical migration of Bosa Italiana's and EuroTLX cash and fixed income markets onto Optiq

Effective from 1 April 2023, Euronext integrated Borsa Italiana and EuroTLX data into the existing Euronext agreement, harmonising Euronext's commercial model across seven market places. The data is disseminated primarily via data vendors but also directly to financial institutions and other service providers in the financial sector. Over 500 vendors currently disseminate Euronext market data to approximately 265,000 screens in over 120 countries. During 2023, Euronext continued to see an increase in the use of Euronext data in automated trading applications, but no significant change in the number of professional users viewing data on traditional trading screens.

Retail clients have access to data from Euronext's markets through the Live.Markets section of the Live.Euronext.com website or via retail brokers. During 2023, the number of retail clients using Euronext data remained strong growing (+33% vs 2022).

Data Solutions

In addition to real-time market data, Euronext also provides daily historical data services, as well as reference and corporate action. These services include both traditional continental Euronext data as well as Euronext Dublin, Oslo Børs and Borsa Italiana data.

In 2023, Borsa Italiana data was integrated into Euronext platforms, including also a complete commercial migration of all Borsa Italiana customers on Euronext contractual frameworks. In 2023, Euronext integrated its commercial model and combined products. Additionally, it implemented new delivery methodologies such as SFTP and Cloud API, which will continue to be enhanced during 2024.

1.3.5.2 Advanced Data

In 2019 Euronext launched Market Flow which shows a daily breakdown of trading flows on the cash order book. It provides analytic products based on Euronext proprietary data, anonymised and aggregated. Euronext is seeing strong demand for these high-value products and the client base is expanding.The product now includes Borsa Italiana data and FX data since early 2023. Euronext Quant Research will start investigating the Commodity and Nord Pool space in 2024.

Euronext now has multiple new diverse sources of data from which to extract value, including Borsa Italiana Group, MTS, Oslo Børs, Euronext Dublin, Euronext FX, and Commcise. Euronext will continue to invest in advanced data products and reinforce its quantitative research team.

1.3.5.3 Indices

Euronext is a leading index provider in Europe with almost 40 years of experience in the index space. Euronext designs, calculates and publishes major national indices in Europe, including the AEX® and AEX ESG, BEL 20®, CAC 40® and CAC ESG®, ISEQ®, MIB® ESG, PSI®, OBX® and OBX ESG.

Responsible investment has become increasingly important in the world of finance, with the aim of supporting more sustainable growth. Euronext's ambition is to proactively contribute to the construction of a sustainable financial ecosystem. In response to the demand for mainstream ESG solutions, Euronext has introduced several ESG Blue-Chip indices taking into account Environmental, Social and Governance practices to continue supporting the growing demand for investment solutions with ESG, climate, thematic, alternative energy, healthcare and other trends, Euronext offers a large range of qualitative, liquid and research-enhanced solutions.

Euronext indices are licensed by the world's largest issuers of financial products. Euronext's strong brand, track record and ability to innovate and quick execution time make Euronext one of the main and innovative index providers.

More than 18 ESG indices have been launched in 2023, notably:

- The CAC SBT 1.5 Index: The CAC SBT 1.5 Index selects companies from the SBF 120 index that have emissions reduction targets approved to be in line with the 1.5°C goal of the Paris Agreement. The index has been built with the support of Amundi, CDP and SBTi, and provides a climate-focused version of the CAC 40;
- Euronext has also expanded the SBT 1.5° index family by adding 2 European benchmarks: The Euronext Europe SBT 1.5 and Euronext Eurozone SBT 1.5 Indices. The two indices select, with the support of the SBT Initiative and CDP, European companies that have emissions reduction targets in line with the Paris Agreement;
- The Euronext Biodiversity Enablers World: The index is constructed in collaboration with Iceberg Data Lab. The index is the first world benchmark index highlighting the positive impact that companies can have on biodiversity, and measuring the double materiality assessment of companies worldwide.

In 2023 Euronext also launched the second set of Cryptocurrency indices. Based on a resilient and BMR compliant methodology, they serve as independent and transparent reference prices to value cryptocurrency portfolio or as benchmarks. The cryptocurrency indices are administered and calculated by Compass Financial Technology SA. This second set of indices covers an additional 25 single cryptocurrency names and a crypto basket index.

More than five thematic indices have been launched in 2023, notably:

- The Euronext Helios Space Index: The index has been built with the support of the European Space Agency, the Euronext Commission and Promus Ventures. It tracks the performance of companies with upstream or downstream activities related to the Space industry, which are within ESA (European Space Agency) member states or benefiting from European support;
- The Euronext AI World: The index is built with the support of SESAMm, a leading artificial intelligence and NLP Technology company. The Euronext AI World selects 100 global companies that are active in the following products or services: Artificial intelligence, Speech recognition, Computer vision, Computer linguistic, Machine learning, Computer audition, Robotics, Discovery, Planning, Creation.

As a result, the Euronext index business:

- Maintained a strong revenue in 2023 while further diversifying its business model and source of revenues;
- Has further extended its global commercial relationships by adding new world's top financial institutions as customers.

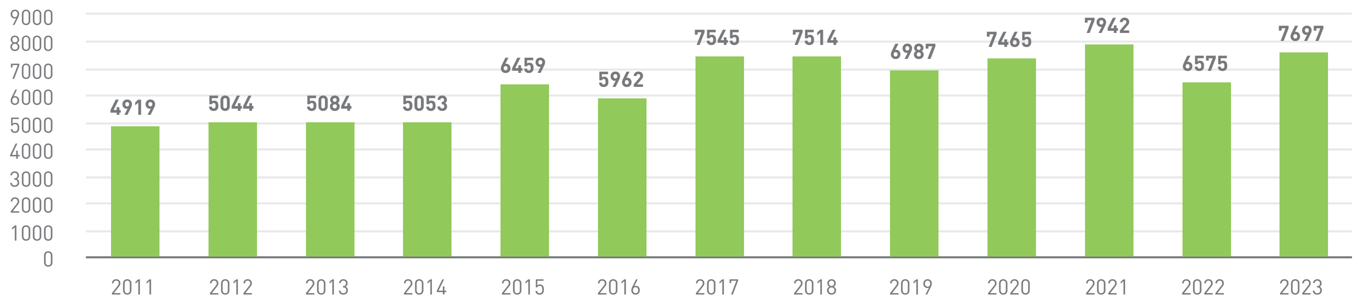
As a stock exchange committed to sustainability, Euronext is now well positioned to benefit from the increased integration of factor and ESG criteria into the investment process and will continue to extend its ESG index offering with the help of the expertise of its partners, Moody's ESG, CDP, Carbone 4, ISS-ESG, Iceberg Datalab, SESAMm, Sustainalytics, Equileap and Gresb B.V.

- At the end of 2023 there were more than 300 listed structured products linked to Euronext ESG indices for the French market alone. These products had combined assets under management ("AUM")of almost €9 billion;
- In 2023, the top five Euronext ESG indices sold in France by market listed sales volume were[1]:

	2023 Sales volumes of underlying indices (€m)
Euronext World Sustainability and Climate Screened Dec	203
Euronext Eurozone ESG Leaders Select 40 EW Dec	116
Euronext CDP Environment France EW Dec	90
Euronext ESG Eurozone Biodiversity Leaders PAB 3.5% Dec	67
Euronext Transatlantic Sustainability and Climate Screen Dec	64

- In 2023 Euronext was awarded "Best Pan-European Index Provider 2023" as well as the "Excellence Award for Robust Biodiversity Solutions 2023" at the Ethical Finance Awards. The Euronext Euro Large Cap Biodiversity Leaders 30 index won the "Best Index of the year" SRP award.
- In 2023 the ETF on the Euronext Low carbon 100 Europe index had a net inflow of more than €500 million, growing to almost €1.3 billion
- ETFs linked to Euronext indices increased by 17% to €7.7 billion in AUM at the end of 2023.

ETFs AuM on Euronext indices, in €million



Figures based on external third-party data, past figures may have been restated.

Building on its strengths and capabilities, Euronext is increasing investments in its index franchise, in teams, technology, and partnerships, with four key directions for growth:

- A large offering of the ESG versions of Euronext's national benchmark indices and a suite of Climate variants of Euronext's national benchmark indices to cope with investor demands;
- Accelerating development of ESG based indices. This will be done through continuous expansion of ESG partnerships bringing innovative science based companies to investors, at the forefront of sustainable finance;
- Continuing diversification of our asset offering as emphasized by the launch of the first 11 Extended Universe indices in 2023;
- Leveraging on technology to further accelerate index creation capacity; Leveraging our extended federal model, to replicate locally our strength, client proximity, time to market, technology, ESG partners, and smart Beta partners.

[1] https://www.structuredretailproducts.com data, figures based on external third-party data.

1.3.6 INVESTOR SERVICES

Through its subsidiary Commcise, Euronext offers SaaS based technology solutions to 2000+ capital markets participants globally. Commcise's solutions are designed to bring the buy-side, sell-side and research providers together using a network of contracts and technology that are designed to service the needs of each participant. Commcise aims to bring greater transparency to research market through developing industry leading technology plus service solutions. Commcise has tripled in revenue since Euronext's acquisition of a majority stake at the end of 2018. Post acquisition, Commcise has launched many new products and services and is now a wholly owned subsidiary of the Group.

Commcise is a trusted partner to many of the world's largest institutional asset managers and hedge funds (who together account for more than $25 trillion in asset under management), brokers and research providers. Commcise's products and services include:

- **COMMCISE**$^{\mathbf{BUY}}$ is a technology solution designed specifically for the needs of the buy-side. CommciseBUY helps asset managers to track and value all sell-side relationships by dissecting every aspect of these relationships into a modular, fully integrated technology platform. Commcise tracks every commission generating trade executed with the street. Commcise unbundles every trade and allows firms to automatically reconcile these trades with the sell-side. Commcise technology is used to instruct and manage payments to the street for research services paid for by Commission Sharing Arrangement ("CSA"), Research Payment Account ("RPA") or P&L (hard dollar).

  Commcise goes further to track the research side of each of these relationships. Commcise has direct feeds of data from over 2000+ research providers that means buy-side investors have immediate access to every interaction they have had with the street at the point of determining the value of these relationships. Commcise's research evaluation module offers a data driven approach to determining the value derived from each research provider relationship ;
- **COMMCISE**$^{\mathrm{SELL}}$ is a cloud-based technology solution designed to help the sell-side manage their CSA/ Soft Dollar programmes at scale. CommciseSELL provides any executing broker with a commission management platform that includes Commcise's industry-leading algorithmic rules engine for unbundling trades and integration with our market leading reconciliation engine that allows buy-side and sell-side to automatically reconcile CSA/soft dollar trades on a daily basis. CommciseSELL integrates to sell side payment systems to automate invoice workflows and provides robust reporting via a white-labelled company portal.
  CommciseSELL allows brokers, research providers, custodians, fund accountants to manage commissions in any level of granularity required by their customers;
- **COMMCISE**$^{\mathbf{CS}}$ is a cloud-based technology solution designed specifically for the needs of any research provider that wants to maximise revenue. CommciseCS provides a 'Client Strategy' technology platform that integrates with any CRM system. CommciseCS automates the distribution of interaction data to the buy-side to use in their valuation process. CommciseCS manages research contracts and triggers invoicing of these on a timely basis. CommciseCS also normalises asset manager scorecards received in multiple formats into a machine-readable format that can be used to optimize analyst time within an account. CommciseCS also helps research providers to assess the profitability of buy-side clients by pricing every interaction using multiple benchmarks.
- In 2020, Commcise and Euronext Market Services LLC (EMS), a US affiliated broker dealer launched their **Aggregation 2.0** solution that provides a turnkey soft dollar commission management platform that offers a full-service solution whilst maintaining balances at multiple brokers that are virtually aggregated using industry leading technology. Asset Managers benefit from the ability to distribute their risk amongst their most trusted banking partners.
- In 2023, Commcise and EMS together launched a **Custody 2.0** solution for the US market. EMS is the first new entrant into the Custodial Aggregation market for over 10 years. **Custody 2.0** offers a technology-first approach to commission aggregation and includes EMS's industry leading service layer. Commcise and EMS together provide an outsourced service that improves efficiency for the buy-side and sell-sides involved in the process.

1.3.7 POST TRADE

Euronext's post-trade business is a combination of Euronext Clearing (formerly known as CC&G), and Euronext Securities (network of four CSDs: Euronext Securities Copenhagen, Milan, Oslo and Porto). In addition to, Euronext also owns a minority stake in Euroclear S.A. / N.V.

Fully owned post-trade infrastructures

Euronext operates and fully owns one central counterparty (CCP), Euronext Clearing (formerly CC&G), following the acquisition of the Borsa Italiana Group in April 2021. Euronext Clearing was incorporated in Italy in 1992, under the Supervision of Bank of Italy, and it is authorised to offer services and activities in accordance with European Market Infrastructure Regulation (EMIR).

Euronext Clearing, Euronext's Central Counterparty in Italy, is a multi-asset clearing house that provides proven risk management capabilities on 14 markets, across a range of trading venues including Euronext Milan, MTS, BrokerTec and Hi-MTF. Asset classes cleared include equities, exchange traded funds (ETFs), Close-end Funds, Financial Derivatives, commodities (agricultural) and Fixed Income (Cash and Repo markets).

Euronext also operates a leading CSD business, Euronext Securities, which comprises four CSDs (Euronext Securities Copenhagen, Milan, Oslo and Porto).

Partnerships and minority stakes

The Group had a 10-year agreement with LCH S.A. for the provision of clearing services on Euronext derivatives markets, for which Euronext served notice of termination in January 2023. Euronext also owns c.3.53% of Euroclear S.A./ N.V..

As Euronext Clearing undertakes derivatives clearing services in Europe, Euronext has decided to terminate the derivatives clearing agreement (the "Agreement") with LCH SA, under the terms of the Agreement. Therefore, on 16 January 2023, Euronext served LCH SA notice of termination for the purposes of the Agreement. Following the notification of the early termination of the Agreement, LCH Group executed its option to buy back Euronext's 11.1% stake in LCH SA in July 2023.

1.3.7.1 Clearing

Following the acquisition of Borsa Italiana in April 2021, Euronext now operates a Central Counterparty (CCP) in Italy which clears the Borsa Italiana markets.

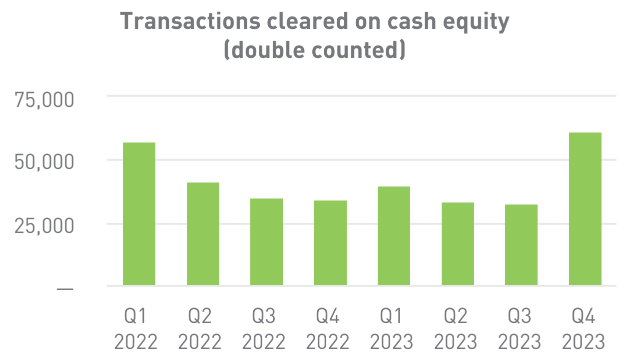
On the non-Italian markets, Euronext relies on strong partnership and contractual arrangements with external providers for the clearing of trades executed on its markets:

- trades executed on Euronext derivatives markets are cleared by LCH S.A. according to a specific clearing agreement (the Derivatives Clearing Agreement);
- trades executed on Euronext cash markets are cleared by Euronext Clearing since November 2023 and by LCH SA (under the Cash Clearing Agreement) and Cboe Clear Europe (formerly EuroCCP) under the open access model;
- trades executed on Oslo Børs cash markets are cleared by a set of three interoperable CCPs: Cboe Clear Europe, SIX x-clear and LCH Ltd.

Euronext Clearing

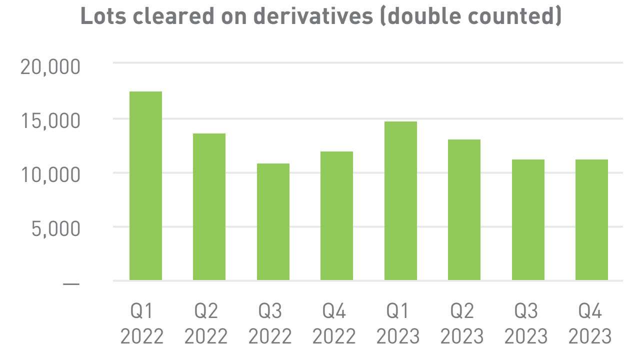
Euronext Clearing clears transactions on Italian markets[1] on a large number of asset classes (Repos, cash bonds, cash equity, ETFs and financial derivatives).

Cash Equity Clearing



After the peak in March 2022 linked to the increased volatility associated with the Russian invasion of Ukraine, the average volume of cash equity transactions cleared by Euronext Clearing has decreased between Q2'22 and Q3'23 (by 4.7%). Q4'23's important increase of volume is linked to the expansion of Euronext Clearing to Euronext Brussels cash market on 6 November 2023 followed by Euronext Amsterdam, Dublin, Lisbon and Paris cash markets on 27 November 2023.

Derivatives Clearing



Overall, volumes cleared on financial derivatives by Euronext Clearing between 2022 and 2023 decreased (by 6.9%) mainly due to the important volatility generated by the Russian invasion of Ukraine impacting 2022 numbers. Comparing the average volumes from 2022 and 2023 and excluding March 2022, the volumes have increased by 3.3%.

Repo Clearing

Repo national cleared by the CCP in 2023 increased slightly (€24.4 trillion compared to €24.1 trillion in 2022). Euronext Clearing is a key player[2] in Europe on Repo Clearing and manages a unique interoperability link on repo with LCH SA.

Margin and default fund contributions

The lower volatility in 2023 compared to 2022 has brought down the level of margins and default fund contributions back to 2021 level. The level has decreased in average from €15 billion in 2022 to €11.9 billion in 2023

General overview

On 16 October 2023, Euronext Clearing implemented a new risk framework on financial derivatives and cash equity clearing relying on the Value-At-Risk (VAR) methodology. This new risk framework, together with the VAR framework deployed in 2022 for fixed income clearing, provides a modern, efficient and robust methodology easily replicable by Clearing Members.

Euronext Clearing is expanded to Euronext's cash equity and derivatives flows, making it Euronext's CCP of choice for its cash equity, listed derivatives and commodities markets. Euronext will position Euronext Clearing as a European clearing house. Euronext Clearing has been expanded to Euronext cash markets (excl. Oslo Børs) on 6 November 2023

[1] And BrokerTec and Hi-MTF
[2] Mostly on Italian sovereign debt

and 27 November 2023 respectively for Euronext Brussels and Euronext Amsterdam, Dublin, Lisbon and Paris.

Commodities and Financial Derivatives will be migrated in Q3 2024.

This strategy allows Euronext to directly manage another core service for clients and create value through a harmonised clearing framework across Euronext venues. It also allows Euronext to align strategic priorities between trading and clearing, and significantly increase its footprint in the post-trade space.

In addition, after the expansion, Euronext will be in an ideal position to innovate and improve time-to-market, notably on derivatives products, to serve the evolving needs of its clients. Revenue and costs contribution for this key project are part of the increased Borsa Italiana Group synergies target. Similarly, the necessary one-off costs to execute this project are included in the 2024 strategic plan related financial guidance.

Euronext will continue to offer an open access CCP model for cash equity clearing, subject to regulatory approval.

LCH S.A.

On 16 January 2023, Euronext announced that the European expansion of Euronext Clearing to Euronext derivatives markets is planned for Q3 2024. Euronext expects to migrate the listed financial derivatives and commodities markets of Euronext Amsterdam, Euronext Brussels, Euronext Lisbon, Oslo Børs and Euronext Paris from LCH SA to Euronext Clearing by Q3 2024. As Euronext Clearing undertakes derivatives clearing services in Europe, Euronext has decided to terminate the existing derivatives clearing agreement (the "Agreement") with LCH SA, under the terms of the Agreement. Therefore, on 16 January 2023, Euronext served LCH SA notice of termination for the purposes of the Agreement. Euronext and LCH SA are committed to working together to ensure an orderly migration of clearing flows from LCH SA to Euronext Clearing.

The termination of the Agreement does not impact the existing clearing agreement signed between MTS S.p.A and LCH SA nor the existing agreement related to the interoperability link on Italian Government Bonds between Euronext Clearing and LCH SA.

1.3.7.2 Custody & Settlement

Since 2019, Euronext has significantly grown its custody and settlement business through the successive acquisitions of Euronext Securities Oslo in Norway in 2019, Euronext Securities Copenhagen in Denmark in 2020 and Euronext Securities Milan in Italy in 2021.

In November 2021 Euronext launched a new brand for its four central securities depositories (CSDs) - Euronext Securities.

Euronext Securities is the CSD network connecting European economies to global capital markets. It represents more than €6.7 trillion of assets under custody[3] and processed more than 120 million settlement instructions in 2023.

As part of the "Growth for Impact 2024" strategy, Euronext plans to "scale up and pan-Europeanise Euronext Securities", with the following priorities:

- **Expand services**: further develop local and Nordic added value services for financial institutions and issuers.
- **Converge**: mutualise and harmonise infrastructure to facilitate access to local markets served by Euronext Securities.
- **Scale European activities**: support Euronext's primary and secondary markets across Europe and leverage Euronext Securities digital securities issuance capabilities.
- **Improve local & international customers' experience**: roll out targeted new client interfaces and client service model.

Euronext Securities Porto

Euronext Securities Porto is a wholly-owned subsidiary of Euronext, established in Portugal. It provides issuance, custody and settlement services for c. €0.4 trillion of securities.

Euronext Securities Porto is authorised as a CSD under Regulation (EU) n°909/2014 (CSDR) and is the operator of a designated securities settlement system under Directive 98/26/EC.

Euronext Securities Oslo

Euronext Securities Oslo is a wholly-owned subsidiary of Euronext, established in Norway. It provides issuance, custody and settlement services for c. €0.9 trillion of securities.
Euronext Securities Oslo received its authorisation as a CSD under Regulation (EU) n°909/2014 (CSDR), and is the operator of a designated securities settlement system under Directive 98/26/EC.

Euronext Securities Copenhagen

Euronext Securities Copenhagen is a wholly-owned subsidiary of Euronext, established in Denmark. It provides issuance, custody and settlement services for c. €1.6 trillion of securities.

Euronext Securities Copenhagen is authorised as a CSD under Regulation (EU) n°909/2014 (CSDR) and is the operator of a designated securities settlement system under Directive 98/26/EC.

Euronext Securities Milan

Euronext Securities Milan is a wholly-owned subsidiary of Euronext, established in Italy. It provides issuance, custody and settlement services for c. €3.8 trillion of securities.

Euronext Securities Milan is authorised as a CSD under Regulation (EU) n°909/2014 (CSDR) and is the operator of a designated securities settlement system under Directive 98/26/EC.

1.3.8 EURONEXT TECHNOLOGY SOLUTIONS & OTHER

Euronext Technology Solutions & Other comprises Euronext's commercial technology solutions and services business, and former Borsa Italiana businesses including Gatelab and Integrated Technology Services 'X2M'. Euronext offers custom solutions and cost-effective services to exchanges,

[3] At 31 December 2023

venue operators, and financial institutions, who require advanced functional capabilities, and low latency processing across multiple-asset classes surrounded by exchange-grade business services used to operating within highly regulated environments. Euronext Technology Solutions also provides commercial services based on its Regulatory Reporting Services, registered as both an Approved Publication Arrangement (APA) and an Approved Reporting Mechanism (ARM) within the EU and the UK. These services provide regulatory reporting facilities to investment firms.

Gatelab, part of the Euronext Group, is a leading provider of trading and market access solutions to the global financial community. Founded in 1989, Gatelab offers scalable low-latency solutions to support market- makers, price-takers and brokers in pre-trade, trading, and post-trade operations across venues of any asset class.

Gatelab provides solutions to buy-side, sell-side and hedge funds as well as exchanges. Its products are deployed or available as software as a service (SaaS) and comprise:

- Manual and automated trading and quoting including request for quotation (RFQs) and indication of interest (IOIs);
- Algorithmic trading;
- Comprehensive algorithmic trade validation framework for compliance with MiFID II RTS-6 organisational requirements on disorderly market conditions;
- Smart order routing for equities and bonds (listed and over-the-counter (OTC));
- Ultra-low latency pre-trade Risk Gateways for sponsored access;
- Seamless integration with external pricing, risk management, middle/back office, and clearing systems;
- Post-trade and OTC trade registration (post-trade transparency and trade reporting).

X2M has data centres located in Milan, London and Frankfurt, and has been providing customers with access to international trading venues, connectivity and hosting services since 2004. X2M delivers infrastructure and network solutions designed and supported to meet the needs of the financial community. X2M services are certified ISO 22301:2019, ISO/IEC 27001:2013 and ISO/IEC 20000-1:2018.

The Technologies & Other business benefits from the technology developments made by Euronext for its own markets and, in return, contributes recurring revenue that is non-cyclical and not trading related. Operating as a technology vendor gives Euronext an opportunity to benchmark both its technology and support services against other vendors to ensure that innovation can thrive within Euronext technology and throughout the wider Group.

The solutions and services offered use the products and services developed by the Euronext group or licensed from third parties.

The Euronext Technologies revenues are comprised of:

- infrastucture and connectivity services, including colocation and network services within the Euronext Core Data Centre in Bergamo, Italy;
- Software and services licensed by third parties such as trading venues and financial institutions.

Euronext's main strategic ambition is to provide secure and direct access to the main European liquidity centres from its Bergamo Core Data Centre facility, alongside access to a set of products covering the full trading cycle, from pre-trade insight (data) to asset allocation, portfolio modelling & construction, execution, and regulatory compliance. This is based on a value proposition created through combining ease of access and a rich set of products and services offered both to Euronext's market participants and to other financial firms.

1.4 Regulation

1.4.1 OVERVIEW

The Euronext Group provides exchange listing, trading, post-trade and related services in Europe. The Company operates Regulated Markets and Multilateral Trading Facilities (MTFs) in seven European countries (Belgium, France, Ireland, Italy, the Netherlands, Norway, and Portugal). The Group operates these venues under a regulatory licence, under national legislation implementing MiFID II / MiFIR granted to the local market operator and the relevant National Competent Authority (NCA) or Ministry when appropriate. Each market operator is subject to the national laws and regulations supervised by the NCAs, central banks and finance ministries as appropriate. As part of their regular supervision, NCAs perform from time-to-time audits, inspections and on-site visits. This may lead to recommendations or other measures as appropriate.

The Group also operates central securities depositories (CSDs) in four European countries (Denmark, Italy, Norway and Portugal). Each of the CSDs is a limited liability company subject to national laws and regulations; however they all operate under the brand "Euronext Securities". VP Securities AS (Euronext Securities Copenhagen), Monte Titoli S.p.A. (Euronext Securities Milan), Interbolsa S.A. (Euronext Securities Porto), and Verdipapirsentralen ASA (Euronext Securities Oslo) hold a licence under the CSDR, under limited national implementing provisions, granted by their NCA on 3 January 2018, 18 December 2019, 12 July 2018, and 28 January 2022 respectively.

Euronext, through Euronext Securities Copenhagen, Euronext Securities Milan and Euronext Securities Porto, participates in the ECB's TARGET2-Securities (T2S) platform. The CSDs migrated respectively in September 2016 (Danish Kroner), August 2015 and March 2016.

Moreover, the Group operates a Central Counterparty in Italy, Cassa di Compensazione e Garanzia S.p.A ("Euronext Clearing"). The company was incorporated on 31 March 1992, holds its registered office in Rome at Via Tomacelli 146, and is registered with the Italian Register of Companies under no. 04289511000. It is authorised by the Bank of Italy as a CCP pursuant to Article 17 of EMIR with effect from 20 May 2014.

1.4.2 EUROPEAN REGULATION

The regulatory framework in which Euronext operates is substantially influenced and governed by European directives and regulations in the financial services area, many of which were initially adopted pursuant to the Financial Services Action Plan, which was adopted by the European Union in 1999 to create a single market for financial services. Today, the Capital Markets Union (CMU) project encompasses many of these regulations. This has enabled the harmonisation of the regulatory regime for financial services, public offers, listing and trading, and settlement amongst other activities.

Markets and trading

There are currently two key pieces of European legislation that govern the fair and orderly operation of markets and trading: the MiFID II/MiFIR and the MAR/MAD II frameworks.

The MiFID II/MiFIR framework includes the Markets in Financial Instruments Directive (Directive 2014/65/EU, "MiFID II") and the Markets in Financial Instruments Regulation (Regulation (EU) No 648/2012, "MiFIR") and has been applicable since 3 January 2018. The objective is to make European financial markets more transparent and to strengthen investor protection.

The MAR/MAD II framework includes the Market Abuse Regulation (Regulation (EU) No 596/2014, "MAR") and the Directive on criminal sanctions for market abuse (Directive 2014/57/EU "MAD II") and has been applicable since 3 July 2016. The objective is to guarantee the integrity of European financial markets and increase investor confidence. The concept of market abuse typically covers insider dealing, unlawful disclosure of inside information, and market manipulation.

Following an initial proposal from the European Commission in November 2021, the EU institutions agreed in the second half of 2023 a number of important reforms to MiFID II/MiFIR. These are expected to begin to apply from the end of Q1 2024. The agreement foresees the introduction of a pre-trade consolidated tape (CT) for top-book anonymised EBBO data for shares and ETFs, and of post-trade data for shares, ETFs, bonds and OTC derivatives. A tender process for the CT provider will be launched by ESMA in late 2024, beginning with the bond CT. On market structure, a ban of Payment for Order Flow (PFOF) will come into force, but including a 'grandfathering provision' for Member States with existing structures in place allowing the practice until June 2026.

Clearing and settlement

EMIR

The EU Market Infrastructure Regulation (Regulation (EU) No 648/2012, "EMIR") is primarily focused on the regulation of CCPs and includes the obligation for standardised OTC derivative contracts to be cleared through a CCP. EMIR came into effect on 16 August 2012.

On 7 December 2022, the European Commission published a proposal on the EMIR review (EMIR 3.0). With its proposal, the Commission is pursuing two objectives: (i) the need to address the potential financial stability risks to the EU due to the continued overreliance on systemic non-EU (UK) CCPs, and (ii) the need to build more attractive, resilient, and robust EU clearing infrastructures, which will in turn strengthen the CMU, and further support EU CCPs competitiveness at an international level. The proposals include changes to the approval regime as well as the supervisory approach. In addition, proposals on intraday variation margins and CCP participation requirements are made. A political agreement was reached in early February 2024 and the revised regime should improve new product and service authorisation procedures.

CSDR

The EU Central Securities Depositories Regulation (Regulation (EU) No 909/2014, ("CSDR") plays a pivotal role in post-trade harmonisation efforts in Europe, as it establishes authorisation requirements and common rules for the exercise of central securities depository activity, with particular reference to securities settlement services. CSDR came into effect on 17 September 2014.

On 16 March 2022, the Commission published a proposal for CSDR REFIT. Areas amendment included the cross-border provision of services, treatment of banking services, supervisory structures, settlement discipline, and third country regimes. The EU Commission aims to address access to commercial bank money for settlement purposes, as well as services passports. The EU institutions reached agreement on the review at the end of 2023. Most of the CSD-R REFIT (Level 1) provisions will be detailed in the regulatory technical standard (Level 2) expected by the end of 2024.

Listing

The rules regarding public offerings of financial instruments and prospectuses, as well as on-going disclosure requirements for listed companies, are set out in the Prospectus Regulation (Regulation (EU) 2017/1129) and the Transparency Directive (Directive 2004/109/EC as most recently amended by Directive 2013/50/EU), as implemented in the countries in which Euronext operates.

Companies seeking to list their securities on Euronext's regulated markets must prepare a listing prospectus in accordance with the requirements of the Prospectus Regulation and comply with the requirements of Euronext Rulebook I, the harmonised rulebook for the Euronext Market Subsidiaries, and any additional local listing requirements in Rulebook II. Following admission, they must comply with the ongoing disclosure requirements set forth by the competent authority of their home Member State.

The objective of the Transparency Directive (Directive (EU) 2004/109) is to harmonise the transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market in the EU. The Market Abuse Regulation (Regulation (EU) No 596/2014) sets a regulatory framework with respect to the disclosure of inside information, market manipulation and related topics.

On 7 December 2022, the European Commission published its proposal for a Listing Act and the proposal was agreed by the EU institutions in early 2024. It should simplify the listing process by streamlining the prospectus and market abuse requirements as well as introducing a European framework for multiple voting rights for issuers on MTFs.

Indices

As a benchmark administrator, Euronext must comply with the Benchmark Regulation (Regulation (EU) 2016/1011, "BMR") which has been applicable since 1 January 2018.

Euronext Amsterdam, Euronext Brussels, Euronext Dublin, Euronext Lisbon, Oslo Børs, Euronext Paris, Fish Pool and Nord Pool are registered by competent authorities as benchmark administrators under BMR. In October 2023, the Commission published a Benchmark Review Proposal, proposing to narrow the scope of the regulation, in effect excluding non-significant benchmarks from scope (benchmarks with usage below a threshold of EUR 50 bn). However, and subject to the outcome of the final negotiations, competent authorities may have the power to designate indices as significant based on qualitative, and not simply quantitative, criteria.

The operation of regulated markets and MTFs

MiFID II/MiFIR, MAR/MAD II, ESMA standards and the Euronext Rulebooks all provide minimum requirements for the monitoring of trading and enforcement of rules by Euronext as the operator of regulated markets and MTFs. In particular, market operators are required to meet, inter alia, all the requirements set out in MiFID II/MiFIR (and reinforced in MAR/MAD) including the obligation to ensure that the markets they operate allow financial instruments to trade "in a fair, orderly and efficient manner".

To this end, Euronext has set up a framework to organise market monitoring by which it:

- monitors trading in order to identify breaches of the rules, disorderly trading conditions or conduct that may involve market abuse;
- reports breaches of rules or of legal obligations relating to market integrity to the competent authority.

Market surveillance and monitoring are implemented through a two-step process consisting of real-time market surveillance and post-trade (i.e. "next day") analysis of executed trades. Euronext ensures member compliance with its rules by conducting on-site investigations and inspections.

Group-wide supervision and regulation

The national regulators of Euronext's markets (where Euronext holds a licence to operate regulated markets and/or MTFs granted by the relevant NCA and operates under its supervision) are parties to a memorandum of understanding (MOU) most recently amended and restated in January 2022 that established a "Euronext College of Regulators". This provides a framework to coordinate their supervision and the regulation of the business and of the markets operated by Euronext. The Company commits itself to the MOU, to the extent that any obligations arising from the memorandum of understanding apply to the Company or its subsidiaries.

These regulatory authorities have identified certain areas of common interest and have adopted a coordinated approach to the exercise of their respective national rules, regulations and supervisory practices regarding listing requirements, prospectus disclosure requirements and ongoing obligations of listed companies.

National regulation

Most of the companies in the group are regulated and supervised by local authorities. These companies are subject to regular inspections by these authorities on dedicated topics. Findings are discussed between the company and the authorities and action plans are agreed where appropriate.

Belgium

Euronext Brussels is governed by the Belgian Law of 21 November 2017 on the market infrastructures for financial instruments and transposing MiFID II. Euronext Brussels is responsible for matters such as the operation of regulated markets and MTFs and the admission, suspension and exclusion of members and has been appointed by law as the "competent authority" for listing matters within the meaning of the Listing Directive (Directive 2001/34/EC). Euronext Brussels is subject to the supervision of the Financial Services and Markets Authority (FSMA), an independent public authority which strives to ensure the honest and equitable treatment of financial consumers and the integrity of the financial markets.

Denmark

Euronext Securities Copenhagen is governed by Regulation (EU) no. 909/2014 (CSDR) and the Danish Capital Market Act (Danish Act. no 2014 of 1 November 2021 on capital markets).

Euronext Securities Copenhagen is supervised by the Danish Financial Supervisory Authority and subject to oversight by the Danish Central Bank (Danmarks Nationalbank). Further, the Euronext Securities Copenhagen has the ECB as relevant authority.

Section 3 - Empower Sustainable Finance of this Universal Registration Document constitutes the statutory reporting on corporate responsibility cf. §99a of the Danish Financial Statement Act.

France

As a market operator, Euronext Paris manages the Euronext regulated markets and MTFs in France. In accordance with Article L.421-10 of the French Monetary and Financial Code, Euronext Paris adopts rules for each of these markets to ensure fair and orderly trading and efficient order execution. The requirements for market access and admission of financial instruments to trading are also covered by these rules, which are approved by the Autorité des Marchés Financiers (AMF) and published on the market operator's website.

Euronext Paris markets are subject to the provisions of Article L.421-4 et seq. of the French Monetary and Financial Code, which authorises the French Minister of Economy to confer and revoke regulated market status upon proposal of the AMF, which must consult with the Autorité de Contrôle Prudentiel et de Résolution (ACPR).

Italy

Borsa Italiana is a market operator supervised by CONSOB. According to Articles 64 and 64-quarter of the Consolidated Law of Finance, CONSOB is responsible for the authorisation of the regulated markets and MTFs managed by Borsa Italiana.

MTS is authorised as operator of a wholesale regulated market for government securities according to Article 62 of the Consolidated Law on Finance. The Ministry of Economy grants the authorisation in agreement with the Bank of Italy and CONSOB. The Bank of Italy supervises the management of wholesale markets for government securities and on the soundness of the market rules without prejudice for CONSOB supervisory powers over financial markets. The Consolidated Law on Finance is supplemented by secondary legislative provision included in the "Markets Regulation" adopted by CONSOB and supervisory instructions issued by Bank of Italy applicable to wholesale markets for government securities.

Euronext Securities Milan is the central securities depository for the Italian financial market. Euronext Securities Milan is authorised as CSD according to Article 79-undecies of the Consolidated Law on Finance since 18 December 2019. CONSOB and the Bank of Italy are the NCAs responsible for authorisation and ongoing supervision pursuant to Article 11, sub-section 1, of Regulation (EU) no. 909/2014 (CSD-R). CONSOB, in accordance with the Bank of Italy, authorises the performance of the core and ancillary services in the capacity of central depository and the extension of the activities or the outsourcing of the services to third parties, pursuant to Articles 16 and 19 of Regulation no. 909/2014 and according to the procedure contemplated by Article 17 of the same regulation. Furthermore CONSOB, in accordance with the Bank of Italy, approves Euronext Securities Rules of Services at the time of the initial authorisation and any subsequent amendment thereof. CSDR is complemented by the domestic regulatory framework (Consolidated Law of Finance and Post-trading Regulation governing central counterparties, central securities depositories and central depository services).

Euronext Clearing is a central counterparty authorised by CONSOB and the Bank of Italy to provide clearing services in compliance with EMIR, which provides clearing services across a broad range of trading venues and asset classes, including equities, derivatives, commodity derivatives and fixed income products.

Euronext Clearing's activities are subject to the direct supervision and oversight of the Italian NCAs, namely the Bank of Italy, with reference to the stability and the reduction of systemic risk, and by CONSOB, with respect to transparency and investor protection. A college has been constituted in compliance with EMIR.

The European Market Infrastructure Regulation (EMIR) has been transposed domestically into the Italian Consolidated Law on Finance (d. lgs. 58/1998) and further into CONSOB and Bank of Italy Joint Regulation on Post-Trading (Provvedimento Unico sul Post-Trading of 13August 2018).

The Netherlands

Both Euronext N.V. and Euronext Amsterdam have licences from the Dutch authorities to operate regulated markets. This means that they are subject to the regulation and supervision of the Dutch Minister of Finance and the Autoriteit Financiële Markten ("AFM"). Since the creation of Euronext in 2000, the Dutch regulators have taken the view that the direct parent company of Euronext Amsterdam, as controlling shareholder, should be seen as co-market operator and, accordingly, also requires a licence. Pursuant to section 5:26 paragraph 1 of the Dutch Financial Supervision Act it is prohibited in the Netherlands to operate or to manage a regulated market without a licence granted by the Dutch Minister of Finance.

The Dutch Minister of Finance may, at any time, amend or revoke the licence if necessary, to ensure the proper functioning of the markets or the protection of investors. The licence may also be revoked for non-compliance with applicable rules.

Norway

Oslo Børs has a licence as a regulated market from the Norwegian Ministry of Finance pursuant to section 11.1 of the Norwegian Securities Trading Act and operates two such regulated markets. In addition, Oslo Børs operates one MTF pursuant to section 9.8 of the Norwegian Securities Trading Act. Oslo Børs adopts rules for each of these markets to ensure fair and orderly trading and efficient order execution.

In addition, Oslo Børs has been appointed as take-over authority pursuant to section 6.4 of the Norwegian Securities Trading Act. Oslo Børs has also delegated authority to supervise compliance with and to sanction violations of issuers' obligation to disclose inside information pursuant to sections 5.2 and 5.3 of the Norwegian Securities Trading Act, cf. section 17.1 of the Norwegian Securities Trading Regulation.

The Norwegian Financial Supervisory Authority is responsible for the regulation and supervision of regulated markets and MTFs licensed in Norway.

Euronext Securities Oslo is the only CSD in Norway and consequently holds a unique position in the Norwegian capital market. On 28 January 2022, Euronext Securities Oslo was granted an authorisation to operate as a CSD in accordance with CSDR. Euronext Securities Oslo will start operating under the new authorisation as from 1 March 2022, from which point in time Euronext Securities Oslo has been subject to the Act of 15 March 2019 no. 6 on Central Securities Depositories and Securities Settlement, etc. (the CSD Act) which implements CSDR in Norwegian law.

Euronext Securities Oslo's activities are subject to supervision and oversight by the Norwegian Financial Supervisory Authority and the Norwegian Central Bank.

Portugal

As a market operator, Euronext Lisbon is governed by Portuguese Decree of Law No. 357-C/2007 of 31 October 2007 which, along with the Portuguese Securities Code and regulations of the Comissão do Mercado de Valores Mobiliários (CMVM), governs the regime applicable to regulated markets and MTFs, market operators and other companies with related activities in Portugal. The creation of regulated market operators requires the prior authorisation from the CMVM.

As a CSD, Euronext Securities Porto is governed by the Regulation (EU) no. 909/2014 (CSDR) and the Portuguese CSD Legal Framework, approved by Law no. 35/2018 of 20 July, along with the Portuguese Securities Code, the regulations of the CMVM and Euronext Securities Porto self-regulation.

The CMVM (Comissão do Mercado de Valores Mobiliários) is is responsible for the regulation and supervision of regulated markets and MTFs as well as its market operators dully authorized. Under this regulatory and supervision CMVM's umbrella is also Euronext Securities Porto. CMVM is Euronext Securities Porto national competent authority and national competent authority and along with the Banco deofde Portugal and the European Central Bank which are its relevant authorities.

Republic of Ireland

The Irish Stock Exchange Plc trading as Euronext Dublin is authorised by the Central Bank of Ireland (CBI) as a market operator pursuant to Article 56 (2) of the European Union (Markets in Financial Instruments) Regulation 2017 (S.I. 375/2017). As a market operator, Euronext Dublin operates one regulated market and three MTFs and adopts rules for each of these markets to ensure fair and orderly trading and efficient order execution.

In addition, Euronext Dublin has been appointed as the competent authority for listing by the Department of Enterprise, Trade and Employment pursuant to the European Communities (Admission to Listing and Miscellaneous Provisions) Regulations 2007, as amended.

The CBI is responsible for the regulation and supervision of regulated markets and market operators authorised in Ireland. Euronext Dublin is required to meet various legislative and regulatory requirements and failure to comply with these requirements could subject it to enforcement action by the CBI including significant penalties and/or revocation of its authorisation as a market operator.

United Kingdom

The revocation of Euronext's Recognised Investment Exchange (RIE) activities in the United Kingdom was confirmed by the FCA with effect from 19 April 2021. Euronext Amsterdam, Euronext Brussels, Euronext Paris and Borsa Italiana have been authorised under the Recognised Overseas Investment Exchange Regime (ROIE). Euronext also has a licence to operate Data Reporting Service Providers (DRSPs, an APA and ARM) in the UK and is supervised by the FCA for this activity. Euronext Paris SA requested the withdrawal of its UK DRSP license as of 1st January 2024 and is awaiting confirmation.

Stichting

In connection with obtaining regulatory approval of the acquisition of Euronext by the NYSE Group, Inc. in 2007, NYSE Euronext implemented certain special arrangements which included a standby structure involving a Dutch foundation *(stichting)*. Following the acquisition of NYSE Euronext by ICE and the Demerger, the Company became a party to these arrangements, which include a Further Amended and Restated Governance and Option Agreement (the "GOA"), to which ICE, the *stichting* and Euronext are parties. The *stichting* has been incorporated to mitigate the effects of any potential change in U.S. law that could have extraterritorial effects on the regulated markets operated by the Euronext Market Subsidiaries as a result of a U.S. shareholder holding a controlling interest in the Company. The board members of the *stichting* are independent from Euronext. Pursuant to the GOA, while the Company has U.S. shareholders with a controlling interest in the Company, the *stichting* is empowered to take actions to mitigate the adverse effects of any potential change in U.S. law that have certain extraterritorial effects on the regulated markets operated by the Euronext Market Subsidiaries. If there is no such controlling U.S. shareholder, the *stichting* becomes dormant and unable to exercise such powers. If a new U.S. shareholder were to gain control of the Company, the *stichting* would be automatically revived.

Up until 20 June 2014, the *stichting* was active through ICE's shareholding. After the IPO, ICE sold its shareholding, and there has been no controlling American shareholder. At the Euronext College of Regulators' request, the *stichting* has become dormant.

1.4.3 OWNERSHIP LIMITATIONS AND ADDITIONAL NOTIFICATION REQUIREMENTS

The rules set forth below apply to an acquisition of a direct or indirect interest in Euronext's market operators. These rules are in addition to shareholder reporting rules applicable to listed companies generally set out above.

Under **Belgian law**, any person who intends to acquire securities in a Belgian market operator and who would, as a result of such acquisition, hold directly or indirectly 10% or more of the share capital or of the voting rights in that market operator, must provide prior notice to the FSMA. The same obligation applies each time such person intends to increase its ownership by an additional 5%.

Under **Danish law**, pursuant to article 27(7) of the Central Securities Depository Regulation, a Danish CSD shall a) provide the Danish Financial Supervisory Authority with, and make public, information regarding the ownership of the CSD, and in particular, the identity and scale of interests of any parties in a position to exercise control over the operation of the CSD; and b) inform and seek approval from the Danish Financial Supervisory Authority of any decision to transfer ownership rights which give rise to a change in the identity of the persons exercising control over the operation of the CSD. After receiving approval from the Danish Financial Supervisory Authority, the CSD shall make public the transfer of ownership rights. Any natural or legal person shall without undue delay inform the CSD and the Danish Financial Supervisory Authority of a decision to acquire or dispose of its ownership rights that give rise to a change in the identity of the persons exercising control over the operation of the CSD. Pursuant to article 27(8) of the Central Securities Depository Regulation, within 60 working days from the receipt of the information referred to in article 27(7), the Danish Financial Supervisory Authority shall take a decision on the proposed changes in the control of the CSD. The Danish Financial Supervisory Authority shall refuse to approve proposed changes in the control of the CSD where there are objective and demonstrable grounds for believing that they would pose a threat to the sound and prudent management of the CSD or the ability of the CSD to comply with the Central Securities Depository Regulation.

Under **Dutch law**, a declaration of non-objection from the Dutch Minister of Finance is required for any holding, acquisition or increase of a Qualifying Participation (defined as direct or indirect participation of at least 10% of the issued capital of the relevant entity or the power to exercise at least 10% of the voting rights) in an operator or holder of a regulated market in the Netherlands which has been granted an Exchange licence to operate such market pursuant to section 5:26 of the Dutch Financial Supervision Act. The Dutch Minister of Finance has delegated its powers to grant a declaration of no-objection under section 5:32d of the Dutch Financial Supervision Act to the AFM, except in cases where the acquisition of the Qualifying Participation involves a fundamental change to the shareholding structure of the relevant licensed operator or holder of a regulated market in the Netherlands. Euronext N.V. controls Euronext Amsterdam, which is the licensed holder and operator of a regulated market in the Netherlands, and has obtained a declaration of no-objection under section 5:32d referred to above. Therefore, any acquisition or holding increase of a direct or indirect interest in the Company that results in an indirect Qualifying Participation in Euronext Amsterdam, will trigger the requirement to obtain a declaration of no-objection of the AFM or, in the case of a fundamental change in the shareholding structure, the Dutch Minister of Finance. Such declaration should be granted unless such holding, the acquisition or increase: (1) could or would lead to a formal or actual control structure that is lacking in transparency and would therefore constitute an impediment to the adequate supervision of the compliance by the market operator with the rules applicable to the operator of a regulated market; (2) could or would lead to an influence on the regulated market operator or effect on the exploited or managed regulated market that forms a threat to the interests which the Dutch Financial Supervision Act seeks to protect; or (3) could jeopardise the healthy and prudent operation of the regulated market concerned. Non-compliance with the requirement to obtain a declaration of no-objection is an economic offence and may lead to criminal prosecution. In addition, if a person acquires or increases a Qualifying Participation without having obtained a declaration of no-objection, it will be obliged to cancel the transaction within a period to be set by the Dutch Minister of Finance or the AFM unless the person cures the offence and obtains a declaration of non-objection. The Dutch Minister of Finance or the AFM may request the District Court in Amsterdam to annul any resolutions that have been passed in a general meeting of shareholders in which such person exercised its voting rights, if such resolution would not have been passed or would have been passed differently if such person had not exercised its voting rights. The District Court will not annul the resolution if the relevant person obtains a declaration of non-objection prior to the decision of the court.

Under **French law,** any person or group of persons acting in concert who acquires or increases, directly or indirectly, a holding in Euronext Paris shares or voting rights in excess of 10%, 20%, 33⅓%, 50% or 66⅔% is required to inform Euronext Paris, which in turn must notify the AMF and make the information public. In addition, any person acquiring direct or indirect control of a market operator must obtain the prior approval of the Minister of Economy upon proposal of the AMF. Further, Euronext Paris shall promptly notify the AMF prior to any changes to the identity and the details of the holding of any existing shareholder or shareholders, alone or in concert, who is in a position to exercise, directly or indirectly, significant influence (10% or more of the share capital or voting right) over the management of Euronext Paris and the proposed change can proceed as long as Euronext Paris does not receive any objection from the AMF within the period of time provided by the AMF General Regulation.

Under **Irish law**, prior notification to the Central Bank of Ireland of a proposed acquisition of, or increase in, a direct or indirect qualifying holding (10% or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that undertaking) of Euronext Dublin is required.

Under **Italian Law,** CONSOB shall be prior notified by anyone who directly or indirectly intends to acquire or transfer a stake in the equity share capital of the market operator or in the person that, whether directly or indirectly, controls the market operator, in such a way that the share of voting rights or capital reaches or exceeds, upwards or downwards, 10%, 20%, 30% or 50%, and in any event when changes result in the acquisition or loss of control of the company. CONSOB may oppose the acquisition of the stake or the change in the control when there are objective reasons to believe that the healthy and prudent management of the market is put at risk, evaluating, among other things, the quality of the prospective buyer and the financial solidity of the acquisition project. In addition, any acquisition of stakes in the capital of the market operator of the regulated market and the subsequent variations, made directly or indirectly, must be communicated by the acquiring party within 24 hours to the market operator. Furthermore, market operators are required to notify CONSOB and make public the information on the ownership of the company and in particular the identity of the parties that are able to exercise a significant influence over its management and the size of their interest. The meaning of "significant influence" and control are specified by the Italian domestic framework. As regards the wholesale regulated market for government securities the power to asses the above-mentioned acquisition of stake and changes in control are attributed to the Bank of Italy. As regards CCPs, the European Market Infrastructure Regulation (EMIR) requires prior notification and subsequent approval of any decision either to acquire or to dispose of a qualifying holding. Article 31 EMIR requires that any decision taken by a natural or legal person also acting in concert, either to acquire, directly or indirectly, a qualifying holding in a CCP or to further increase, directly or indirectly, such a qualifying holding, as a result of which the proportion of the voting rights or of the capital held would reach or exceed certain predetermined decimal thresholds (10 %, 20 %, 30 % or 50 %), or so as to make the CCP become its subsidiary, should be subject to notification and subsequent approval by the CCP's competent authority. The same applies in case of any decision to dispose or to reduce a qualifying holding, so that the proportion of the voting rights or of the capital held would fall below said predetermined thresholds, or so that the CCP would cease to be that person's subsidiary. Pursuant to EMIR article 31, the NCA shall have a maximum of 60 working days as from the date of the written acknowledgement of the receipt of the notification by the proposed acquirer or vendor to perform said assessment, with the possibility to extend the deadline upon occurrence of certain conditions, e.g. in case of a further request for information. For Italian CCPs the assessment is performed by the Bank of Italy, in agreement with CONSOB.

Under Article 27(7) of CSDR, a CSD shall (a) provide the competent authority with, and make public, information regarding the ownership of the CSD, and, in particular, the identity and scale of interests of any parties in a position to exercise control over the operation of the CSD; (b) inform and seek approval from its competent authority of any decision to transfer ownership rights which give rise to a change in the identity of the persons exercising control over the operation of the CSD. Furthermore, any natural or legal person shall inform without undue delay the CSD and its competent authority of a decision to acquire or dispose of its ownership rights that give rise to a change in the identity of the persons exercising control. Within 60 working days from the receipt of the information referred to in paragraph 7, the competent authority shall take a decision on the proposed changes in the control of the CSD. The competent authority shall refuse to approve proposed changes in the control of the CSD where there are objective and demonstrable grounds for believing that they would pose a threat to the sound and prudent management of the CSD or to the ability of the CSD to comply with the applicable regulation. For Italian CSD the assessment is performed by CONSOB, in agreement with the Bank of Italy. According to art. 26 of the Rules governing central counterparties, CSDs and central depository services dated 31 August 2018 4, CSDs shall send the Bank of Italy and CONSOB, on an annual basis on the occasion of sending documentation on the financial statements, a copy of an updated version of the shareholders register, indicating for each shareholder: a) the number of shares with voting rights held; b) the percentage of the shares with voting rights held with respect to the total number of shares with voting rights. In general, CSDs shall communicate all amendments to the shareholders' register to the Bank of Italy and CONSOB without delay.

Under **Norwegian law**, an acquisition resulting in the acquirer having a significant holding in a market operator for an official stock exchange, or in the stock exchange itself, requires authorisation from the Norwegian Ministry of Finance. Significant holding means any direct or indirect holding representing at least 10% of the share capital or the voting rights, or which otherwise makes it possible to exercise substantial influence over the management of the undertaking. Shares held or acquired by related parties shall be deemed equivalent to the acquirer's own shares. The acquisition of a right to become holder of shares shall be deemed equivalent to the holding of shares for the purpose of the first to third sentence where this must be considered a beneficial shareholding. Any acquisition increasing the holding such as to directly or indirectly exceed 20%, 30% or 50% of the share capital or voting rights of a stock exchange requires authorisation from the Norwegian Ministry of Finance.

Under the current **Norwegian Securities Register Act**, the rules in respect of ownership restriction for CSDs are similar to the rules that apply to market operators of a Norwegian stock exchange, described above. An acquisition of a significant holding in a CSD may only take place after authorisation from the Norwegian Ministry of Finance. "Significant holding" has the same content as described above for stock exchanges. In the CSDR there are also rules regulating ownership of a CSD. Any transfer of ownership rights that give rise to a change in the identity of the persons exercising control of the CSD needs approval from the competent authority of the CSD. This implies that an acquisition of shareholdings that gives the opportunity to exercise control of the CSD needs approval from the Norwegian FSA.

Under **Portuguese law**, a shareholder who intends to acquire, directly or indirectly, a dominant holding (broadly defined as 50% or more of the share capital or voting rights) or a dominant influence (broadly defined as the majority of voting rights or the possibility to appoint or dismiss the majority of the members of the managing or supervisory bodies) in a Portuguese market operator must obtain the prior authorisation of the Portuguese Ministry of Finance (with prior advice of the CMVM). In addition, all entities envisaging (i) acquiring or disposing of a (direct or indirect) qualifying holding (10% or more of the share capital or voting rights or otherwise establishing a significant influence) or increasing a qualifying holding at the level of 10%, 20%, 33⅓% or 50% or more of the share capital or voting rights in a market undertaking in Portugal or (ii) otherwise establishing a control relationship with a market subsidiary in Portugal, must notify the CMVM of the acquisition or disposal as soon as a decision has been taken to proceed within four business days following the relevant transaction and seek a prior declaration of non-objection. The disposal/reduction of the aforementioned qualifying holdings (considering each threshold above) or change in the control relationship is also required to be notified to the CMVM. Under Article 27(7)(a) of CSDR, a CSD shall (i) provide the competent authority with, and make public, information regarding the ownership of the CSD, and, in particular, the identity and scale of interests of any parties in a position to exercise control over the operation of the CSD; (ii) inform and seek approval from its competent authority of any decision to transfer ownership rights which give rise to a change in the identity of the persons exercising control over the operation of the CSD; after receiving approval from its competent authority, the CSD shall make public the transfer of ownership rights. Any natural or legal person shall inform without undue delay the CSD and its competent authority of a decision to acquire or dispose of its ownership rights that give rise to a change in the identity of the persons exercising control. The Portuguese CSD Legal Framework specifies that the acts through which the acquisition, increase, disposal or reduction of qualifying holdings and controlling interests is carried out are communicated to the CMVM and the CSD by the holders of the interest within 15 days. Qualifying holdings are deemed to be 10%, 20% or one-third of voting rights or capital. The CSD notifies the CMVM of changes in its ownership, in accordance with Article 27(7)(a) of Regulation (EU) 909/2014 (CSDR), as soon as it becomes aware of them.

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2 RISK MANAGEMENT & CONTROL STRUCTURE DR

Euronext analyses and monitors risks related to its activities with specific attention those whose occurrence could have a material impact on the Group's business. The table of the Group's principal risks categorises, the most material risks taking into account the impact and the probability of their occurrence.

Although Euronext believes that the risks and uncertainties described below are the material risks and uncertainties concerning the Group's business and industry, they are not the only risks and uncertainties relating to the Group. Other risks, events, facts or circumstances not presently known to Euronext, or that Euronext currently deems to be immaterial could, individually or cumulatively, prove to be important and may have a significant negative impact on the Group.

2.1 Risk Factors

Hierarchy of Risk Factors

Strategic Risks	Strategic Transformation Risk
	Regulatory Evolution and Enhanced Regulatory Scrutiny Risk
	Global and Regional Economy Risk
	Competition Risk
Operational Risks	Cyber Security Risk
	Technology Risk
	Third Party Risk
	Business Continuity Risk
	Employee Risk
	Regulatory and Liabilities Risk
Financial Risks	Credit Risk
	Market Risk
	Liquidity Risk
	Capital Requirements Risk

Our Markets   Our Society   Our People   Our Partners   Our Environment

Euronext recognises the importance of environmental, social and governance ("ESG") related risks. Based on our 2023 risk analysis, no material residual (unmitigated) ESG core business risks have been identified as impacting the operations, revenues and stakeholders of the Group.

The risk factors annotated by a reference symbol indicate material business risks that have an ESG dimension and link to the key ESG issues as identified by the Group's external stakeholders in the Group ESG materiality matrix (see *Section 3.1 - Value Creation by Euronext* of this document for more information) labelled under 5 impact areas have been identified according to these categories.

Strategic Risks

Strategic Transformation Risk

Risk Identification and Description	Potential Impact on the Group
The Group's strategy includes the identification and implementation of organic initiatives and new business initiatives such as acquisitions and partnerships. The market for acquisition targets and strategic alliances is highly competitive, the Group acts on opportunities as they arise and may continue to enter into simultaneous business combination transactions. The size, number and complexity of past acquisitions and those that may be executed in the near future, as well as ongoing enhancement programmes creates a strategic transformation risk for the Group. Notably, the Group has continued the integration of Borsa Italiana which is principally driven by the migration of Borsa Italiana markets to the Optiq® platform and the expansion of the Group's CCP, Euronext Clearing. Over 2023, the Group achieved two significant milestones with respect to the migration of Borsa Italiana markets to the Optiq® platform, and is expected to complete the final milestone in the first half of 2024. The Group delivered the first milestone of its CCP expansion with the internalisation of its cash equity clearing for non-Borsa Italiana markets onto Euronext Clearing in 2024, the final milestone is expected in mid-2024. There are varying degrees of dependency between the above-mentioned projects and there is a risk that, should the last milestone of the Optiq® migration project be significantly delayed, the second phase of the Clearing expansion may be impacted. Beyond the above mentioned projects, the Group is undergoing other group-wide business transformation programs, including the development of its convergence plan across the Group CSDs.	Pursuing strategic transactions requires substantial time and attention of the management team, and of key employees managing or working on the integration/project activities. This could prevent oversight of other initiatives, reduce bandwidth for business as usual activities and slow other ongoing projects or initiatives. Late, incomplete or unsuccessful integrations or projects may impact the Group's strategic plan, business, reputation and financial results. The ability to adapt to a rapidly changing company culture by Euronext's employees is necessary to ensure successful integrations and transformation. Failure to meet the demands of the changing company culture could negatively impact the advancement of projects and successful integration. If integration programs are not completed, do not operate as intended, are delayed or identified synergies are not delivered, Euronext's strategic ambition and reputation may be at risk.

Regulatory Evolution and Enhanced Regulatory Scrutiny Risk

Risk Identification and Description	Potential Impact on the Group
The Group's businesses are subject to extensive regulation and supervision at both European and national levels in the jurisdictions in which the Group has operations: Belgium, Denmark, France, Ireland, Italy, the Netherlands, Norway, Portugal and the United Kingdom. In addition, the Company has a presence in the United States, Singapore, Finland and India. Regulatory changes may impact the operating environment of Euronext exposing the Group to risks associated with the implementation and maintenance of compliance with new regulatory requirements. As the Group expands, so has the scope of regulatory requirements to which it is subject and the breadth of relevant relationships it must maintain. The regulatory environment is an important element that may limit the ability of the Group or its entities to provide certain current or planned services, or build an efficient, competitive organisation. The Group must obtain regulatory approval to implement significant changes to the operations of its trading venues, and material changes to operations and models of its CCP and CSDs. Transformational cross-organisation projects include the Borsa Italiana markets migration to Optiq and the expansion of Euronext Clearing. Failure to obtain required approvals, which may need approval by multiple regulators, may delay or prevent the Group from achieving its strategic objectives.	Decisions by Euronext's regulators to impose measures may impact the competitive situation and possible strategy of the Group. Adherence to new and evolving regulatory regimes implied increase compliance and associated costs for the Group, for instance by requiring the businesses of the Group to devote substantial time and cost to the implementation of new rules and related changes in their operations. It may also impact the ability to outsource certain activities and/or place financial and corporate governance restrictions on the Group and its entities. As the Group grows its product base and the jurisdictions in which it operates, regulatory oversight of the Group's activities by additional regulatory bodies potentially increases regulatory constraints or increases compliance requirements if adversely designed could materially increase the costs of, and restrictions, of its activities. Delays or denials by regulatory authorities of approvals requested by Euronext required to implement its strategic initiative, or to pursue business opportunities could have a significant impact on Euronext's competitive positioning and growth. The impacts of the proposed amendments to MiFIR remain difficult to assess. The changes to the structure of the market data business including both reasonable commercial basis provisions and the creation of a consolidated tape may negatively impact market data business revenues in the medium term. The same may be the case for market structure reforms.

With regards to MiFID II/MiFIR, an agreement on the Commission proposal was struck in the summer of 2023, however the official text has yet to be adopted and published. The outcome represents a risk for market data revenues. The scope of the pre-trade consolidated tape is limited to anonymised top-of book EBBO data, shares and ETFs, while post-trade data applies to shares, ETFs, bonds, and OTC derivatives. The revised market structure regulatory framework, may potentially benefit off-venue trading with alleviations introduced on bank internalisation. At the same time, a ban on Payment for Order Flow (PFOF) has been introduced, including a grandfathering provision for member states with existing structures in place until June 2026.

The Commission proposal for the Benchmark Regulation review should be positive as it aims to limit the framework to critical, significant and environmental benchmarks and is expected to apply in 2026. The Commission proposal on the Retail Investment Strategy seeks to improve the framework for retail investors, and there is a risk, subject to the final outcome, of unintended consequences in terms of limiting retail access to financial markets further. The Commission proposal on ESG Ratings seeks to install safeguards on transparency and is expected to be positive for the market that relies on ESG ratings.

In December 2022, the Commission proposed a review of EMIR and a new Listings Act, both which are potentially positive. The Listing Act is expected to be agreed in Q1 2024 with the aim of simplifying the listing process by streamlining prospectus and market abuse requirements. The EMIR review seeks to improve new product and service authorisation procedures and is expected to be agreed in 2024.

With regards to the CSDR framework, the EU Commission addresses access to commercial bank money for settlement purposes, as well as services passports, both requiring effort to implement. The Withholding Tax proposal, proposes that CSDs should register as Certified Financial Intermediaries, potentially causing additional burdens in this area.

Beyond market infrastructure regulation, the Group is subject to increased regulation in the areas of IT, cybersecurity, and outsourcing, particularly with the Digital Operational Resilience Act (DORA) which will be applicable in 2025. Level 2 Regulation is being prepared and consultations will continue over the course of 2024.

In 2023 the Distributed Ledger Technology (DLT) Pilot Regime entered into force permitting exemptions to MIFID and CSDR to manage financial instruments through new DLT infrastructures that could benefit from these exemptions, potentially increasing competition. The Markets in Cypto Assets (MICA) Regulation will be applicable in 2024 regulating the provision of services of crypto assets potentially allowing crypto asset service providers to leverage their more regulated structure and start competing on traditional financial instruments.

ESG regulation continues to evolve, with the final four objectives of the EU Taxonomy for Sustainable Activities published in 2023. The Corporate Sustainability Reporting Directive (CSRD) was finalised and will be transposed into national regulations in 2024. The negotiations of the Corporate Sustainability Due Diligence Directive (CSDDD) were provisional agreed in December 2023, however during a meeting of the Coreper in February 2024, the agreement failed to receive sufficient support at the European Council level.

On the post-trade side, the CSDR and EMIR Reviews are generally positive for the Group, potentially facilitating these businesses, however, the legislative process still needs to be finalised. The potential impact of the EMIR review is expected to include changes to the supervisory regime, authorisation procedures foreseen within EMIR, which may result in the relocation of clearing flows related to certain derivatives asset classes from the UK to the EU. The Withholding Tax proposal may however add regulatory burdens on CSDs. The Benchmark Review may reduce regulatory burdens on the indices offered by the Group.

With respect to the DLT Pilot Regime and MICA Regulation, in the medium term, the estimated impact, due to the asset perimeter is expected to be limited. In the longer term, more flexible provisions of digital finance may be extended to a broader asset perimeter, and enable new competition on Euronext's core activities, with the main impacts expected on bond listing, post-trade and retail trading activities.

If competitors (including those in third party jurisdictions) can obtain regulatory approval for similar products (including new digital products) or services faster than established entities such as the Group or its subsidiaries, or with lower regulatory burdens than regulated entities, the Group's competitive position may be weakened.

Well-designed legislation in respect of IT, cyber security and outsourcing, notably DORA can be expected to assist the Group in its operations on a cross-border basis, particularly in harmonising reporting obligations. However, compliance risks can be expected to increase.

ESG regulations require increasing time and resources to ensure correct implementation and continued compliance changes and adaptation processes, including training and awareness for employees. Potential impacts of new regulations will be determined by the scope of application of new regulations and directives.

Global and Regional Economy Risk

Risk Identification and Description	Potential Impact on the Group
The Group is exposed to global and regional economic, political and geopolitical market conditions, macro-economic changes in global or regional demand or supply shifts and legislative changes across several jurisdictions, which can affect the level of global and local financial activity. The general economic conditions as well as unanticipated, impactful events, and general economic conditions affect financial and securities markets in a number of ways, from determining availability of capital, to influencing investor confidence. Adverse changes in the economy or the outlook for the financial and securities industry can have a negative impact on the Group's revenues through declines in new listings, trading, clearing and settlement volumes, and demand for market data. Starting in 2022, inflation in Europe and the US increased to its highest in several decades, driven by the lingering impacts from the pandemic and its recovery, and exacerbated by the war in Ukraine and subsequent sanctions to the Russian invasion. Over 2023, inflation continued however slowing as Government responses to curb inflation continued over 2023. In the second half of 2023 Central Banks slowed the increase of interest rates buoying the economy and supporting equity trading and valuations and ultimately business activity. Market and FED expectations are for 75 basis point rate cut in 2024, supporting economic growth. GDP in the euro area, where the Group's activities are concentrated, was weaker in 2023 than expected due to Germany's slowdown and 2024 may confirm this trend. Eurozone GDP growth in 2024 is expected to be close to zero to 0.5%. Low or negative growth may impact trading, and increased credit risk in the Euro area, reduce appetite for risk including trading activities by participants. Additionally, primary listing activities have been impacted given challenging market conditions in 2023 and may continue in 2024 further impacting the Group.	While volatility may drive volumes on trading venues, the recession and slow GDP growth may be reflected in issuance and trading, clearing and settlement volumes, and demand for market data, which may negatively impact Group revenue and growth targets. Declines in volumes may also impact the Group's market share or pricing structures. The expected recessionary and increasing credit risk environment may negatively impact markets, which may experience a "flight to quality", negatively impacting business where the Group has activities. Further, a flight to quality may result in less volatile BTP-Bund spreads, the trend over 2023 was a tightening of the spread versus increasing spread, volume is expected to continue in the first half of 2024 maintaining the overall volume of bonds traded on Group markets on the upside. In case of a temporary recession the impact on the Group may be muted due to potential opportunities of portfolio reallocation. Should a recession be persistent, higher credit risk, increased bond spreads, and impacts to market liquidity, may result in participants reducing their trading activity and suspending potential listings.

Competition Risk

Risk Identification and Description	Potential Impact on the Group
The industry in which the Group operates is highly competitive. In particular, the Group's trading business is facing market fragmentation and increased competition, from OTC and bilateral trading, systematic internalisers and Multilateral Trading Facilities (MTFs). The listing business is facing competition from Regulated Markets as well as private equity funding. Competition has intensified due to trends including: - technological innovation; - the globalisation of capital markets, which has resulted in greater mobility of capital, greater international participation in local regions and more competition among different geographical areas; - the continued expansion of other market participants impacting volumes on our markets; - the growing appeal of private equity; and, - increased competition among exchanges, central counterparties and CSDs. The Group competes with other market infrastructures on: - diversity of flows, - index, clearing, issuance and settlement services, - data and quantitative research; - ease of use and performance of trading, clearing and settlement systems including quality and speed of execution and functionality; - range of products and services offered to customers, trading and clearing participants and listed companies; and - adoption of technological advancements. Competition on price across each of the Group's product areas including, trade execution, post-trade services, market data, and technology continue, and is expected to persist. Finally, competition may intensify further should certain rules, regulation and circumstances change.	Should the Group be unable to adapt to continued changing market pressures, evolving customer demands, or is required to adapt its pricing structure, revenues and profit margins could decline. The success of the Group's business depends on its ability to attract and maintain order flow, both in absolute terms and relative to other market infrastructures, and the loss of order flow would negatively impact the Group's sources of liquidity and its market position, which could have a material adverse effect on the Group's business, results of operations, financial condition and prospects. Intensifying competition among exchanges and private equity offers may have a negative impact on listing fees and future trading fees.

Operational Risks

Cyber Security Risk

Risk Identification and Description

Cyber resilience is a critical priority for the Group. The Group's growth footprint and threat landscape in terms of employees, geographical, and business footprint increases the Group's exposure to cybersecurity threats meaning that secure transmission of business information over public and other networks are critical elements to the Group's operations.

The volume of cyber-attacks has been increasing in general and, consequently, within the financial sector. As the Group expands, it accumulates, stores, and uses more business data which are protected by business contracts and regulated by various laws, including data protection, in the countries in which it operates. The Group expansion also leads to an enlarged global footprint, expanding the overall attack surface.

The Group may be exposed to exploitation of its internet exposed applications by malicious actors, data leakage, including ransomware, unauthorized access or other security incidents including:

- Breaches at the level of third parties, including cloud computing services, to whom Euronext provides information and may not be fully diligent in safeguarding it.
- DDoS threats on internet exposed assets and applications of the Group.
- Attacks leveraging potentially unsecure internet connections for employees working remotely.
- Advanced persistent threats from highly sophisticated attackers including state sponsored or organised crime hacking groups with malicious intentions which may target the financial sector.
- Third-party software used by Euronext within its context and software solutions, which is available to the public and may be exposed to unknown or undisclosed vulnerabilities (zero-days).
- Phishing attacks targeting Group employees.
- Persons who circumvent deployed security measures that could wrongfully access the Group's or its customers information, or cause interruptions or malfunctions in the Group's operations. Data protection regulations increase the risks associated with regulatory non-compliance in case there is an incident.

Potential Impact on the Group

The impact of a successful cybersecurity attack depends on the nature and scope of the attack , for example:

- Security breaches, leaks, loss or theft of sensitive, personal, strategic or confidential data, including data subject to protection laws, and other related security incidents could cause Euronext to incur reputational damage, regulatory sanctions, litigation and/or have an impact on its financial results.
- A successful cybersecurity attack on the Group's IT systems may affect the confidentiality, availability or integrity of information.
- A cybersecurity attack may result in system operational failures due to vulnerability exploitation.
- Internet facing Systems may face downtime due to DDoS attack.

The Group is committed to maintaining and safeguarding its IT systems and information, with particular attention on external growing threats and threat actors (such as cybercriminals). However, malfunctions, significant disruption, loss or disclosure of sensitive data could disrupt the Group's operations, result in significant reputational harm or have a material adverse effect on the Group's business, results of operations, financial condition and prospects.

Technology Risk

Risk Identification and Description

Technology is a key component of Euronext's business strategy, and is crucial to the Company's success. Euronext's business depends on the security, performance and stability of complex computer and communications systems. The ability to expand system capacity and performance to handle increased demand or regulatory requirements is fundamental to Group operations.

The Group's markets have experienced systems failures and delays in the past and could experience future systems failures and delays, impacting our members and clients and related trade executions. Such failures may arise for a wide variety of reasons including hardware and software malfunctions or defects, or complications experienced in connection with the operation of such systems, including system upgrades.

The Group is currently undergoing significant technology transformation projects in line with its strategic plan. Projects include the migration of Borsa Italiana markets to the Optiq® trading platform, and the European expansion of Euronext Clearing both of which have completed significant milestones in 2023 and are expected to be completed in 2024. In addition CSD initiatives that are aimed to foster harmonisation have progressed over 2023 and will continue in 2024. The magnitude of these transformations carry project and change management risk, and once implemented, a broader technology risk that if the Group's technology and/or information systems suffer from major or repeated failures, this could interrupt or disrupt the Group's operations or services.

Potential Impact on the Group

Euronext's future success will depend, in part, on continued innovation and investment in its trading and post-trade systems and related ability to respond to customer demands, understand and react to emerging industry standards and practices on a cost-effective and timely basis.

Given the significance of ongoing integrations and projects, as well as the continuing need for effective change and integration management, to minimise disruptions, may have a negative cascading effect on strategic objectives.

Following the completion of transformation project milestones over 2023 (Borsa Italiana cash equity trading and expansion of cash equity clearing of Euronext markets (except Oslo Bors) and deployment of data centre service offerings (colocation and customer managed connectivity (CMC)) Euronext is becoming a critical service provider for some of its clients, thus increasing the impact and visibility of system failures or disruptions should they occur.

In general, should the Group's technology not be properly managed, and system issues occur during operations, reputational damage and confidence in the Group maybe undermined, and may lead to customer claims, litigation and regulatory actions including investigations or fines.

Third Party Risk

Risk Identification and Description

There is a risk that if one of the Group's third party services providers suffer from major or repeated failures, Group operations or services could be interrupted or disrupted.

Technology Service Providers

the Aruba data centre located near Bergamo (Italy), is critical third party for the Group housing its core data centre, the Group has internalised a number of data centre services while third parties offer complementary services reducing dependencies on third parties. The Group continues to depend on Equinix who provides the secondary data centre.

Euronext depends on Amazon Web Services (AWS) for select cloud services, notably for regulatory and external reporting.

With respect security services the Group relies on Cap Gemini for services related to its Security Operations Centre to assisting the permanent monitoring of the Group's environments.

Clearing Service Providers and Settlement Partners

In Q4 2023 the Group's CCP, Euronext Clearing, replaced LCH S.A., a central clearing party owned by LSEG Group, as the default CCP for its trading venues for equity cash clearing reducing its dependence on this third part. However, open access is maintained via the Preferred CCP Model under which LCH S.A. and CBOE Clear Europe which remain preferred CCPs for all trading venues with the exception of Oslo. With respect to Oslo cash markets, Euronext Oslo relies on three interoperable CCPs: LCH Ltd, Cboe Clear Europe and Six X Clear.

LCH S.A. will remain the CCP for trades executed on the Group's derivatives markets (excluding Borsa Italiana) until the completion of the Group CCP expansion of its derivatives markets in 2024. Borsa Italiana derivatives are already cleared by the Group's CCP.

LCH SA together with the Group's CCP provide clearing for the fixed instruments traded on MTS platform via the interoperability link established between these two CCPs.

The settlement of trades concluded on the Group's trading venues relies not only the Group's own CSDs but also on third party CSDs, according to the type of securities to be settled.

Potential Impact on the Group

Technology Service Providers

Euronext actively manages its relationships with its key strategic technology suppliers, and includes framework Service Level Agreements to ensure services are guaranteed. However, should a significant disruption occur, including a discontinuation of services or a service failure, the Group may experience significant disruption to its business and may be subject to, reputational damage, litigation by its customers or increased regulatory scrutiny or regulatory fines.

Clearing Service Providers and Settlement Partners

To the extent that any of the entities providing clearing or settlement for trades concluded on Euronext markets experience difficulties, materially change its business relationship with the Group, or are unable for any reason to perform its obligations, the Group may suffer negative impacts on its operations, business, reputation, and financial results.

Business Continuity Risk

Risk Identification and Description	Potential Impact on the Group
Business continuity a key objective of the Group's operational resilience strategy, helps to address the Group's ability to prevent, adapt, respond and recover from operational disruptions to minimise the impact on our customers and on the financial stability of capital markets. The energy crisis experienced in Europe in 2022 has been largely tempered in 2023. The Group continues to monitor the situation should underlying tensions increase. The rise of social and environmental tensions in Europe may create pressure on the physical security of facilities and well-being of employees.	Unforeseen events such as physical security and system security threats, epidemic or pandemic, or a major system breakdown, could impact the continuity of the Group's services operation, reputation and its financial condition, cause financial detriment both internally and externally to the wider market. Should an energy crisis or significant social disruption occur, the Group, particularly its critical services or its critical service providers of the Group including data centres be impacted, the Group may not be able to run its critical operations without disruption or diminished service which may negatively impact the reputation and financial results and of the Group.

Employee Risk

Risk Identification and Description	Potential Impact on the Group
People management is a key component of Euronext's business and ESG strategy, and is crucial to the Group's success. People risks could arise from a lack of critical skills, which could impact the ability for the Group to deliver its objectives. The ability to attract and retain key employees and critical skills is dependent on many factors including market conditions, internal talent development and compensation practices, and employee engagement initiatives. A people strategy to support the Group strategy and company purpose, a structured organisation and a diverse workforce are necessary to ensure people engagement and performance.	An inability to attract skilled senior management and other key people at the right time and with the right skills could impact delivery of some projects and financial objectives at business line level. Employee turnover is not expected to impact the business or operational resilience of the Group.

Regulatory and Liabilities Risk

Risk Identification and Description	Potential Impact on the Group
Euronext operates in a highly regulated environment with multiple regulators which highlights a potential risk that one or more of the Group's entities may fail to comply with the regulatory or contractual requirements to which it is subject. Compliance risk may arise under laws and regulations relating to financial markets and services, insurance, tax, employee behaviour, misuse of information systems, technology, data and intellectual property of others, data privacy, market abuse, corruption, anti-money laundering, financial sanctions, foreign asset controls, and data privacy and foreign corrupt practices areas. In addition, potential liabilities may result from disputes terms of a securities trade and/or settlement, from claims that a system, or operational failure or delay caused monetary losses to a customer, as well as employment, competition matters and other commercial disputes. Euronext N.V. licenses rights to a number of trademarks, service marks, trade names, copyrights, applications (that also embed libraries or components subject to open source licenses), products, specific deliverables, software and databases, including those of third parties. The Group's intellectual property could be misappropriated by third parties, and/or the Group may inadvertently infringe third party IP rights during its business activities., particularly as the Group is increasingly digitalised.	Euronext could be exposed to significant fines or sanctions from relevant regulators, authorities or a court that announce adverse resolutions of any lawsuit or claim against Euronext Group as well, which could impose restrictions on how Euronext Group shall conduct its businesses and the ability to compete. This situation may expose the Group to significant reputational damage, consequences on the Group' financial results, and the significant legal expenses in defending claims, even those without merit. Failure to protect intellectual property (including trademarks service marks, trade names and copyrights) adequately could harm the Group's reputation and affect its ability to compete effectively, diminish the value of that intellectual property as an asset as well as diminishing potential revenues stemming from those rights. Further, defending the Group's intellectual property rights may require significant financial and managerial resources.

Financial Risks

Credit risk

Risk Identification and Description	Potential Impact on the Group
Non-Clearing	**Non-Clearing**
The Group's exposure to credit risk predominantly arises in the event of a counterparty default, from its operating activities, primarily trade receivables, its financing activities, and the investment in cash equivalents, short-term financial investments and derivatives contracts used for hedging purposes. The Group's power market is potentially subject to credit risk should one of its members default with an amount in excess of the collateral provided outstanding. The power market has a credit risk towards its main banking partner with respect to the settlement of wholesale electricity transactions.	The Group may incur a loss that would impact its net income should one of the counterparties to which it is exposed default. Adverse changes in the economic environment may increase loss allowance provisions which would negatively impact the net income of the Group. With respect to the Group's power market, should a participant default beyond the collateral, the entity could incur losses.
Clearing	**Clearing**
The Group's CCP assumes the credit counterparty risk for all cleared transactions. The credit risk is thus the risk of a CCP member default i.e. that one of the parties to a cleared transaction defaults on their obligation; in this circumstance the CCP is obliged to honour the contract on the defaulter's behalf and thus an unmatched risk position arises. The CCP may suffer a loss in the process of closing the positions of the defaulter if the market moves against them. The CCP is required to make available a proportion of its regulatory capital available ('skin in the game') to cover potential residual defaulting losses following the exhaustion of the defaulter's resources (margins and default fund contribution) before allocating remaining losses to non-defaulting members' default fund allocation. As of February 2023 the CCP has been required to implement the regulatory "second skin in the game" to comply with the CCP Recovery and Resolution Regulation. The CCP is also exposed to Credit Risk linked to treasury counterparties default as any other entity of the Group (see Credit Risk paragraph above). Credit risk related to CCP Investments are subject to the CCP Investment Policy which is aligned with EMIR regulation, and described under Market Risk in the "Clearing" subsection. CCP Investments over 2023 are negligible, almost all cash deposited at Central Bank.	Should a default of a CCP clearing member not be manageable within the resources available, the CCP's (and by extension the Group's) reputation and financial resources may be adversely impacted. In case of usage of the CCP's own resources (first and second 'Skin in the Game') during a default of a clearing member, the CCP must restore these capital reserves to continue to fulfil the regulatory requirements. If CCP reserves and/or capital surplus are not sufficient to replenish the skin in the game contributions, CCP shareholders would be asked to replenish them by contributing in a capital injection. The financial and reputational impact of CCP recapitalisation on the Group may be significant.

Market Risk

Risk Identification and Description

Non-Clearing

Market risk arises from changes in interest rates, foreign-exchange risk and other market prices.

The Group is exposed to interest rate risk on both fixed-rate bond and floating rate financial assets and liabilities, including the fixed-rate bonds and the Revolving Credit Facility.

The Group is exposed to foreign currency risk arising from the translation of assets and liabilities of subsidiaries with functional currencies other than the Euro. The Group is exposed to foreign exchange risk primarily in NOK, USD, DKK and GBP. Fluctuations may affect the Group's profit margins and value of assets and liabilities in non-euro denominated currencies when translated into Euros.

Please refer to Note 37 in the Notes to the Financial Statements for details on sensitivity analyses performed by Group Treasury.

Clearing

The CCP assumes the counterparty risk for all cleared transactions. This is a latent market risk as it only exists in the event of a clearing member default. In addition the risk is increased if market conditions are unfavourable at the time of default.

Regarding the CCP Investment Risk, the Group's CCP makes investments in high-quality liquid sovereign bonds. CCP Investments over 2023 are negligible, almost all cash deposited at Central Bank. The successful operation of these investment activities is contingent on general market conditions and there is no guarantee that such investments may be exempt from unexpected losses (that could materialise in case of default of a Sovereign Country, a number of Clearing members, or unfavourable interest rate movements).

Potential Impact on the Group

Non-Clearing

Increased interest rates could negatively impact the net financial income of the Group by increasing the cost of borrowing, refinancing, however having a positive impact on interest income on cash investments.

Fluctuations in non-Euro currencies particularly with respect to the NOK, USD and GBP may impact the income generated and the (regulatory) equity in these currencies when translated into Euros in the Consolidated Financial Statements.

Although the Group seeks to limit its exposure to market risks, it cannot eliminate them. As such, adverse changes in market conditions, on both interest rate and foreign currency fluctuations may negatively impact the net financial income of the Group.

Clearing

Should a default of a CCP clearing member not be manageable within the resources available, the CCP's (and by extension the Group's) reputation and financial resources may be adversely impacted.

Unfavourable movements in interest rates could negatively impact the net financial income of the Group by reducing interest income.

Liquidity Risk

Risk Identification and Description

Non-Clearing

The Group would be exposed to a liquidity risk if its short-term liabilities become higher than its cash, cash equivalents, short-term financial investments and available bank facilities and in the case where the Group is not able to refinance this liquidity deficit, for example, through new banking lines.

The Group's power market is exposed to liquidity risk should there be a significant delay in receiving large payments.

Clearing

The Group's CCP is exposed to the risk of incapacity to meet cash obligations towards its Clearing Members both in standard conditions and while managing a member default.

Potential Impact on the Group

Non-Clearing

In the event that the Group fails to maintain a level of liquidity sufficient to cover its short term obligations, it will increase its default risk, potentially damage its creditworthiness and subsequently its reputation.

Depending on the amount of the liquidity shortfall resulting from a delayed payment to the the Group's power market's, the Group may be asked to fill the liquidity gap in extreme circumstances.

Clearing

The Group's CCP collects clearing members' margin and default funds contributions in cash and/or in highly liquid securities. To maintain sufficient ongoing liquidity and immediate access to funds, the Group's CCP deposits the cash received in highly liquid and secure investments, such as Central Bank accounts, sovereign bonds and reverse repos, as mandated under EMIR. In the event that the CCP fails to have sufficient liquidity to fund its obligations the CCP may have significant reputational and regulatory impacts which may further extend to the Group.

Capital Requirement Risk

Risk Identification and Description	Potential Impact on the Group
Euronext N.V. as well as certain local entities, operate under strict regulatory requirements, which may include the maintenance of minimum capital requirements. Management of regulatory capital is conducted in compliance with applicable regulation. Capital Requirements Regulation, MiFID II, Market Infrastructure Regulation (EMIR), CSDR, as well respectively applicable national requirements. There is a risk that Euronext N.V. or one of its regulated entities fails to comply with the applicable regulation and associated requirements for minimum capital held.	In the event that Euronext N.V. or its regulated subsidiaries do not have sufficient regulatory capital, the Group or the relevant subsidiary's operating licences may be jeopardised, which would affect the Group's capacity to operate its financial infrastructure, negatively impacting revenues, brand and reputation.

2.2 Mitigation Measures

The measures described in this section are presented to provide additional information on the Group's efforts to seek to manage the likelihood, frequency, or impact of certain risks. Despite the measures noted, the Group's efforts may not be successful in limiting or preventing these risks from materialising or may not achieve the intended benefits, therefore risks in *Section 2.1 - Risk Factors* remain material risks for the Group. Refer to *Section 2.1 - Risk Factors* for a discussion of the Risk Factors that may negatively impact the Group.

Strategic Risks

Strategic Transformation Risk

The Group closely monitors its transformation programs, which include formal frameworks that establish governance bodies to organise, and implement its strategic projects. Governance instances are also developed horizontally across strategic projects to identify cross-dependencies, including delivery and internal and external readiness.

Group knowledge and expertise is continually increasing as the Group gains capacity, competence and experience in expanding its technology into the Group and delivering synergies. The Group has developed a strong project culture including management knowledge and oversight of projects, reinforcing the Group's ability to complete projects within expected timelines.

Regulatory Evolution and Enhanced Regulatory Scrutiny Risk

Euronext actively monitors all relevant European and national legislative and regulatory policy developments and engages in regular discussions with issuers and trading members, European and national policy-makers, and regulators to provide input and respond to developments and consultations attempting to ensure an acceptable impact on our markets. Euronext is working to simplify and harmonise its regulatory process. However, Euronext remains subject to all applicable regulations and directives signed into law whether they be detrimental to Euronext's business or not and may translate into an additional regulatory burden for the Group or its entities.

Global and Regional Economy Risk

Euronext considers international institutions' economic outlooks and analyst forecasts to assess the level of this risk.

The Group has demonstrated the resilience of its business model (diverse asset classes, geographic regions and other sources of income), and is working to develop its non-volume related businesses to reduce the impacts of macroeconomic volatility.

Competition Risk

The Group challenges its peers on their markets, in particular for the listing of global companies and SMEs in the technology sector. The Group has established a sales presence building proximity in several European locations. The Group identifies unlisted companies to support meeting their ambitions (additional financing) and maintains targeted pre-IPO programmes to familiarise key executives with financing solutions of capital markets.

Innovation in the equity sector and movements in the competitive landscape are closely monitored and actions are taken to protect market share and develop new offerings to attract trading. Euronext is focused on delivering the highest quality liquidity management with the aim of providing a deep pool of liquidity, best execution and a resilient market. The Group maintains, or improves its position by offering services, research and client engagement to respond to client needs. In particular, Euronet is expanding its pan-European and US equity offering for 2024 Euronext will implement new functionalities for the trading execution of institutional flow.

The Group clearing house competes for cash equity clearing flows, to maintain attractivity the Group seeks to generate decreased costs for clearing members for the clearing and settlement of instruments.

Operational Risks

Cybersecurity Risk

The Group makes significant efforts to mitigate cybersecurity risks, whether from threat actors or vulnerabilities, from materialising by making targeted investments in people, processes, and technology. The Group has a specific cybersecurity strategy, roadmap, and a Group-wide established governance model supported by dedicated resources. The roadmap and strategy are challenged by internal audits, external auditors and regulators from all countries where Euronext operates regulated markets. Euronext implements a security strategy and best practices aligned and certified in recognised global standards (e.g. ISO9001, ISO 27001, NIST) and seek to ensure a high level of cybersecurity maturity. Despite the Group's efforts, cybersecurity threats continue to grow in sophistication and thus the risk cannot be eliminated.

Technology Risk

The performance and availability of the Group's systems are reviewed continuously and monitored to prevent problems when possible and responding, in a timely and efficient manner, when problems do occur. Euronext continuously invests in the development of its technology in order to maintain and ensure best in class service and capacity.

The Group has established governance instances to oversee multiple parallel IT programmes. This supports the objective of control of execution, proper resource allocation while maintaining system stability and continuity of service.

Third Party Risk

Technology Service Providers

The Group seeks to identify and manage risks associated with third party supplier risk by partnering with reputable technology and services providers, via audits of the technology, backups and business continuity arrangements, as well as information on remediation plans should any of its providers experience service issues. The Aruba Data Centre is state-of-the-art Tier 4 data centre which ensures redundancies to avoid outages. The Group has implemented an Outsourcing Policy and a Procurement Policy which ensure the due diligence and contract review of all service providers to ensure that contracts are robust.

Clearing Service Providers and Settlement Partners

Euronext has contracts with each of its post-trade clearing providers that establish clear governance and service quality. Specifically, with LCH S.A. a long-term derivatives clearing contract has been signed between two entities and regular governance instances are established that maintains the relationship and ensures regular communication between the two entities. The derivatives clearing contract will be terminated following the migration of derivatives clearing to Euronext Clearing.

Following the change of default CCP for cash equity, Euronext Clearing, the Group's CCP, has contractual relationships with the CSDs which provide settlement and custody services for Euronext Clearing, including the Group's CSDs and Euroclear Bank. Such contracts include provisions to ensure the continuity of service. The Group interests are further protected at in Euroclear as the Group holds 3.5% stake of Euroclear S.A./N.V and is further represented on the Board of Directors.

Business Continuity Risk

The Group has process and controls in place to mitigate the impacts of unforeseen disruptions on its business activities. The Group has a strong group-wide Business Continuity Policy and programme, with mature governance instances in place. The Policy includes risk-based scenarios that support the assessment of the risk profile of the Group and its subsidiaries.

The Group maintains an ongoing process to assess its operational resilience and capacity to operate critical activities in the face of potential energy outages across its locations. The Group along with financial sector peers seek to ensure the well-being of their employees and continuity of their operations and to this end work to strengthen relationships with authorities to maintain security and resilience.

Employee Risk

The federal model and geographic footprint enable Euronext to have a diversified talent pool and to allocate resources in areas with less competitive market conditions. It contributes to minimise impacts on business and operational resilience of the Group. Shared processes and HR systems are deployed across locations together with a common framework on talent acquisition, talent development, succession plans, performance management, compensation and career mobility.

To mitigate risk, the Group has established common Talent Develop practices across all locations, in accordance with the strategic plan priorities. A Group training plan, including leadership programs, and local training actions are in place to develop competencies of core strategic skills.
To help prevent a skill shortage, specifically in the information technology field, Euronext partners with engineering and IT schools to co-develop projects and improve its visibility as an attractive employer. The Group has an "Early Career" programme to recruit and train students and recent graduates with the latest technologies and critical skills. In addition, for more senior roles, Euronext has developed short term and long term international mobility to support teams upskilling and the federal model. In 2023, the Group continued to reinforce its ESG commitment internally and externally with initiatives to support its corporate purpose "Shaping capital markets for future generations", including Climate session, Society projects, a diversity network across all locations and the launch of a Women Network in all locations. Health, sport, nutrition and work-life balance programs have been reinforced to support our employees.

Please see section *3.4.3 - Our People* for details regarding employee initiatives in place.

Regulatory and Liabilities Risk

In order to ensure that the Group remains compliant with all laws and regulations it has taken a range of proactive preventative measures. For example, the Regulatory and Government Affairs team of the Group monitors and informs the business about all relevant legislative developments, to ensure that business lines and operations are aware of all applicable rules and regulations. In addition, compliance policies and procedures are in place, regularly reviewed and supported by an annual training plan. The actions ensures Group entities and staff are compliant with applicable laws and regulations and uphold our corporate standards. The Euronext Code of Business Conduct and Ethics sets out the principles of behaviour required of all Company employees and is provided to all new joiners. In addition, conduct risk is primarily managed via a wide range of policies and procedures, applicable to employees, and is enforcing these through regular training and monitoring.

Legal and compliance functions have been established at various locations to ensure coverage of all business lines, including throughout all stages of business projects to comply with local laws and regulations.

Financial Risks

Credit Risk

Non-Clearing

The Group's Treasury Investment Policy governs the credit risk requirements of counterparties (banks, financial institutions, funds) and their diversification to avoid a concentration of risk. Investments of cash and cash equivalents in bank current accounts and money market instruments, such as short-term fixed and floating rate interest deposits, are governed by a strict group Treasury Investment Policy aimed at reducing credit risk. The Group seeks to limit its exposure to credit risk by rigorously selecting the counterparties with whom it executes agreements. Credit risk created by derivatives for hedging purposes are negotiated with leading high-grade banks. The Group continuously monitors the credit ratings of its counterparties and reviews individual counterparty limits on a regular basis. Customers of the Group are typically leading highly rated financial institutions.

Credit risk at the Group's power market is reduced by the margin/collateral posted by members, which is intended to exceed their expected daily trading. The Group's power market adjusts its risk model parameters to take into account high volatility and prices to ensure sufficient levels of collateral in case of a member default. In certain circumstances, trading could potentially exceed collateral posted, however the entity closely monitors all members to prevent outstanding trading amounts in excess of collateral capacity. Key banking relationship assessed and considered low risk given high credit rating and systemic importance.

Clearing

Risks associated with clearing activity are mitigated by a number of preventative controls and as well as measures that seek to reduce the impact should the risk materialise, the most important of which include:

- Strict CCP membership rules including supervisory capital and operational capability
- The maintenance of prudent levels of margin and default funds to cover exposures to participants. Members deposit margins are computed at least daily (including intraday calls), to cover the expected costs which the clearing service could incur in closing out open positions in a volatile market in the event of the member's default.
- Regular 'Fire Drills' are carried out to test the operational soundness of the CCP's default management processes.

Market Risk

Non-clearing

All outstanding bonds maturing between 2025-2041 totalling €3 050 million are fixed-rate bonds not hedged. The Group seeks to protect capital by making short term investments in high quality and low risk financial instruments.

Foreign currency risk is reduced because the operating revenue and expenses in the various Group subsidiaries are generally denominated in the functional currency of each relevant subsidiary. The Group may use derivative instruments or foreign denominated debt to manage its net investment exposures. The Group is primarily exposed to major currencies, for which it is the Group's policy not to hedge net investment exposures, cash flows paid or received at a currency different from the functional currency of the entity in question. While not typical, the Group may consider, on a case by case, hedging net investments and cash flows should circumstances dictate.

Clearing

Margins and default funds collected from Clearing Members are sized to protect against latent market risk. The adequacy of margins is daily (also intraday) monitored and adjusted. Daily stress test based on 'extreme but plausible' scenarios encapsulating not only historical crises, but theoretical scenarios ensure that the Default Funds are sufficient to cover the most exposed banking groups. The CCP is compliant with the appropriate regulatory requirements regarding margin calculations, capital and default rules.

The CCP has a specific Investment Policy, compliant with EMIR Regulation. It defines the scope and the limits of potential investments to ensure that risk taking is limited and controlled. The Group's CCP manages its exposure to credit and concentration risks arising from such investments by maintaining a diversified portfolio of high-quality liquid investments. The CCP monitors on an permanent basis, its portfolio and its compliance with the Investment Policy. Given the external environment, Euronext Clearing has adapted its strategy to risk-off to terminate any residual risk.

Liquidity Risk

Non-Clearing

The Group's policy is to maintain sufficient cash, cash equivalents and available bank facilities to enable the Group to repay its financial liabilities at all maturities, irrespective of incoming cash flows generated by operational activities. These assets are managed as a global treasury portfolio invested in non-speculative financial instruments, readily convertible to cash to ensure a high level of available liquidity.

The Group's power market has committed risk capital, committed and uncommitted credit lines, trading is covered by collateral posted by members via pledged accounts, on-demand bank guarantees and letters of credit. Additionally the settlement cycle provides a buffer between inflow and outflows that further underpins liquidity. These measures have been established to help ensure that the entity has sufficient liquidity should it be required.

Clearing

The Group's CCP has implemented a regulatory compliant Liquidity Plan (regularly reviewed and shared with the CCP's regulators head of submission to the CCP's Board for approval) for day-to-day liquidity management and controls, including contingencies for stressed conditions. The Group's CCP has multiple layers of defence against liquidity shortfalls including: minimum cash balances, access to contingent liquidity, and access to intraday central bank liquidity and secured and unsecured committed lines of credit. Investments over 2023 are, however, negligible almost all cash collateral is deposited at the Central Bank.

Capital Requirements Risk

Euronext N.V. has a control and regulatory reporting framework with dedicated procedures aimed at ensuring the regular monitoring of the Capital Requirements for each of the regulated entities and that sufficient capital is constantly maintained within specific thresholds to meet the required levels under each of the regulations applicable to its subsidiaries.

2.3 Control Framework

A Unified Second Line of Defence

Euronext is dedicated to building the leading European market infrastructure and powering capital markets to finance the real economy, while delivering value to shareholders. To execute our ambitions Euronext is committed to preserving a balance between pursuing our strategic ambitions and ensuring operational excellence. To support our ambitions and preserve favourable conditions to fulfil its mandate Euronext has adopted Enterprise Risk Management (ERM) framework and Internal Control frameworks.

The Enterprise Risk Management framework is designed and operated to identify potential events that may affect the Company, with the objective of protecting the Company. The ERM approach provides a framework to identify, assess, measure and manage risk to be within the defined risk appetite, via mitigation measures and control mechanisms, and monitor and report risks to protect the Group.

The Internal Control framework is designed to complement the ERM Framework. It seeks to support the Group in ensuring controls are robust, i.e. appropriately designed and implemented and correctly executed to support risk mitigation.

Corporate Compliance provides guidance with dedicated policies and standards to all Group staff, to establish and safeguard required and expected conduct in accordance with all applicable regulations and Group expectations.

Business Continuity Management (BCM) underpins Group operational resilience as it seeks to anticipate, respond and mitigate the impacts of potential incidents and crises to ensure the recover of critical processes and operational as quickly as possible in the event of a significant disruption.

Euronext embeds the risk and control awareness in the Company culture, to make risk and opportunity management a regular and everyday process for employees. The Supervisory and Managing Boards regard risk management and internal control as key management processes to steer Euronext, and enable management to effectively manage risks and opportunities.

Risk Management, Internal Control, Compliance and Business Continuity Management teams work closely to support and protect Group value, assets, and reputation.

Enterprise Risk Management Framework

The objectives and principles for the ERM process are set forth in the Group's ERM Policy. The ERM process is based on industry best practice of both Internal Control and Enterprise Risk Management. It employs a bottom-up and top-down process to enable better management and transparency of risks and opportunities. At the top, the Supervisory Board and Managing Board discuss major risks and opportunities, related risk responses and controls and opportunity capture, as well as the status of the Group risk profile, including significant changes and planned improvements. The design of the Group risk management process seeks to ensure compliance with applicable laws and regulations with respect to internal control and risk management, addressing both subjects in parallel.

Enterprise Risk Management Framework Governance

The ERM framework and governance is designed to allow the Managing Board and the Supervisory Board, as part of Euronext's business model (see *Section 1.3.1 - Business Overview* of this Document for information), to identify and assess the Company's principal risks to enable strong decision-making to execute Group strategy. Reporting is made and consolidated on a regular basis to support this process. The risk management framework further enables the Supervisory and Managing Boards to maintain and attest to the effectiveness of the systems of internal control and risk management as set out in the Dutch Corporate Governance Code.

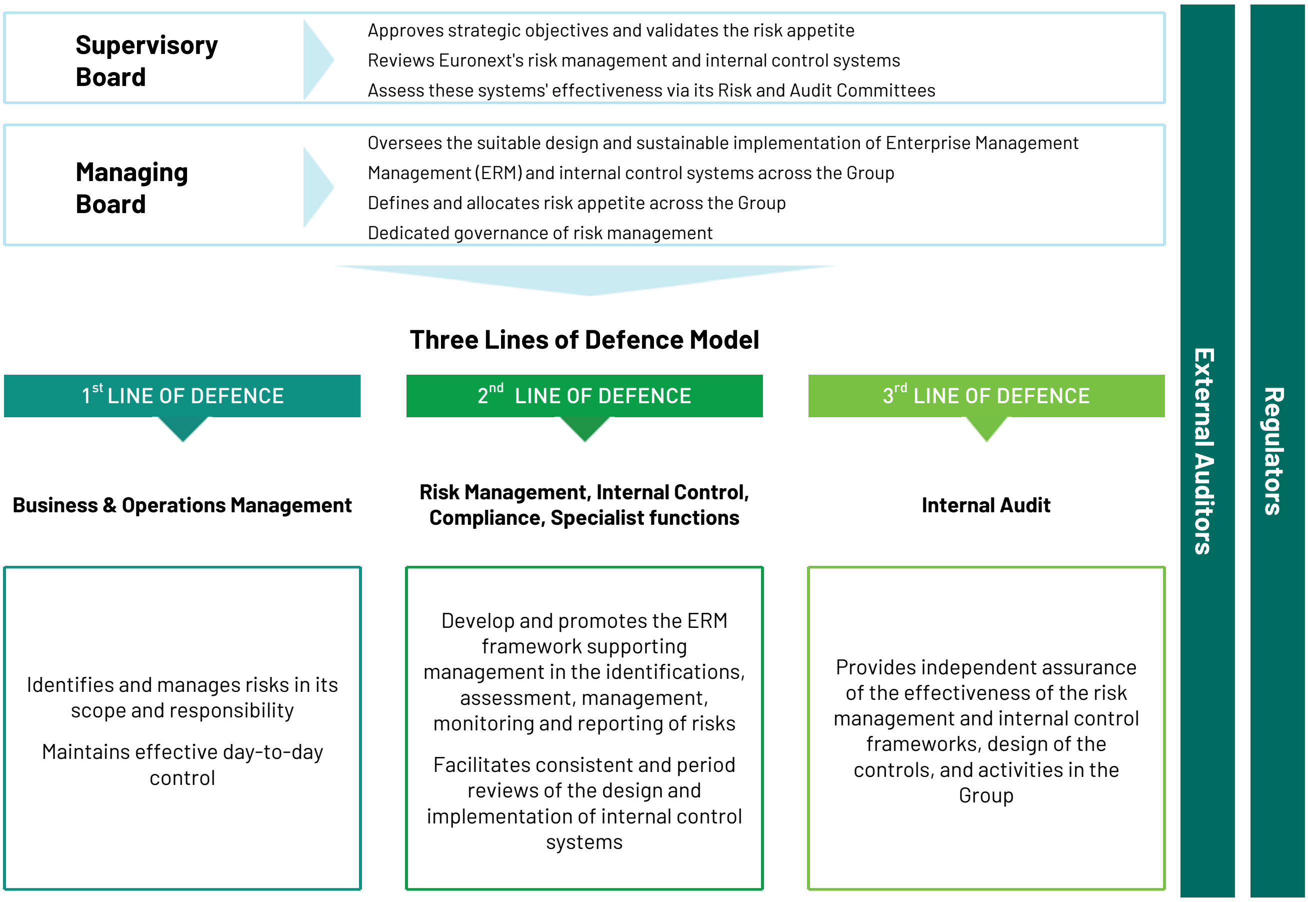
The Governance structure and related responsibilities for the ERM process are as follows:

- The Supervisory Board validates the risk appetite, reviews risk management and internal control systems, and assesses their effectiveness via the Risk Committee.
- The Managing Board is responsible for the suitable design and sustainable implementation of enterprise risk management (ERM) and internal control systems across the Group.
- By delegation, the Risk Committee of the Managing Board ('Risk Committee of MB' or 'RCMB') oversees that the RM Policy and the RM Framework is applied, discusses key risks and potential actions, and challenges the RM Process. It defines and applies the risk appetite of the Group. The RCMB is composed of a subsection of the Managing Board.
- Boards of subsidiaries, if constituted, ensure that the RM Policy and the RM Framework is appropriate to the specific circumstances of the entity and serves the governance and regulatory requirements of that entity.
- The Group's CFO has primary responsibility for the controls over financial reporting and regulatory capital requirements.
- The Group's CISO has primary responsibility for the controls over cyber and information security.
- The senior management of the Company assume responsibility for the operation and monitoring of the ERM system in their respective areas of responsibility, including appropriate responses to reduce the probability and impact of risk exposures and increase the probability and impact of opportunities.
- The Head of Risk and Compliance is appointed by the Managing Board, reports to the Chief Executive Officer and has a line of communication to the Risk

Committee of the Supervisory Board. This reporting structure provides the necessary independence second line of defence teams.

The Group Head of Risk and Compliance has primary responsibility for the ERM strategy, priorities, process design, culture development and related tools; the risk management organisation is structured cross-division, as a network of risk owners permitting the coverage of the entire Group and drives a proactive risk management culture.

Risk and Compliance officers are located in countries where Euronext conducts its activities and are supported as necessary by local legal staff to benefit from the local expertise and knowledge of the local business and environment.



Euronext's internal risk management and control is a process executed by the Managing Board, management and other employee stakeholders. It is designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- effectiveness and efficiency of operations;
- reliability of financial and non-financial information;
- compliance with laws, regulations and internal policies;
- safeguarding of assets, and identification and management of liabilities; and
- strategic and business objectives.

No major failings were identified by the Risk and Internal Control Programmes over the course of 2023.

As Euronext continuously evolves its internal control programme and related oversight, it will continue to challenge first line controls and ensure the Internal Control testing plan is risk-based and adapted to oversee critical processes.

Euronext's first and second lines of defence perform their roles in risk assessment and reporting on risk management and control systems. The results are reported in the Risk Profile and discussed regularly at Managing Board meetings and with the Supervisory Board via the Risk Committee of the Supervisory Board.

Internal Audit, as the third line of defence, provides an independent and objective assurance on the organisation's governance, risk management and internal control as well as the operational robustness of processes. Internal Audit reports are discussed with risk and process owners. The Head of Internal Audit attends Managing Board meetings on a regular basis to discuss its findings and recommendations. (See *Section - 2.3.3 Third Line of Defence* of this Document for more information).

2.3.1. FIRST LINE OF DEFENCE

The First Line of Defence, represented by the department risk owner is accountable and has the authority to manage risk.

The first line identifies, notifies, assesses, and manages/ mitigates risks within their relevant scope in coordination with the Second Line of Defence. Furthermore, the First Line of Defence cascades the risk appetite throughout their scope, monitors risk and validates risk-related information.

The first line is accountable for maintaining accurate information regarding the action plans related to identified risks. The progress and effectiveness of action plans (as well as the implemented risk mitigation measures) is monitored by the relevant risk owners and, regularly and/or upon request by the second line of defence.

2.3.2 SECOND LINE OF DEFENCE

The Second Line of Defence, represented by the Risk Management and Internal Control Teams and supported by the Business Continuity Management and Compliance teams.

2.3.2.1 Risk Management

The Risk Management team develops the risk management policy, including the risk appetite framework and processes, and supports consistent application across the Group. The Risk Management Team coordinates the risk management activities across the group, and reports to relevant instances (see governance above) the risks profile with a particular focus on eventual risks that may exceed the stated risk appetite levels (see section 2.3.2.1.1) for details on Risk Appetite).

The Risk Management team is responsible for challenging the first line risk owners on the comprehensiveness and level of their identified risks and related mitigation measures and action plans to propose and recommendations where deemed necessary. Risk management further coordinates risk information from other specialist second line and control functions, including but not limited to Business Continuity Management, Internal Control and Compliance as necessary.

Risk Appetite

Risk appetite is the type and amount of risk, on a broad level, Euronext is willing to take to achieve its strategic objectives.

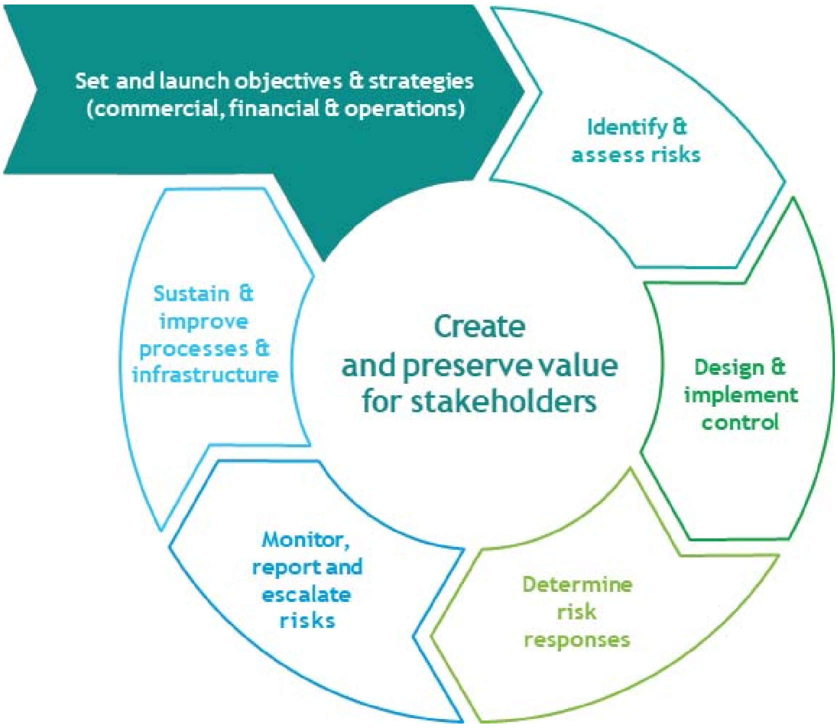
Developing the Risk Appetite Statements is an exercise in striking a balance between risk and opportunity. Risk Appetite is set for both risks related to daily business as usual operations and specific business initiatives.

Risk Appetite sets the basis for the requirements for monitoring and reporting on risk. Risk appetite is considered at an operational level and strategic level with quantitative and qualitative components and cascaded into business lines and legal entities. These components are used during the assessment process to develop the residual risks and support risks reported and escalated to the Managing Board and Supervisory Board.

Risk Appetite Statements According Risk Typology:

Strategic Risks	Operational Risks	Financial Risks
Moving the Group forward requires taking calculated risk in pursuit of rewards while securing its core business, its reputation and regulatory development including environment, social and governance subjects. The Group aims to ensure revenue aligns with the Budget Plan in expected economic conditions.	The Group ensures core services are provided to the market and its clients. Euronext has no appetite for a material compromise of the security or availability of our information and financial assets under its control or failing to meet legal and regulatory requirements or for its employees to fail to comply with internal Group policies. The Group aims to design, execute and maintain processes that are efficient and effective while avoiding significant adverse impacts on environmental, social and governance (ESG) factors. Operational investments are prioritised in line with the degree of tolerance accepted. Strategic initiatives may introduce increased risk for a certain period of time.	The Group will take some financial risk in alignment with the strategic objectives of the business within the limit of maintaining its investment grade profile. The Group has no appetite for regulated entities to fail to meet regulatory capital requirements and will maintain targeted liquidity headroom at all times.

Risk Management Process



Risk Identification involves the identification of threats to the Group as well as causes of loss and potential disruptions.

In line with Risk Appetite the Group classifies its risks under three principle categories. risks are classified to achieve two objectives.

- Create a uniform language to examine risks;
- Allow newly identified risks to be assigned to an appropriate category for measurement, tracking and reporting.

The Group classifies risks into the following categories: Strategic, Financial and Operational (including Compliance).

These categories provide comprehensive coverage of the Group and its activities and are the foundation of the enterprise-wide risk classification system. The classification system ensures that risks in all businesses, subsidiaries, and operations of the Group and its activities are considered and reported.

In addition to embedding sustainability risk in the Group's risk appetite statements. Risks with an ESG dimension are integrated into the risk management process. Complementing the risk taxonomy (*see table below*), the Group has developed ESG Risk definitions and has integrated them to the risk process, in particular during the Risk Identification leg of the process. The Group's approach to ESG Risk Management is integrate where relevant the ESG dimension into existing risks, to avoid duplication. To do this the Group completes a dual analysis to first identify and classify a risk according to its principle risk category: operational, strategic or financial (see table below "Overview and Definition of Principle Risk Categories) according to the Group taxonomy and then uses the ESG Risk definitions (See table below "ESG Risk Definitions to determine whether there is an ESG dimension to a risk, and thus whether it can also be considered an ESG Risk.

Overview and Definition of Principle Risk Categories

Strategic Risks	Operational Risks	Financial Risks
Risks associated with the quality of Group strategy, creation, and implementation. Risks associated with reputation and stakeholder confidence.	Risk of loss resulting from a failure in, or inadequate or failed internal processes, people, and systems or from external events including security. Risk of loss, an organisation faces, when it fails to act in accordance with industry laws and regulations, internal policies or prescribed best practices.	The risk of financial failure, loss of earnings due lack of liquidity, funding or capital, CCP related financial risks and/or the risk of improper reporting and disclosure of financial information.

* For material risks categorised according to the above typology please refer to *Section 2.1 - Risk Factors* of this Document.

The approach to ESG risk is considered from two perspectives: inside-out risk, or the impact of the Group and its related activities on ESG, and outside-in risk, how ESG issues may impact the Group or its activities. Risks with an ESG dimension are either Operational or Strategic in nature.

ESG Risk Definitions

ESG Landscape Risk	An environmental, social, or governance event or condition that, if it occurs, could cause a real or potential material negative impact (financial, operational or strategic (including reputation)) on Euronext Group's ability to achieve its objectives, or on its stakeholders, address uncertainty and act with integrity. This includes the risk of a financial and strategic impact due to the inadequacy of the Group's product and services offering, and evolution of ESG regulations impacting the Group and/or its supply chain or service providers.
Environmental Risk	The risks of any negative impact on Euronext Group stemming from the current or prospective impacts of environmental factors on its business activities or assets. Environmental risks may take the form of physical risks and transition risks (outside-in) or liability risks (inside-out). Physical risks both acute (short-term resilience) and chronic (long-term evolution) are those risks related to impacts of climate change. ▪ Resilience Risk is the acute risk associated with a one-off climate event (more frequent/more severe) and how the Group may be impacted. • Chronic risk (and opportunity) of long-term evolution can present as risks to physical assets, and or underlying markets and products impacted by climate change and a transition to a net-zero economy, including changes in climate-related regulation and customer perspective/appetite.
Social Risk	Risk of inadequate human capital management and/or development or action negatively impacting group stakeholders and/or communities. This risk typically takes the form of organisational policies and practices regarding human rights, health and safety, supply chain management, diversity and inclusion, and social impacts resulting from company operations.
Governance Risk	Inadequate, poorly designed, or absent system of rules, frameworks (policies, processes, standards and procedures) and oversight (internal and external) that guide the Company. ▪ Includes frameworks such as accountability, security and transparency to ensure that the Company acts with integrity; ▪ It is related to regulation and laws generally recognised on the ESG spectrum:e.g. KYC, AML, anti-fraud, anti-bribery, cybersecurity, data protection, business continuity, regulations or standards etc., generally those regulations that apply to ethical standards.

Risk Assessment is made in the potential event of a developing risk or following an incident. It aims to assess the risk qualitatively and quantitatively where possible, using supporting information such as performance indicators. This assessment, defining the residual risk level, takes into account mitigation measures currently in place such as controls, procedures, policies, business continuity measures and/or insurance policies.

The risk assessment phase is carried out by the risk management team in conjunction with the first line of defence based on data and information produced and collected by the first line or support functions. Mitigation measures for each risk are identified, evaluated, and the residual risk is assessed and reported.

In 2023 Group Risk Management has worked with the first line to identified risks with an ESG dimension and reassessed these risks with the first line to ensure that the impact of ESG is appropriated determined. The Group currently has not identified any material ESG risk exposures. Risks with an identified ESG dimension are risks that have been identified and categorised by the Group's ERM taxonomy.

The Group Risk Management team has worked to support the ESG team in completing the double-materiality assessment and determining the Group's materiality areas according to the CSRD ESRS and assess the impact, risk and opportunities related to these, for more information on the Group CSRD process please refer to *Chapter 3 – Empowering Sustainable Finance* of this document.

Furthermore Group Risk Management has started a process of evolving the Group's Physical Risk assessment to include a Physical Climate Change Risk, in addition working on further developing its Transition Risk Analysis, to support the Group's ESG objectives, enhance understanding of climate change risks and meet CSRD and reporting requirements (for detailed information related to the double materiality assessment and applicable CSRD material topics, please refer to *Section 3.1* of this Document).

Risk Response determines and implements the most appropriate treatment of identified risks. It encompasses the following: treat, tolerate, transfer and terminate, typically risks out of appetite are treated.

Organisational units and employees perform risk management and implement mitigating actions, including among others, controls as required by the risk appetite and escalation process. Residual risks may remain material after management process is applied (see section *2.1 - Risk Factors*).

Risk Reporting – the Supervisory and Managing Boards and Risk Committee of the Managing Board, comprised of senior managers, are informed in a timely and consistent manner about material risks, whether existing or potential, and their related management measures to take appropriate action. Reports are issued to the above mentioned boards and committee on a regular basis. Ad hoc reports may be issued when a new risk or the development of an existing risk warrants escalation.

2.3.2.2 Internal Control

Euronext has established a framework of internal control across its business areas and functions. This framework is based on IOSCO principles, established procedures and training of the key personnel responsible for implementation and oversight.

Controls are performed at a first level in the businesses and monitored and tested by the second level by specialised teams, notably in Internal Control and Compliance departments. In accordance with professional standards governing this activity, internal audit independently assess the effectiveness of internal control and risk management procedures.

The Internal Control framework is underpinned by the Group Internal Control Policy and complemented by an Internal Control Handbook. Internal Control is supported by the Internal Control Steering Committee and validated by the Risk Committee of the Managing Board.

Internal control works closely with the Risk Management team to ensure that risks which have to be treated are covered by mitigation measures, action plans, and /or controls.

2.3.2.3 Business Continuity Management

Business continuity is an essential component of effective risk management. It involves understanding an organisation's potential risks which, if realized, could have a high impact on the continuity of the organization's business operations. Business continuity is an essential component of effective risk management. It involves understanding an organisation's potential risks which, if realised, could have a high impact on the continuity of the organisation's business operations.

Effective Business Continuity Management (BCM), including crisis management, is vital in protecting and underpinning the reputation, efficiency, and resilience of the Company, as well as the Group stakeholder interests. Business continuity and crisis management at Euronext is supported by the Business Continuity Management Steering Committee and validated by the Risk Committee of the Managing Board.

The BCM Steering Committee's role is to review and validate the data consistency of the Business Continuity and Crisis Management and to provide guidance for the construction of the BCM roadmap. The Risk Committee of the Managing Board validates Business Continuity and Crisis Management policies and can arbitrate on key decisions when necessary.

The Group has implemented a comprehensive framework for business continuity, including plans, testing and crisis preparedness, to enforce the company's organisational resilience with the capacity for effective response, whether to maintain or restart its critical activities, safeguard the interests of its key stakeholders, its reputation, its brand and its value-creating activities.

The Group's business continuity objectives are as follows:

- safeguard the well-being and safety of employees,
- minimise organisational and operational risks to the Group, and ensure that the Group can operate effectively with prepared workaround and crisis management processes,
- provide a coherent framework for business continuity management that ensures recovery arrangements are taken into account as part of corporate and support function practices,
- implement recovery measures for Group activities such that are available, and appropriate to reduce insofar possible disruptions of any size.

The Business Continuity framework and its implementation at Euronext are based on internationally recognised business continuity principles, notably those developed by the International Organisation for Standardisation (ISO) and the Business Continuity Institute (BCI).

2.3.2.4 Corporate Compliance

Compliance with applicable rules, regulations and ethical principles is key to Euronext's success and it is the obligation of every employee to support this effort. Euronext is strongly committed to conducting its business with integrity, excellence and responsibility and to adhering to high standards of ethical conduct. Euronext's culture promotes accountability, responsibility, an open dialogue, and is bolstered by the Corporate Compliance department. The role of Corporate Compliance is to establish and maintain a best in class compliance culture within the Company and to ensure that Euronext's business approach is in line with the highest ethical standards.

The Corporate Compliance department supports Euronext and its employees in complying with applicable laws and regulations and promotes ethical standards in accordance with Corporate Governance standards. Corporate Compliance raises awareness by articulating the responsibilities of the Company and its employees through policies and training, the monitoring of those policies, and serving as a point of contact contact for compliance matters for employees.

Euronext Code of Business Conduct and Ethics

Euronext's Code of Business Conduct and Ethics sets and reaffirms Euronext's high standards of ethical conduct and reinforces its business ethics, policies, and procedures. All board members (Managing Board, Supervisory Board and any other entity boards) and all employees including consultants, contractors and temporary employees are required to be compliant with the Code.

The Code of Business Conduct and Ethics, is complemented by nine additional corporate compliance policies, and governs, without exception, all business activities of the Company. The Code of Business Conduct and Ethics is supported by additional specific compliance policies and are permanently, publicly available on the Euronext website and on the internal intranet.

The Corporate Compliance policies that supplement the Code of Business Conduct and Ethics cover the prevention of money laundering, sanction violations, corruption and fraud, managing conflict of interest, confidential and inside information and personal trading (please refer to *Section 3* of this Universal Registration Document and the Group website for additional details on the Corporate Compliance policies).

The Code of Business Conduct and Ethics is also supported by a confidential reporting (whistleblowing) system that enables employees to report, in an anonymised manner should they choose, alleged breaches of a general, operational and financial nature. The Euronext Whistleblower policy and procedure ensure that reporting employees, in good faith, are free to do so without fear of retaliation in accordance with the laws in the countries where Euronext operates. The Company protects anyone who reports an alleged breach of laws or Company policies in good faith, and ensures that they shall, in no way, be put at a disadvantage by the Company as a result of the report.

The effectiveness of the Code of Business Conduct and Ethics and supporting policies are ensured by their availability, and by Group-wide training and awareness programs, including communication targeting all Company employees. In addition, Corporate Compliance department provides specific, targeted training for employees in sensitive roles that require additional awareness and training reinforcing the Group ethics and compliance culture.

Anti-Fraud Framework

Euronext maintains a high level of awareness of the risk of fraud, both intern and external. With respect to internal fraud, controls to mitigate this risk are embedded in first and second line procedures, for example, controls to detect unauthorised access of internal systems by staff and multiple sign-offs for transfers. In addition, awareness is maintained through internal training on compliance and fraud-related subjects for all employees and additional, specific training for departments that are potentially more at risk. The Group seeks to prevent any and all occurrences of fraud, and should they occur, limit impacts of external fraud, broadly by awareness and training campaigns for all employees.

Particularly in the case of fraud related to cyber security the Group maintains a dedicated strategy and implements bests practices. For more information on Cyber Security Risk and Group mitigation measures refer to *Sections 2.1 Risk Factors and Section 2.2 Mitigation Measures of this Document.*

Governance is provided by an Anti-Fraud Framework and Anti-Fraud Policy, which are periodically reviewed. Reporting mechanisms are available to staff to ensure that alerts signals are referred to the relevant department for follow up.

Further, guidelines and procedures ensure that the risk of anti-money laundering and sanctions, bribery, fraud and conflicts of interest concerns are managed and that business is always conducted in a fair manner. Staff training and awareness sessions are conducted regularly in all Company locations to promote compliance and ethical standards.

Finally, given the dual positions of Euronext as a market operator and a listed issuer on the Euronext markets, the Compliance department has imposed strict personal dealing rules and a conflicts of interest procedure to ensure that neither the staff nor the Company itself may take undue advantages of from this situation.

Compliance processes are established as follows:

More information on Euronext's commitment to Ethics are provided in *Section 3.4.4 - Our Society* of this Document

2.3.2.5 Data Protection

In addition to the Corporate Compliance department the Group has an independent Data Protection department with a Group DPO appointed to ensure that data privacy and compliance with General Data Protection Regulation (GDPR) is maintained across all Group entities.

Euronext is committed to protect personal data and respect of the right to privacy. To support Group compliance to GDPR. Euronext has adopted a set of internal policies and procedures and has published or disseminated a number of information notices to data subjects, including but not limited the Data Privacy Policy, Data Classification Standard, Corporate Standard and Procedures for Data Protection Impact Assessment, Data Rights and Management of Personal Data Breach among others.

Developing and maintaining staff awareness of data protection is key for Euronext in order to maintain compliance with data protection laws. As such, new arrivals must complete GDPR training upon arrival, and all employees undergo mandatory GDPR training via multiple channels. Additionally, those with roles that handle personal data, may undergo in-depth training.

Processes that handle personal data are reviewed by the Group DPO at the starting phase of each new project and then reviewed regularly once implemented to ensure continuous compliance with the Group's data privacy obligations. Since 2020, Euronext has run a monitoring programme to control GDPR compliance as well as the respect of measures implemented internally. Following these checks, remedial measures are proposed and their implementation is monitored. Since 2022 a similar monitoring programme has been introduced for companies outside the Group that process personal data on behalf of Euronext. At the end of this monitoring, a report is sent to the Risk and Compliance Department and to the departments using the services of the their-party companies concerned in the event of identified risks.

Further information and details on Euronext's commitment to GDPR are provided in *Section 3.4.4 - Our Society*, of this Document.

2.3.2.6 Second Line Programme Development

Euronext continues to drive improvements to its risk management process and the quality of risk information generation, while at the same time maintaining a simple and practical approach. The roadmap for 2023 for the Second Line included the below key elements

- Risk Management involvement in key initiatives related to Borsa Italiana Group integration including developments for the Borsa Italiana Migration to the Optiq® trading platform, European expansion of Euronext Clearing and other internal development programme; the Risk Management supported the

ESG and other key stakeholders in the CSRD double materiality assessment.

- Starting at the end of 2021, the Group embarked on a significant programme reviewing its internal control framework with the objective of improving integration and streamlining internal control and the risk management process, and alignment with recognised standards. The review is ongoing and wholistic with an initial scope covering core-market businesses, IT and associated support functions. In 2023 important evolution and maturity includes: control tool maturity and adoption by multiple departments, continued alignment of risk management, and internal control approach for addressing risk and identifying controls.
- Over 2023 the Business Continuity Management continued its evolution and maturity with the integration of Borsa Italiana Group entities into Group business continuity management framework, including adapting documentation to Group standards and adopting Group processes.
- The Compliance organisation evolved in 2023 to reflect the Euronext Group structure to allow for future growth. The evolution of the Compliance organisation includes a quarterly Compliance Committee which services as a separate committee next to the Risk Committee of the Managing Board. Finally supporting a bottom-up approach the Compliance function enhanced several policies to better reflect Group ESG ambitions and objectives.

The 2024 roadmap will continue with the topics above notably with the first deliveries of the final milestones of strategic projects of Borsa Italiana migration to Optiq® and the expansion of Euronext Clearing to Derivatives.

Internal Control will focus on deploying the Internal Control Tool, working with different business and operations teams to review and enhance their control registers and perform its annual testing plan.

Business Continuity will focus on the improvement of resilience through testing of our capability and readiness and the enhancement of workaround procedures and a better identification of all critical assets at group level. It will also support business and IT on the implementation of DORA.

Compliance will complete its organisation evolution over 2024, and continue to support business on various initiatives and support the implementation of new regulations, for example DORA.

As a whole the Second Line of Defence seeks to adapt as the Group evolves, to support business, maintain compliance, and protect and strengthen the Group.

2.3.2 THIRD LINE OF DEFENCE

Euronext's governance includes an Internal Audit department (IA) that acts as the third line of defence in Group's Internal Control Framework. In accordance with the Institute of Internal Audit (IIA), Internal Audit provides an independent and objective assurance on the organisation's governance, risk management and internal control as well as operational robustness of processes that is guided by a philosophy of adding value to improve the operations of the Euronext Group. The objectivity and organisational independence of the Internal Audit function is achieved through the Head of Internal Audit not performing operational management functions and reporting directly to the Chair of the Audit Committee and a dotted reporting line to the CEO.

In addition, the IA assists the Group in accomplishing its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's governance, risk management, internal control. It has a risk-based approach with a specific attention on regulations, regulatory requirements as well as any specific applicable local laws and regulations. Internal Audit scope is to cover the entire Euronext group, which naturally includes all recent acquisitions. Its activities are governed by adherence to:

- The Institute of Internal Auditors' mandatory guidance including the Definition of Internal Auditing and the Core Principles ;
- The Code of Ethics;
- The International Standards for the Professional Practice of Internal Auditing (Standards); and
- The Definition of Internal Auditing:"Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes". This mandatory guidance constitutes principles of the fundamental requirements for the professional practice of internal auditing and for evaluating the effectiveness of the internal audit activity's performance. The Institute of Internal Auditors' Practice Advisories, Practice Guides, and Position Papers will also be adhered to as applicable to guide operations.

The IA team is diverse and inclusive, in line with Euronext's principles, composed of 12 permanent auditors in 2023, with various background, origin, nationality, ethnicity, age, gender etc. and with both business and IT expertise allowing to cover all Internal Audit assignments. The team is located in Paris, Milan, Porto and Oslo, and performs audit assignments covering the entire Euronext Group. When/If necessary, the Internal Audit department can be supported by external service providers.

In 2023, Internal Audit performed 38 assignments on various domains, including information technology, information security, ESG, business entities and support functions.

In 2023, the Audit Universe was also revised to reflect the evolution of Euronext's organization. It is mirroring the federal model and matrix organization and it is reflecting the integration status of the different activities, supporting IA's planning efforts in the context of the group structure. The 2023 Risk Assessment exercise was performed based on this new Audit Universe, providing a common global Audit Plan for 2024 with audit missions covering transversal topics for the entire group, audit missions covering a group of entities, and other audit missions on specific topic of a specific entity either due to a local regulation or to a specific identified local risk that requires internal audit attention.

Furthermore, Internal Audit has developed an Internal Audit Strategy in line with Euronext's Group growth that considers global trends, industry benchmarks and emerging risks such as ESG that could impact the organization. The objective of the IA strategy is to take into consideration key topics for the 2024 Audit plan in order to align with the goals and expectations of the organisation's Senior Management.

Finally, in line with the transformation and digitalisation of the Group, the Internal Audit continues its efforts to deploy an Internal Audit Tool for its assignments and recommendation follow-up as well as to improve the use of data analysis methods as part of the execution of the audit assignments. Internal Audit has also launched an in-depth review of its audit procedures to ensure that they are in continuous improvement and updated in line with regulatory changes and to ensure greater consistency across the Group.

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3 EMPOWER SUSTAINABLE FINANCE DR

3.1 Value Creation by Euronext

The purpose of every responsible company is to create sustainable value for shareholders and stakeholders. The Euronext Value creation model has been developed according to the International Integrated Reporting (IIRC) Framework. It shows how the company uses the resources, capabilities and expertise at its disposal to create value. The model transforms the different capital inputs into value outputs and impacts that over the short, medium and long-term create value for the company, its stakeholders and society at large.

Euronext's inputs are financial, intellectual, human, social and natural. With these inputs Euronext brings value to its different stakeholders by connecting local economies to global markets, accelerating innovation and sustainable growth. Euronext gives companies access to capital either through initial public offerings (IPOs), capital increases or through the debt route. It allows investors to get returns either by way of capital appreciation (growth) or timely income (dividends). It facilitates not only domestic investments, but also brings in foreign capital which is used for further development and growth. It also promotes an environment that encourages collaborative work, learning and innovation for all its employees. In a more long term approach, Euronext has linked its business model with the globally agreed Sustainable Development Goals (SDGs) on which its impact is the most important.

Long term value for all our stakeholders:

Euronext Ambition, Purpose and Mission

The world is facing significant challenges in ensuring a sustainable future for its people and its planet.

The finance sector is an important contributor to the global sustainability agenda and should promote sustainable finance, by incorporating environmental, social and governance (ESG) factors into investment decision-making, and by supporting the allocation of capital to sustainable initiatives.

Every organisation has a unique role to play in the transition to a sustainable society, based on its impacts, risks and opportunities. With a special position in the financial ecosystem, Euronext connects European economies to global capital markets, to accelerate innovation and sustainable growth, with the ambition to build the leading market infrastructure in Europe and the purpose to shape capital markets for future generations.

- **Our Ambition**: *Build the leading market infrastructure in Europe.*
- **Our Purpose**: *Shape capital markets for future generations.*
- **Our Mission**: *Connect European economies to global capital markets, to accelerate innovation and sustainable growth.*

The strategic plan "Growth for Impact 2024" is built on Euronext's strong focus on ESG, with the priority to empower sustainable finance through an ambitious 1.5° climate commitment for Euronext that aims to make a tangible impact on its partners and clients, and an enhanced inclusive people strategy. The sustainability strategy focuses on accelerating climate action both in Euronext's operations and through the role it plays in empowering sustainable finance across all its markets.

Euronext follows its mission by:

- driving investment in innovative, sustainable products and services through secure and transparent markets, in continuous collaboration with the financial community;
- inspiring and promoting sustainable tangible practices within the company and towards its communities, by respecting and developing its people and by supporting its ecosystem.

Stakeholder expectations and materiality analysis

In 2018 and 2019, as a first step towards the creation of its ESG strategy, Euronext realised a stakeholder consultation to identify the ESG related issues that its stakeholders believed to be the most important areas of focus and effort for the Group. Euronext received feedback through workshops and interviews from a wide selection of stakeholders, notably investors, analysts and issuers, but also employees and regulators, all providing valuable insights.

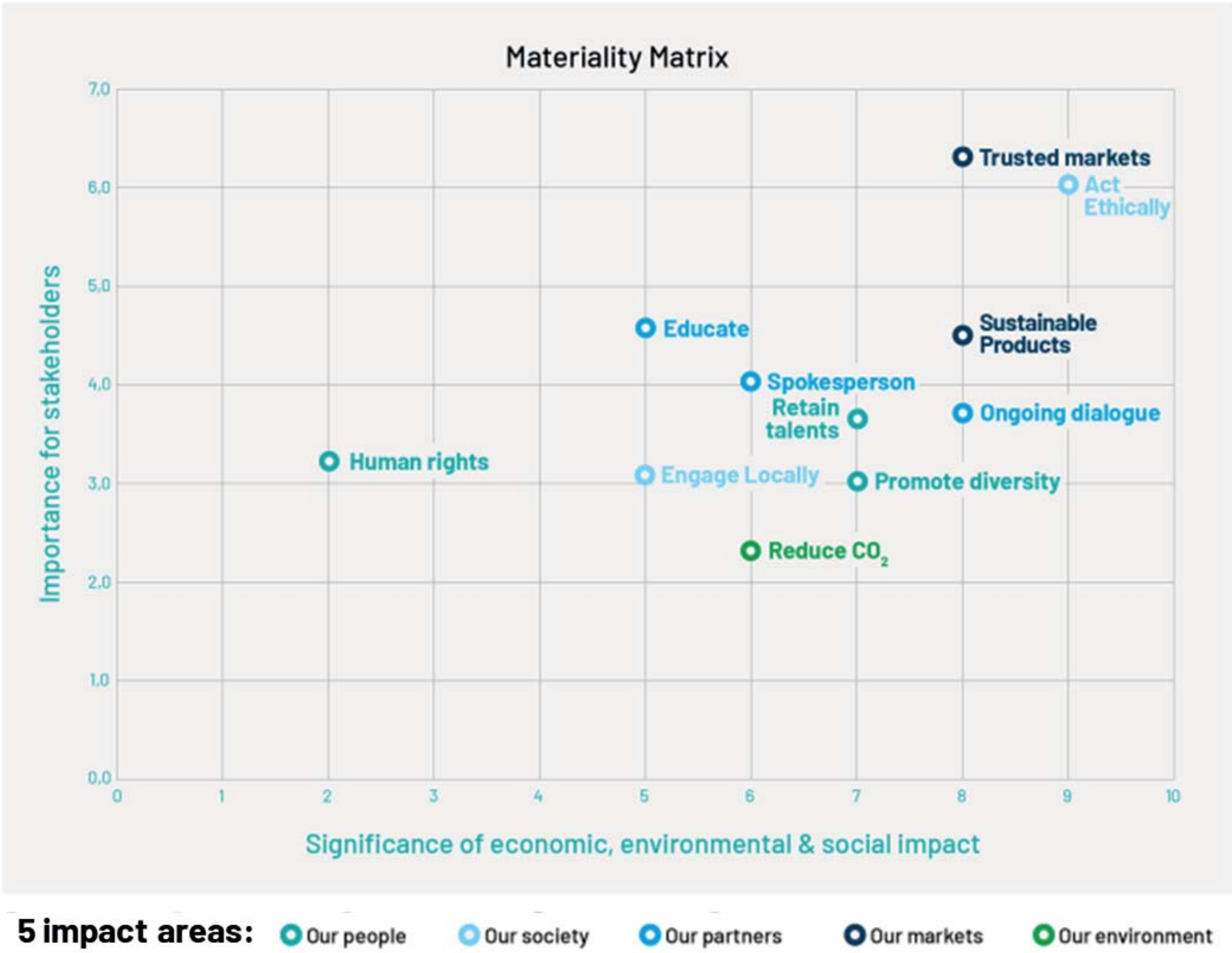
On the basis of these results, Euronext performed a materiality analysis, defining eleven key issues in which Euronext could be most impactful, and that influence most stakeholder decision-making. These were grouped into 5 material impact areas, consistent with the Euronext dual ESG ambition.

The stakeholders were invited to prioritise the eleven key issues – labelled under the five material impact areas – and the results are illustrated in the chart below. Specific KPIs have also been defined for each impact area, details of which are set out in the sections below, with a summary in section 3.5 - Summary of ESG KPI.

Key Issues	Material Impact Area	Drivers of the Mission	Fit for 1.5°	KPI
■ Organise a trusted, fair, transparent and efficient market, thereby enhancing access to capital. ■ Promote and develop sustainable and innovative products and services with environmental (green and blue) or social added value.	Our Markets	Driving investment in innovative, sustainable products and services through secure and transparent markets, in continous collaboration with the financial community.	Develop capital market solutions for a carbon neutral European economy.	■ Number of incidents reported to the College of Regulators. ■ Number of operational alerts treated internally by EMS. ■ Availability of the trading platform. ■ Percentage of ESG Revenues.
■ Be the spokesperson of the sector and foster "Issuer-Investor" dialogue. ■ Maintain an ongoing dialogue with multi-stakeholder partnerships. ■ Educate our partners on financial literacy and regulationsx.	Our Partners			■ Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 GHG emissions ■ Client satisfaction ("NPS").
■ Develop skills and retain talents in an open culture of dialogue. ■ Promote diversity. ■ Respect human rights and local labor laws.	Our People	Inspiring and promoting sustainable tangible practices within the Company and towards our communities, by respecting and developing our people and by supporting our ecosystem.	Implement a forward-looking and outcome-based approach across all its impact areas, including human capital, community investment and governance issues that are material to its industry with a view to improving its overall ESG ratings relative to peers.	■ Diversity at the Senior Leadership Team.
■ Act ethically, with integrity and the highest standards in terms of good governance. ■ Educate and engage with our local Community.	Our Society			■ GDPR training employees. ■ Personal data breaches. ■ Use of the Whistleblowing process.
■ Reduce our own carbon footprint and contribute to the protection of the environment.	Our Environment		Commit to setting science-based quantitative climate targets by signing the "Business Ambition for 1.5°C"	■ Carbon emission.

Materiality Matrix

Euronext's 11 material topics, categorised under the five material impact areas, have been organised on a matrix to visually represent the results in terms of their importance to stakeholders and the significance of their ESG impact.



Corporate Sustainability Reporting Directive and Double materiality assessment

In addition, in 2023, Euronext launched a new stakeholder engagement initiative to conduct a double materiality assessment making use of the Corporate Sustainability Reporting Directive (CSRD)[1], that entered into force as of 5 January 2023, and of the final European Sustainability Reporting Standards (ESRS)[2] as adopted by the European Commission on 31 July 2023.

As part of the double materiality assessment process, Euronext has considered both the impact materiality and financial materiality perspectives:

- Impact materiality reflects the inside-out perspective: Euronext's actual or potential, positive, or negative impacts on people and the environment.
- Financial materiality reflects the outside-in perspective: the potential effects of sustainability-related risks or opportunities on Euronext's financial position, performance, and cash flows over the short-, medium- and long-term.

The double materiality assessment resulted in the identification of 9 material topics for Euronext, which are illustrated in the table below. The table is complemented with a high-level explanation of the changes in current material topics.

In this context, Euronext considered whether it would be seen as a facilitator for certain companies by providing them access to capital and financing their activities, and thereby enabling the positive or negative ESG impact of these

[1] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance)

[2] Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards

companies. Based on the stakeholder engagement, it has been concluded that it was not the case. The core business of Euronext is to organise trusted and transparent markets, bringing together buyers and sellers. The impact attributable to Euronext which is highly regulated would be low since Euronext is only providing the infrastructure and Euronext's impact on downstream customers is mainly economic. For example, Euronext cannot implement stricter requirements on ESG for new companies which want to be listed on its markets.

The process and outcomes of the double materiality assessment have been reviewed and approved by the Euronext's Managing Board.

A process is ongoing to analyse the current gaps to be aligned with the CSRD and the ESRS requirements. As such, this 2023 report has been prepared in accordance with the Non-Financial Reporting Directive (NFRD). Euronext has proactively incorporated certain requirements of the ESRS when the data was available. However, Euronext will achieve full alignment with the CSRD for the reporting year 2024.

Material topics NFRD	Change in material topics	Material Topics identified through the DMA Process
■ Reduce CO^{2}	More broadly defined in line with ESRS, covering climate change mitigation, climate change adaptation and energy.	■ Climate Change (Fit for 1.5°)
■ Promote diversity	Additionally, it will incorporate the importance of creating an inclusive environment.	■ Diversity and Inclusion
■ Develop skills and retain talents in an open culture of dialogue	While maintaining the main topic, it will be split into various material ESRS sub-topics.	■ Working conditions ■ Training and Development
■ Trusted markets	Will no more be included as a separate topic since it's not considered as a sustainability matter as defined under CSRD. However this topic can be partially linked with "Corruption and Bribery" through the need to ensure the security of the markets, which is a material ESRS topic.	■ Corruption and Bribery
■ Act Ethically	More broadly defined to promoting ethical behaviour. It recognizes that act ethically is not solely dependent on individual actions, but is influenced by the overall culture and governance practices within Euronext.	■ Culture and Governance
■ Engage locally	Considering the business activities of Euronext and the definition of the ESRS, it has been concluded that local communities are not among Euronext's key stakeholders. Therefore this topic will not be included in the list of material topics.	N/A
■ Ongoing dialogue	"Ongoing dialogue" was about maintaining a dialogue with multi-stakeholder partnerships. This can be partially linked with management of relationship with suppliers which will be a specific material ESRS topic.	■ Management of relationships with suppliers
■ Spokesperson	"Be the spokesperson of the sector" and foster "Issuer-Investor" dialogue has a link with "Political Engagement", which will be a material ESRS sub-topic.	■ Political Engagement
■ Sustainable products ■ Educate	"Sustainable products" will be maintained as a separate entity specific topic, and will be combined with the "Educate" topic, as it is about educating clients/suppliers/partners on financial literacy.	■ Sustainable Products and Services, including trainings
■ Human Rights	This topic will be maintained, but split in various material ESRS sub-topics.	■ Working conditions ■ Diversity and Inclusion

3.2 ESG Governance

Euronext has a two-tier governance structure in accordance with Dutch law, composed of a Managing Board and a Supervisory Board. The Managing Board is responsible for developing and implementing the Company's strategy, as well as assuring the day-to-day operations, and is composed of executive directors. The Managing Board is supervised by the Supervisory Board composed of non-executive directors, the majority of whom is independent, including the Chair. The Supervisory Board is responsible for the supervision of the policy of the Managing Board and the general course of affairs in the company and the business affiliated with it and for advising the Managing Board. Key decisions require the approval of the Supervisory Board. The Supervisory Board has four different committees (nomination and governance, audit, risk, and remuneration). Each of them has a role to play in the sustainable journey of the group. This is explicitly laid down in the charters of the committees.

Both, the Supervisory Board and the Management Board, have fully endorsed ESG as core of the "Growth for Impact 2024" strategic plan of Euronext.

With the help of the Group Head of ESG, the General Counsel, part of the Group's Extended Managing Board and the Executive Committee, is in charge of coordinating ESG at the Group level, making sure that all relevant departments integrate the ESG objectives into their missions. The General Counsel ensures that ESG initiatives, impacts and challenges are high on the agenda of the Group's Managing Board and Supervisory Board, and that the company reports on ESG related topics in a transparent way. In 2023, members of the Supervisory Board have been regularly trained on ESG topics, including diversity and inclusion and sustainable long-term value creation, to make sure they understand and embrace these new challenges, as well as the consequences of the ongoing climate crisis.

A strong dedicated governance, structured around the five material impact areas described above and headed by the Group Head of ESG, ensures suitable coverage of all priority topics.

Moreover, a dedicated project governance has been put in place for the Environmental pillar, to mobilize all the internal actors and facilitate the implementation of an integrated approach to ensure that the carbon reduction targets are reached.

Additionally, a dedicated project governance has been established to ensure a sustainable value chain. This involves engaging internal stakeholders from various departments, including procurement, ESG, legal, and communication. The primary objective is to strengthen supplier engagement and foster a solid commitment to sustainability. Furthermore, this initiative aligns with the attainment of Euronext's SBTi targets especially the one related to supplier engagement.

Finally, all ESG initiatives are captured by the Transformation Office, which monitors the progress of the whole strategic plan of the Group, reports regularly on these progresses to the Managing Board and the Supervisory Board and, in this context, has regular update meetings with the Group Head of ESG. All significant new ESG related projects are submitted for approval to the Managing Board.

For more information on the role of the Supervisory Board and the Managing Board, please refer to sections *4.2.2 - Supervisory Board* and *4.2.3 - Managing Board* of this Universal Registration Document.

3.3 Relevant ratings and standards

Scope

Unless specified otherwise in section 3.5., Euronext aims to include all the entities that are in the scope for financial information in this chapter 3.

3.3.1. ESG ratings

Euronext recognizes the critical role of ESG rating agencies in providing accurate and transparent information to the market, and considers the engagement with these actors as a central element of its ESG strategy.

Euronext monitors the ESG ratings very closely and conducts gap analysis regularly on scores to identify areas of development. Euronext's ESG scores improved across multiples rating agencies in 2023, reflecting the Group's commitment to provide its stakeholders with timely and transparent ESG reporting. An excellent example of this progress is the transition from a D rating to a B rating in CDP, also highlighting the significance that Euronext places on addressing climate-related issues.

Rating Agency	Scale	2023	2022	2021
MSCI	From AAA (top) to CCC	A	A	A
Sustainalytics	From 0 (top) to 40+	15.4	18.7	15.3
S&P	Out of 100 (top)	56	49	47
CDP	From A (top) to F	B	D	D
CDP SER*	From A (top) to F	A-	C	C-
Moody's ESG	Out of 100 (top)	57	52	49
ISS	From A+ (top) to D-	C	C-	C-

*Supplier Engagement Rating

3.3.2. EU Taxonomy

Since 2021, the EU Taxonomy on Sustainable Economic Activities applies to Euronext, which includes mandatory disclosures according to article 8 of the EU Taxonomy Regulation[3]. The EU Taxonomy Regulation is intended to serve as a standardised and mandatory classification system to determine which economic activities are considered as 'environmentally sustainable'.

An economic activity is considered Taxonomy eligible if it is described in the Taxonomy Delegated Acts, irrespective of whether that activity meets any or all of the technical screening criteria laid down in the Delegated Acts. An eligible activity becomes taxonomy-aligned when it meets all of the following three criteria:

- Substantially contribute to one of the six environmental objectives in line with the Technical Screening Criteria (TSC).
- Do-no-significant-harm (DNSH) in relation to the other environmental objectives
- Comply with Minimum social safeguards (MSS) as described in the Taxonomy Regulation.

The six environmental objectives of the Taxonomy are:

- climate change mitigation,
- climate change adaptation,
- sustainable use and protection of water and marine resources,
- transition to a circular economy,
- pollution prevention and control,
- protection and restoration of biodiversity and ecosystems.

The Technical Screening Criteria define the specific requirements and thresholds for an activity to be considered as significantly contributing to a sustainability objective. These TSCs are being elaborated in secondary legislation called Delegated Acts (DAs), more specifically the Climate Delegated Act[4], the Complementary Climate Delegated Act[5] and the Environmental Delegated Act[6].

The Climate Delegated Act covers the EU Taxonomy criteria for economic activities making substantial contribution to the climate objectives, i.e. climate change mitigation and climate change adaption objectives and the Environmental Delegated Act includes the EU Taxonomy criteria for economic activities making a substantial contribution to the non-climate environmental objectives, namely: sustainable use and

[3] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, supplemented by Commission Delegated Regulation (EU) 2021/2139 and the Commission Delegated Regulation (EU) 2021/2178.
[4] Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.
[5] 3 Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities
[6] Commission Delegated Regulation (EU) 2023/2486 of 27 June 2023 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives and amending Commission Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.

protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems.

The Complementary Climate Delegated Act includes, under strict conditions, specific nuclear and gas energy activities. Since Euronext does not engage in nuclear activities, this Delegated Act is not further considered.

Article 8 of the Taxonomy Regulation requires certain companies including Euronext to include in their consolidated non-financial statement information on how and to what extent their activities are eligible and aligned with economic activities that qualify as environmentally sustainable this Regulation, in particular, (a) the proportion of their turnover derived from products or services associated with economic activities that qualify as environmentally sustainable; and (b) the proportion of their capital expenditure (CapEx) and the proportion of their operating expenditure (OpEx).

Based on the review of the Climate and Environmental Delegated acts, Euronext concluded that for 2023, none of its turnover-generating activities can be identified as eligible. As a result, and similar to the previous years, Euronext' core activities are not within the scope of these delegated acts and consequently none of Euronext ' turnover were eligible to the EU Taxonomy. The exercise has been done for operational expenditure as well and Euronext did not identify any of its OpEx as being nor eligible, nor aligned to the Taxonomy.

On the contrary, Euronext did identify eligible capital expenditures that could be aligned for the objective of climate change mitigation.

See the 2023 figures in the table below compared to the previous years (more details in Appendix 1). The figures were determined in accordance with the requirements of Annex I to the Disclosures Delegated Act, supplementing Article 8 of the Taxonomy Regulation. Double counting in the allocation in the numerator of turnover, CapEx, and OpEx KPIs across economic activities is avoided by using unique identifiers for the different activities. Moreover, Euronext has not identified economic activities that substantially contribute to several objectives. Detailed standard forms can be found in the appendix of the ESG section.

Disclosure 2023

Article 8 indicators	Turnover	CapEx	OpEx
Eligible	0.00%	0.13 %	0.00%
Aligned	0.00%	0.04 %	0.00%
Non Aligned	0.00%	0.09 %	0.00%
Non Eligible	100.00%	99.87 %	100.00%
Total	100.00%	100.00%	100.00%

Disclosure 2022

Article 8 indicators	Turnover	CapEx	OpEx
Eligible	0.00%	7.87 %	0.00%
Aligned	0.00%	0.22 %	0.00%
Non Aligned	0.00%	7.65 %	0.00%
Non Eligible	100.00%	92.13 %	100.00%
Total	100.00%	100.00%	100.00%

Disclosure 2021

Article 8 indicators	Turnover	CapEx	OpEx
Eligible	0.00%	0.00%	0.00%
Aligned	0.00%	0.00%	0.00%
Non Aligned	0.00%	0.00%	0.00%
Non Eligible	100.00%	100.00%	100.00%
Total	100.00%	100.00%	100.00%

Similar to the previous two years, no eligible turnover or OpEx was defined. Regarding the CapEx, Euronext's eligible CapEx decreased compared to the prior year due to business-related factors. Specifically, this decrease can be attributed to the comprehensive remodelling of the complete Oslo Børs building in 2022, while in 2023, only minor renovation works were undertaken at some of the Euronext offices.

Turnover

The proportion of eligible economic activities is determined by dividing the net turnover derived from products or services, including intangibles, associated with Taxonomy-aligned economic activities (numerator), by the net total turnover (denominator) as defined in Article 2, point (5), of Directive 2013/34/EU. The net total turnover International Accounting Standard (IAS) 1, paragraph 82(a), as adopted by Commission Regulation (EC) No 1126/2008 (1). For further details see section 8.1 'Consolidated Statement of Profit or Loss' of this Universal Registration Document.

Euronext has reviewed the application of the EU Taxonomy Regulation to its activities taking into account the list of the economic activities of the Climate and the Environmental Delegated Acts and came to the conclusion that Euronext has no eligible turnover under the Taxonomy Regulation. For a full list of Euronext's activities, please see section 7.1.3 - Sources of revenue of this Universal Registration Document.

Those activities are not explicitly listed in the economic activities and provisions of the delegated act. Euronext therefore limited its analysis to the following economic activity: "Data processing, hosting and related activities" (8.1) and came to the conclusion that Euronext has no eligible turnover under the Taxonomy Regulation.

Capital expenditure

Euronext calculated the proportion of qualifying capital expenses by comparing its capital expenses with the economic activities defined in the different Annexes to the Climate and Environmental Delegated Acts. Investment expenses are all additions to tangible and intangible assets (see Chapter 8, Note 16, table 'Property, Plant and Equipment' (row "Additions"), Note 17, table 'Leases' (row "Additions") and Note 18, table 'Goodwill and other intangible assets' (row "Additions") of this Universal Registration Document) without depreciation, amortisation, without remeasurement and changes to fair value. Goodwill is also not included in the calculation of taxonomy-aligned capital expenditure as it is not an intangible asset according to IAS 38.

The CapEx for 2022 was recalculated to include leases according to IFRS 16, aligning with the Disclosure Delegated Act specifications. The corrected KPIs are included in the tables presented in this report.

Euronext considers capital expenditure to be eligible if the output comes from an eligible economic activity. Euronext does not have a CapEx investment plan in place.

Euronext has identified and analysed the following economic activities in the Climate and Environmental delegated acts that could potentially give rise to aligned investment expenses:

- Installation, maintenance and repair of energy efficiency equipment (7.3)
- Installation, maintenance and repair of technologies for renewable energy technologies (7.6)

7.3 Installation, maintenance and repair of energy efficiency equipment

In 2023, a few small renovation works took place at Euronext's buildings to make them more energy efficient.

The first renovation work involved replacing the lights in the Milan and Rome offices with LED lighting. Additionally, in the historical Amsterdam building, the windows were upgraded to more energy-efficient ones, featuring HR++ glass. The installation of energy light sources, and the replacement of existing windows with new energy efficient windows represent an eligible CapEx of € 65,602 and € 50,000 respectively.

Euronext concluded that these costs cannot yet be reported as Taxonomy aligned, because Euronext has not yet been able to substantiate all technical screening criteria.

7.6 Installation, maintenance and repair of technologies for renewable energy technologies

In addition, the heat pump, which was installed in 2022 in the historical Amsterdam building to decrease natural gas consumption, was updated in 2023, representing a capital expenditure of € 50,860.

Similar to the CapEx related to the installation of the heat pump last year, the CapEx related to the update has been considered aligned with EU Taxonomy, as it qualifies as contributing substantially to climate change mitigation, according to the technical screening criteria and does no significant harm to any of the other environmental objectives ('DNSH').

Operating expenditure

In compliance with the Disclosure Delegated Act, Operational Expenditures (OpEx) must be calculated by assessing all direct non-capitalized costs related to research and development, building renovation measures, short-term leases, maintenance and repair, as well as other direct expenditures necessary for the day-to-day servicing of property, plant, and equipment assets. This assessment is then compared with the economic activities defined in the various Annexes to the Climate and Environmental Delegated Acts.

This definition for OpEx lacks precise parameters and poses challenges in accurately determining and tracing it, deviating from conventional OpEx calculation methodologies and presenting inherent complexities

Euronext has encountered significant hurdles in precisely calculating Total OpEx as stipulated by the Disclosure Delegated Act, thereby risking the inadvertent omission of certain fields. Consequently, this year, it was decided to incorporate total traditional OpEx figures, prioritizing operational prudence over strict adherence to the Disclosure Delegated Act methodology for OpEx. Nevertheless, Euronext is committed to regulatory compliance and transparency, and is actively endeavouring to fortify its financial processes to ensure enhanced alignment with regulatory standards in subsequent reporting periods.

Regarding eligibility, OpEx is considered eligible if the output comes from an OpEx eligible economic activity. For the reporting year, Euronext has identified no economic activities in the Climate and Environmental delegated acts that could potentially give rise to eligible operational expenses.

For comprehensive insights into OpEx, please refer to Chapter 8, specifically Notes 9, 10, and 11, of Euronext's Universal Registration Document

Minimum social safeguards

Euronext has assessed its compliance with the minimum social safeguards mandated by the EU Taxonomy, focusing on human rights, anti-bribery, fair competition, and taxation. Euronext has achieved the necessary minimum safeguards. The Group's policies, aligned with Article 18 of the EU Taxonomy regulation, encompass relevant aspects of business conduct related to these issues and can be found on its website. The assessment has provided Euronext with a solid basis to confirm that the company meets the criteria for minimum social safeguards.

3.3.3. Limited assurance and other standards

Limited assurance

Review and external limited assurance by an independent auditor

In addition to the audit on financial statements, Ernst & Young Accountants LLP (EY) has reviewed certain non-financial information in section 3.5. of the Universal Registration Document with a limited level of assurance in accordance with the Dutch law, including the Dutch Standard 3000A "Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)" (Assurance engagements other than audits or reviews of historical financial information (attestation engagements)). EY's assurance report can be found in section 9.3 - Assurance Report of the of the independent auditor on selected non-financial information of this Universal Registration Document.

European Directive 2014/95/EU dated 22 October 2014

A 2023 reference table with the European directive is available in the investor relations section on the Euronext website.

UN Global Compact

Euronext is signatory to the UN Global Contact since 2020 and has provided its Communication On Progress (COP) as requested on the 4th May 2023.

GRI Standards

A 2023 GRI Index is available in the investor relations section of the Euronext website. This report has been prepared in accordance with the Global Reporting Initiative (GRI).

The SASB Standards

The SASB Standards require stock exchanges to be transparent on a number of information, including the number of significant market disruptions and duration of downtime, and a description of the alert policy regarding timing and nature of public release of information. Moreover, they request to describe the policy to encourage or require listed companies to publicly disclose ESG information and to report on number of data breaches, the percentage involving personally identifiable information (PII), and the number of customers affected.

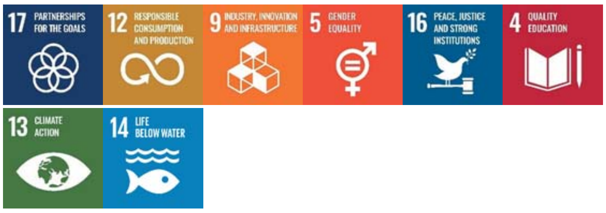
The SASB logo will be displayed in this document when the information complies with the SASB Standards for the Security & Commodity Exchanges industry.

Task Force on Climate-related Financial Disclosures ("TCFD")

The Euronext TCFD Report Index is available on the Euronext website.

Sustainable development Goals

Euronext has identified 8 Sustainable Development Goals (SDGs) that are the most relevant per impact area:



3.4 Euronext's five ESG impact areas and the sustainable development goals

In this section, Euronext provides an overview of the progress made in 2023 against the 11 key ESG issues, supporting Euronext's 5 material impact areas.

3.4.1.Our Markets

Key Issues:

- Organise a trusted, fair, transparent and efficient market, thereby enhancing access to capital
- Promote and develop sustainable and innovative products and services with environmental (green and blue) or social added value

KPI:

- 1: Number of incidents reported to the College of regulators
- 2: Number of operational alerts treated internally by EMS
- 3: Availability of the trading platform
- 4: Percentage of ESG revenues

New material topics making use of the CSRD:
In its recent double materiality assessment (see Section 3.1. - Value creation by Euronext), Euronext has identified Corruption and Bribery and Sustainable Products and Services, including trainings, as material ESG topics. Reporting in line with the new material topics will occur in 2024, when Euronext is to be aligned with the CSRD.

3.4.1.1 Trusted, fair, transparent and orderly markets

As an operator of regulated markets, Euronext's mission is to bring together buyers and sellers in trading venues that are transparent, efficient and reliable.

To this end, Euronext:

- Adopts rules for each of its markets to ensure fair and orderly trading and efficient order execution;
- Sets up a framework to organise market monitoring by which it oversees trading in order to identify potential breaches of the rules, disorderly trading conditions or conduct that may involve market abuse;
- Offers state of the art, reliable, scalable and resilient technology with a large range of functionalities to market participants to allow trading even in times of high volumes. A particular attention is paid at cybersecurity and data protection;
- Reports breaches of rules or of legal obligations relating to market integrity to the competent authority. Market surveillance and monitoring are implemented through a two-step process consisting of real-time market surveillance and post-trade (i.e., "next day") analysis of executed trades. Euronext ensures member compliance with its rules by conducting on-site investigations and inspections;

- Invests in technology aiming to improve its monitoring.

Part of Euronext's role in maintaining trusted, fair and orderly markets includes ensuring the security of those markets. The growth in the digitalisation of the finance industry over the last years has revolutionised the sector. This transformation means that an increasing number of financial services are becoming available to more and more people at an ever increasing pace. Euronext has grown and continues to thrive with these changes via increased volumes and processing power enabling the Group to grow in complexity and size. With increased complexity, size and access come potential cyber security risks. Euronext has, through cyber security governance and management, implemented a programme that guarantees the necessary security controls in place in order to protect its markets from unwanted activity.

Euronext management has a strong commitment to upholding the security of the group. Management oversees the information security/cybersecurity strategy and review process as well as annual plans, ensuring that the programme stays current with the evolving environment and to avoid and treat potential negative impacts to Euronext. For further information of cybersecurity risks please refer to section *2.1 - Risk Factors* of this Universal Registration Document.

In order to monitor the effectiveness of its markets, Euronext has put in place the following KPIs:

- Number of serious incidents (severity 1 and 2) on the regulated markets reported to the College of Regulators;
- Number of operational alerts treated internally by EMS: Euronext has an alerting mechanisms in place;
- Availability of the Optiq® platform.

These KPIs are described in more detail below:

Number of **serious incidents** (severity 1 and 2) on the regulated markets reported to the College of Regulators (KPI n°1):

SASB STANDARDS
Now part of IFRS Foundation

The Euronext Market Services (EMS) team, also the front line to ensure fair and orderly markets for all Cash, Derivatives and Commodities products, including Corporate Actions, Euronext Indices, Euronext Market Data, Member on boarding and Hosted Commercial Markets. In this context, the EMS team has the ownership of the serious incidents process and ensures that it is fully assessed, graded and efficiently managed.

The objectives of the Serious Incident Process are to:

- Facilitate restoration of normal service operations as quickly as possible, and minimise the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained;
- Ensure that serious incident management and resolution is performed in an effective and controlled manner in compliance with best practices and the organisation's internal and external rules and regulations;
- Ensure all customers, clearing houses and regulators are alerted in a timely manner on the market status and are kept informed during the incident;
- Ensure that all relevant stakeholders within EMS and IT are directly updated on the status of recovery activities until service is fully restored;
- Ensure that all relevant stakeholders within EMS and IT are informed of the outcomes of post-incident investigations and the actions being taken to avoid a recurrence.

This KPI covers all the markets operated on the Optiq® trading platform, including Borsa Italiana from the date of the migration of the Italian markets on the Optiq® platform. This migration has taken place in different steps:

- The migration of Equities and ETF in March 2023, so the scope of KPIs after March 2023 includes Borsa Italiana in those two segments of Optiq®;
- The migration of Warrants and Fixed Income in September 2023, so the scope of KPIs after September includes BITA in 4 different segments of Optiq®.

The number of incidents reported to the College of regulators in 2023 is 5, including 1 of Severity 1.

	2023	2022	2021	2020	2019
Serious Incidents reported to the College of Regulators	5	7	6	14	11

Number of **operational alerts** treated internally by EMS: Euronext has an alerting mechanism in place (KPI n°2):

SASB STANDARDS
Now part of IFRS Foundation

The EMS team has also access to all relevant EMS Cash and Derivatives business and technical monitoring tools and operates daily from 06:30-22:30 CET.

The alerts are triggered real-time and help the operational teams of EMS to secure a smooth running of the markets. The type or the scope of alerts may change over time.

On the Euronext regulated cash markets, 52,936 alerts were treated by EMS compared to 59,719 in 2022, 47,995 in 2021 and 99,409 in 2020. Euronext observed a decrease of 11%. Overall, the result is in line with recent years.

This KPI covers all the markets operated on the Optiq® trading platform, including Borsa Italiana from the date of the migration of the Italian cash markets on the Optiq® platform. The number of alerts on the Italian cash markets subsequent to the migrations on the Optiq platform is 38,974. The migration of the cash market has taken place in different steps (see above for further details).

On the Euronext regulated derivatives markets, 185,677 alerts were treated by EMS in 2023, compared to 505,522 in 2022, 458,626 in 2021, and 1,195,733 in 2020. Euronext observed a decrease of 63% which is in line with the market activity and the market volatility. The EMS team has also successfully reduced the number of false positive alerts by reducing the number of alerts for situations where no action was required.

For the previous years, the increase in volatility, as the result of the conflict in Ukraine and the Covid situation, had a significant upwards impact. The KPI does not cover the Italian derivatives markets since this market has not migrated yet on the Optiq® platform.

Number of operational alerts	2023	2022	2021	2020	2019
Euronext cash regulated markets	52,936	59,719	47,995	99,409	44,046
Borsa Italiana cash regulated markets	38,974	NA	NA	NA	NA
Euronext derivatives regulated markets	185,677	505,522	458,626	1,195,733	427,535

Availability of the Optiq® trading platform (KPI n°3):

SASB STANDARDS
Now part of IFRS Foundation

In 2023, the availability was 99.98 % for cash markets and 100 % for derivatives markets.

This KPI covers as well all the markets operated on the Optiq® trading platform, including Borsa Italiana from the date of the migration of the Italian cash markets on the Optiq® platform.

Availability of Optiq®	2023	2022	2021	2020	2019
Cash regulated markets (%)	99.98	100.00	99.99	99.84	100.00
Derivatives regulated markets (%)	100.00	99.98	99.94	99.90	99.95

3.4.1.2 Promote and develop sustainable and innovative products and services with environmental (green and blue) or social added value

With its strategic plan "Growth for Impact 2024", Euronext is focussing on accelerating climate action to accelerate the transition to a European economy aligned with a 1.5° trajectory. This will help drive investments towards decarbonised assets and support Euronext's clients on their ESG journey. A key part of this strategy is to expand the Group's ESG business and continue its growth in this area.

ESG revenues

The EU Taxonomy does not apply directly to Euronext's activities and it is not therefore the best framework for classifying its products and services as sustainable. Euronext therefore worked on its own definition of ESG revenues and does measure the ESG revenue according to this definition, which is described in more detail in Section 3.5.- Summary of ESG KPI's.

In order to assess the growth of its ESG business, Euronext has put a specific KPI in place which consists of calculating the percentage of revenues attached to those ESG products and services, compared to its overall revenues (KPI n°4), with a clear ambition to increase that KPI.

After further analysis, the scope of the KPI has been extended compared to 2022, and now also includes the revenues generated from the initiative "Sustainable finance partnership" for which partners are provided with the «Borsa Italiana – Sustainable Finance Partner» Label (see section 3.5 for a full list of ESG products and services). Figures of 2022 have been reviewed with the same scope as for 2023, resulting in a non-material adjustment.

Even if the 2023 percentage remains stable, ESG revenues have increased from €65.4 million to €69.9 million, i.e. by +6.9% compared to a +3.9% increase in overall revenues.

For 2023, this percentage is 4.7%.

	2023	2022	2021
Total ESG Revenues (€k)	69,874	65,390	59,352
Total Revenues (€k)	1,474,706	1,418,809	1,298,655
% of Total ESG Revenues on Total Revenues	4.7 %	4.6 %	4.6 %

Description of Euronext's offer of ESG products and services

A. ESG products

A.1. Sustainable Indices

Euronext ESG Indices are designed to support common approaches to environmental, social and governance (ESG) investing. They are based on fully transparent and rules-based selection process whose methodologies measures risk and performance across a variety of ESG areas.

In 2023, Euronext launched 18 new ESG indices, including the CAC 40 SBT 1.5, the Eurozone SBT 1.5, the Europe SBT 1.5, the Biodiversity Enablers world, and the Biodiversity screened world. At the end of the year, there were more than 300 listed structured products for the French market alone linked to Euronext ESG indices. These had a combined assets under management of almost €9 billion[7].

Moreover, Euronext is one of the leading ESG index providers in Europe for structured products since 2019, according to the independent SRP database.

Euronext will continue to extend over 2024 its ESG index offering together with its partners.

A.2. ESG Exchange-traded funds (ETF) accessible on the Euronext markets

ESG Exchange-Traded Funds (ETFs) represent a significant stride in the asset management world. As such, ESG ETFs, are rapidly gaining popularity, reflecting a broader shift in the investment community towards sustainability and corporate responsibility.

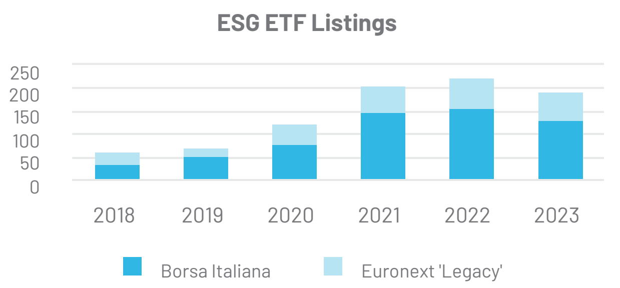
Currently there are 1,011 ESG-related ETFs available on Euronext markets, complying with the EU's Sustainable

[7] Based on sales volumes in the SRP database

Finance Disclosure Regulation (SFDR), whereof 892 fall under art. 8 of the SFDR and 119 under art. 9.

159 new ESG ETFs were listed on Euronext markets in 2023 across 195 separate listings.

Euronext SFDR categorisation under SFDR for ETF is available on the Euronext website from January 2023. It provides analytics and statistics to all interested parties.



A.3. ESG investment funds accessible on Euronext

Sustainable Investing is an important theme in Euronext's investment funds market. In 2023, 12 additional sustainable fund securities were listed on Euronext.

There are currently 125 ESG-related investment funds listed and traded on Euronext, and 90% of them are ESG investment funds: 113 funds among which 80 are "SFDR-article 8" and 45 are "SFDR-article 9".

A.4. Euronext ESG Bond footprint and platform initiative

Euronext is the leading venue for ESG bonds, with more than 2,200 green, social, sustainability and sustainability-linked bond listed and admitted to trading on its markets, from 500+ issuers and accounting for more than 1.3 trillion euros.

In 2023, debt capital markets recovered from a 2022 bleak year. Higher issuance volumes were generated by European corporates, benefiting Euronext.

Sustainable bonds also enjoyed a strong revival, with the Euronext ESG Bond Platform welcoming 71 new ESG issuers. Close to 500 ESG bonds were listed on the platform in 2023, compared to 400 in 2022. Euronext is now the world leading venue for the listing of ESG bonds.

Euronext is committed to give more visibility to its ESG Bonds issuers and to participate in the development of the overall sustainable bond market. It did so by publishing 4 ESG Bond Barometers, with 8 interviews with green leaders.

The best-in-class section of SBTi climate-aligned ESG bond issuers is also very active and has been extended to companies with a validated Net Zero pathway (in addition to companies having a validated 1.5° pathway). 16 companies joined this section in 2023.

Finally, Euronext organized, in September, five inaugural DCM committees in Dublin, Paris, Oslo, Amsterdam and Brussels, gathering industry experts, to discuss ESG trends and topics.

A.5. ESG derivatives

Euronext launched in 2022 a future on the CAC 40 ESG Index to support the development of responsible investments, and expansion of its ESG derivatives offering.

This launch aims for the ongoing reallocation of assets from the CAC 40 index to its ESG version, by enabling market participants to manage and hedge ESG portfolios efficiently and in compliance with ESG principles, and to lower the cost of trading.

B. Equity initiatives

B.1. Educational resources

Euronext is committed to encourage the incorporation of ESG factors into investment decision-making and supports equity issuers in their ESG journey. Such commitment is materialised in the ESG Reporting Guide which is designed to help listed companies understand how to address ESG issues in their interactions with investors and the wider ESG community, and the main principles to consider when preparing an ESG report.

In 2023, Euronext published a new guide targeted at pre-IPO companies, in collaboration with the Paris Institute for Sustainable Finance. It provides a set of recommendations on best practices for ESG during the IPO process, as well as an overview of investor expectations on corporates' ESG maturity.

Euronext also announced the strengthening of the ESG contents in its educational pre-IPO programme IPOready.

B.2. European Sustainability Week

From 4 to 8 September 2023, Euronext organised its first Euronext Sustainability Week, an entire week of activities dedicated to sustainable finance. Originally launched as Italian Sustainability Week in 2017, Euronext has expanded this successful concept to encompass all its geographies across Europe. Around 40 external and internal events, combining conferences, workshops, and webinars, were held over five days, from nine different geographies across Europe and targeting corporate and investors audiences, to foster sustainable finance.

The event aims to provide a concrete response to the need of issuers and investors to benefit from educational moments and dialogue. Companies attending the event have the opportunity to discuss with domestic and international institutional investors about their sustainability strategies through one-to-one meetings.

B.3. Launch of My ESG Profile

With the launch of My ESG Profile, Euronext has become the first stock exchange to make the ESG data of its issuers available in a standardized format on its website. In November 2023, Euronext published close to 1,900 company ESG profiles containing over 60,000 data points on Euronext Live. Data is collected and validated by a specialised data partner directly from issuers' annual reports based on a list of thirty quantitative indicators sourced from key European regulations. The objective of My ESG Profile is to support the transition to a sustainable economy, by providing listed companies with a digital tool they can use to centralise relevant ESG information, showcasing their sustainability efforts to the market, while facilitating investors' access to this key data to inform their sustainable investment decisions.

The launch of this service marks an important milestone in Euronext's ambition to provide concrete tools and guidance on ESG to all its listed companies, while facilitating investor-issuer dialogue on ESG matters.

C. ELITE network

ELITE is an international network of SMEs that connects companies with diverse sources of capital to drive their growth. Sustainability and Corporate Governance are two of the pillars on which companies can get access to training, guidelines, recognition of achievements and a pool of partners/advisors to execute development projects. In particular, the ELITE membership includes:

- Training modules and vertical workshops on Corporate Governance: how to build a Board of Directors in SMEs; the role of Corporate Governance in strategic management and the relationship between owners and management.
- Guidelines on Corporate Governance on the best practices in order to achieve long term success for their stakeholders and Governance Certificate that is recognised to those companies in line with industry standards.
- International workshops on Sustainability as an occasion to connect with experts and top decision makers from EU institutions, academics, large corporates and industry advisors.
- Company assessment on Sustainability with specific focus on voluntary SMEs sustainability reporting and introduction to partners to support on sustainability projects.

D. Corporate Services

Corporate Services is a fully-owned subsidiary of the Euronext Group helping listed companies to make the most effective use of capital markets and supporting organisations with innovative solutions and tailor-made advisory services in Governance (iBabs), Compliance (ComplyLog), Communication (Company Webcast) and Investor Relations (Advisory and IR Solutions). Corporate Services already serves more than 4,800 clients in over 30 countries, of which 1,000+ are listed companies.

- iBabs enables a significant reduction of paper consumption through paperless and digital meetings management solutions which supports the adoption of best practices in terms of good Corporate Governance and enables a more collaborative, secured, efficient and informed decision-making process within Board of Directors and Executive Committees.
- IntegrityLog helps companies to ensure a transparent and ethical governance through a dedicated whistleblowing tool.
- InsiderLog automates the management of inside information and insider lists for both issuers and their professional advisors and therefore compliance with EU Market Abuse Regulation (MAR).
- Company Webcast, market leader in webcast and webinar solutions, reduces the negative environmental impacts of transportation through remote and digital conferences, while making sure that companies deliver regular communication.
- Advisory and investor relations (IR) Solutions, supports listed companies to meet ESG requirements in a context of increasing compliance and transparency requirement, growing involvement of shareholders in Corporate Governance, and pressure from rating agencies on companies. This support consists in several offers, namely:
  - The "Shareholder Analysis" offer allows issuers to have a clearer understanding of the shareholding structure, proactive communication and rationalised targeting of investors.
  - "ESG Advisory" assists companies in understanding of investors' expectations and in building a comprehensive tailor-made ESG strategy by evaluating non-financial issues, providing ESG perception studies, prioritising and collecting data to engage with investors. Through commercial partnerships, "ESG Advisory" offer comes with (i) a reporting solution to facilitate the collection, reliability, consolidation and analysis of corporate ESG data and (ii) governance analytics and board assessments.

E. Post trade activities

E.1. Shareholders register service

Euronext Securities offer Shareholder Register Services that provide insight on companies' shareholders. They have a range of solutions, including daily updated digital shareholder registers in Norway and Denmark, periodically updated shareholder registers in Italy, and shareholder identification solutions in Portugal, that is provided to issuers. These services help companies identify shareholders, enabling them to engage with and support their ESG goals.

E.2. General Meetings Services

Euronext Securities General Meeting Services are tailored to support the ESG goals of the clients. This include a significant component, the Virtual General Meetings (VGM), which allows shareholders to participate in general meetings remotely. This feature not only diminishes the necessity for travel, reducing the associated carbon footprint, but also enhances shareholder accessibility and engagement. In addition to VGM, Euronext Securities offers a range of solutions to digitize various processes involved in general meetings. These solutions help in cutting down the consumption of paper and other resources, aligning with sustainable practices. By offering and investing in both virtual and traditional general meeting services, Euronext Securities demonstrates a comprehensive commitment to supporting the ESG objectives of their clients.

3.4.1.3 Reporting "Our Markets" against the SDGs

SDG	Targets	Quantitative results	Qualitative achievements
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation. As a stock exchange Euronext can contribute to the increase of access of small-scale industrial and other enterprises, to financial services.	**Elite** New companies who joined ELITE in 2023: +157 across Europe. Total number of events: 43 training and workshop events for a total cumulated of 64 days of duration - of which 12 full days on ESG related topics (governance, DE&I, sustainability) and 8 online webinars. **Euronext securities** Number of General meetings that were supported by Euronext: ■ Norway: 325 (299 in 2022); ■ Denmark:273 (200+ in 2022); ■ Italy: 257 (242 in 2022).	**Elite** All companies access to a specific and mandatory module entirely dedicated to Corporate Governance. **ESG Indices** ■ First Euronext Employment indices with the Euronext French Employment 40 which selects the 40 companies from the SBF 120 with the highest Humpact score. ■ First Euronext Gender Equality indices launched, in partnership with Equileap. The Euronext Equileap Gender Equality France 40 and the Euronext Equileap Gender Equality Eurozone 100.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns. ESG indices, derivatives and ETFs create a use-case for ESG information and an incentive for issuers to improve their ESG practices: Euronext's ESG guidance disseminates ESG disclosure best practice. By facilitating issuer-investor dialogue on ESG matters, Euronext strengthens the business case for ESG practices and disclosure.	**ESG reporting guide** ■ 854 downloads in 2023; ■ 2306 downloads in total since its publication. **ESG ETFs** 159 new ESG-related ETF available in 2023. **ESG Funds** 125 ESG-related investments funds listed and traded on Euronext.	**ESG derivatives** Launch of the Euronext CAC 40 ESG index future. **ESG Bonds** Euronext is the world leader in green bonds (in terms of number of green bonds, in terms of number of issuers and in terms of AUM).
13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts. As a stock exchange, Euronext can play a leading role in creating climate resilient markets by offering related financial products as well as by encouraging or requiring climate disclosure in this area?	**Green bonds** ■ Green bonds represents 55% of the Euronext ESG bond offer; ■ €292 billion raised by ESG bonds in 2023.	**ESG Bonds** Creation of a best-in-class section promoting ESG bond issuers that have a SBTi-validated 1.5° strategy: the SBTi 1.5° ESG Bonds Issuers. 43 issuers are displayed on this section. **ESG indices** Euronext Biodiversity Screened World Index and Euronex Biodiversity Enablers World Index launched in August 2023. In 2023, Euronext was awarded "Best Pan-European Index Provider 2023" as well as the "Excellence Award for Robust Biodiversity Solutions 2023" at the Ethical Finance Awards. The Euronext Euro Large Cap Biodiversity Leaders 30 index won the "Best Index of the year" SRP award. Publication of a revised version of the ESG Reporting guide with a focus on the 1.5°C global temperature increase trajectory.
14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Water-themed ESG indices create an incentive for upgrading issuers' water-related practices: As an exchange, we enable companies active in the blue economy to raise capital.	The last years, 35 new Blue Economy companies listed in Euronext markets (an increase of 30% over 2015). Over the 5 year period from 2015 to 2019, these companies: ■ Grew revenue at an annual growth rate of 4.5%; ■ Grew EBITDA at 13.3%; ■ Grew employment at 3.2%.	**Water Indices** Financial ESG indices developed by Euronext with a thematic focus on water include: ■ Euronext Water and Ocean Europe 40 EW (launched in 2021); ■ Euronext CDP Water Eurozone EW (launched in 2020).

3.4.2 Our Partners

Key Issues:

- Be the spokesperson of the sector and foster "Issuer-Investor" dialogue
- Maintain an ongoing dialogue with multi-stakeholder partnerships
- Educate our partners on financial literacy and regulations

KPI:

- 5: Client Satisfaction (Net Promoter Score - NPS)
- 6: Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 GHG emissions

New material topics making use of the CSRD:
In its recent double materiality assessment (see Section 3.1. - Value creation by Euronext), Euronext has identified Political Engagement, Management of relationships with suppliers, as material ESG topics. Reporting in line with the new material topics will occur in 2024, when Euronext is to be aligned with the CSRD.

3.4.2.1 Be the spokesperson of the sector and fostering issuer-investor dialogue

A central element of Euronext's work involves engagement with all actors within its ecosystems. Alongside customers, issuers, investors and intermediaries, Euronext also engages with policymakers and regulators with a view to contribute to the development of the regulatory framework which governs Euronext's activities.

This engagement focuses on both the EU institutions, namely the Commission, Parliament and Member States in Council, as well as all relevant authorities in the Euronext jurisdictions.

In 2023, in relation to sustainable finance related priorities, a number of initiatives have been going through the European legislative process going from a draft on ESG rating agencies to a proposal on the Corporate Sustainable Due Diligence Directive (CSDDD). The EU Commission did finalise as well the European Green Bond Standard and the European Sustainability Reporting Standards (ESRS).

3.4.2.2 Maintain an ongoing dialogue with multi-stakeholder partnerships

Euronext's commitment is enriched by a continuous dialogue with all its stakeholders, including at national level, its clients and suppliers.

Advisory Committees

Each exchange of the Group has one or more exchange committees ("Advisory Committees") consisting of external stakeholders, to advise and assist the local Managing Board in a non-binding, advisory capacity on issues of major interest to Euronext users (i.e. issuers, investors and other interested parties), where products and services might be developed to meet users' needs. These committees discuss strategic issues at the local level, and also propose new ideas that fall within the scope of the Committee. Euronext commits to listening to the opinions of each Committee and taking these into account in its decision-making process insofar as possible, in the interests of both the Company and its shareholders.

Client Satisfaction Survey

In order to assess how clients are satisfied with the products and services provided by Euronext, the Group has put in place a Client Satisfaction Survey (NPS)[8] which serves as a KPI (KPI n°5).

For the seventh consecutive year, this annual customer satisfaction survey was conducted in 2023. Since 2022 the survey has been conducted in a different way compared to previous years[9], consisting of an online survey among Euronext clients' base to provide anonymous feedback on a wide range of topics covering each aspect of the business. Several hundred contacts participated in this yearly exercise, providing valuable insights into client perception of Euronext's strategic initiatives, client relationship management, and product offering.

NPS	2023	2022
Debt and equity listing	+37	+27
Market Data	+32	+23
Euronext Clearing	+10	+41
Euronext Securities	+42	+54
Trading Members	+31	+47
Corporate services - excluding iBabs	+52	+46
Corporate services - iBabs	+18	NA[1]

[1] iBabs is part of Corporate Services, newly included in the scope for 2023. Its presented in a separate line to allow for consistent comparison year-on-year.

In previous years, the survey consisted of short phone interviews with the following results:

NPS	2021	2020	2019	2018	2017
Debt and equity listing	+24	+27	+12	+14	+9
Market Data	+39	+17	+20	+3	+15
Euronext Clearing	NA	NA	NA	NA	NA
Euronext Securities	+33	+27	+49	+29	+47
Trading Members	+18	+10	+15	+13	-15
Corporate services	NA	NA	NA	NA	NA

Suppliers and subcontractors ethical supply chain

Euronext has developed a "Euronext Supplier code of conduct", which includes provisions regarding human rights, diversity and inclusion, and environmental protection. This is provided together with "requests for proposal" to each envisaged supplier. Euronext tracks the percentage of its suppliers signing the code of conduct.

Euronext has decided to take a new approach to monitoring its supply chain. In addition to the monitoring of the signed code of conduct, Euronext is tracking which vendors are making a formal and public, SBTi aligned, commitment to reduce their scopes 1 and 2 carbon emissions (KPI n°6). The

[8] The NPS represents the difference between the members who are positive vis-à-vis Euronext and those who are detractors (the neutrals are not taken into account). When the figure is positive it means that the promoters outweigh the detractors (and vice versa).

[9] From 2015 to 2021, the survey consisted of a 15 minutes phone interview. Given this change of methodology, results for 2022 cannot be compared with previous years.

primary focus is on the top vendors which represents the most significant portion of Euronext's scope 3 emissions.

Euronext's goal is to collaborate closely with its suppliers, supporting and guiding them on their journey to establish science-based targets. Together they are working towards a more sustainable and responsible future of their business and the planet.

More details on this suppliers engagement can be found in section 3.4.5.

Code of conduct coverage	2023	2022	2021	H2 2020
Number of new suppliers	1,658	3,295	750	254
Number of Code of Conducts	1,658	3,295	750	254
Number of Code of Conducts returned signed	1,269	786	585	209
Percentage of Code of conduct returned (%)	77	24	78	82

Employees

Further insights in section 3.4.3 - Our People, to explore all the initiatives taken by Euronext to support and nourish a culture of performance through an ongoing dialogue with its employees.

Shareholders, analysts and investors

Euronext has an ongoing dialogue with financial analysts, shareholders and investors. The Company focuses on communicating clearly and providing transparent clarifications. Euronext publishes full financial results on a quarterly basis. These results are commented on in either physical meetings or conference calls for analysts and investors and are accessible to the general public via webcast found on the Company's website.

In 2023, the Euronext investor relations team met with more than 450 investors, including ESG investors, from investment companies from more than 20 countries. These countries notably include United Kingdom, France, Germany, Italy, Switzerland, the United States and Canada. The meetings included both virtual and physical meetings. During the year, Euronext management and investor relations team attended 14 investor conferences. Euronext is continuously willing to engage with its shareholders on a regular basis so as to enhance the knowledge of the Company and the understanding of its strategy.

Regulators

Each Euronext market operator is subject to national laws and regulations and other regulatory requirements imposed by exchange authorities, central banks and finance ministries as appropriate.

The national regulatory authorities in charge of the supervision of the regulated markets operated by the Group coordinate this supervision through the "Euronext College of Regulators", acting pursuant to a Memorandum of Understanding which Euronext has committed to respect.

3.4.2.3. Educate our partners on financial literacy and regulations

Euronext operates a Euronext knowledge centre, known as "Euronext Academy", that aims to reach individual investors, as well as teachers, students, and other members of the general public in the countries where the Group operates and beyond, to improve their financial knowledge, skills, and ways of thinking. This is a key part of Euronext's mission to support local economies across Europe by connecting them to global capital markets, to accelerate innovation and sustainable growth.

In 2023, Euronext combined and replaced its successful legacy TechShare, GoPublic, IPOready, and FamilyShare programmes into one single comprehensive pre-IPO programme IPOready. IPOready is now Euronext's unique pan-European business educational pre-IPO programme for businesses ready to take the next step towards financing their growth journey.

Sustainable finance memberships and partnerships

SSE	Euronext is an official partner of the United Nations Sustainable Stock Exchange Initiative ("SSE").	■ Euronext representatives attended regular meetings held by SSE during 2023. ■ On International Women's Day, Euronext hosted a bell-ringing ceremony across all its markets for the 9th consecutive year to raise awareness for gender equality. The initiative is organized by the SSE and its Global Partners, including the UN Global Compact, UN Women, International Finance Corporation (IFC), and World Federation of Exchanges
FESE	Euronext is a member of the Federation of European Securities Exchanges ("FESE"), representing European exchanges and engages in advocacy on behalf of this member community.	■ In 2023, Euronext continued to chair the Sustainable Task Force of FESE, discussing subject areas that include the CSDDD, Green Bond Regulation, ESG ratings, Taxonomy and SFDR papers.
SUSTAINABLE TRADING	Euronext is a founding member of the Sustainable Trading initiative.	■ Euronext has been a founding member of the "Sustainable trading initiative". ■ In 2023, several Euronext's representatives participated in workstreams focusing on Environmental, Social, and Governance issues and developing best practices.
Signatory of: PRI Principles for Responsible Investment	Euronext signed the Principles for Responsible Investment ("PRI"), a UN-supported network of investors, which works to promote sustainable investment.	■ UN PRI was an institutional supporter of the Euronext Sustainability Week 2023. ■ The interview with David Atkin, CEO of UN PRI, by Fabrizio Testa, CEO of Borsa Italiana, opened the first day of the Euronext Sustainability Week 2023.
Signatory of: WOMEN'S EMPOWERMENT PRINCIPLES	Euronext signed the Women's Empowerment Principles, which result from a collaboration between the UN Global Compact and UN Women.	■ The signature of the Women's Empowerment Principles took place in March 2023.
JA Europe	Euronext is partner with the JA Europe, the largest non-profit in Europe dedicated to preparing young people for employment and entrepreneurship.	■ In 2023, over 70 Euronext employees across 9 countries volunteered to become mentors for the third edition of this programme. Over 250 students benefited from their mentoring

3.4.2.4 Reporting "Our Partners" against the SDGs

SDG	Targets	Quantitative results	Qualitative achievements
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns. As a stock exchange, Euronext can play a key role in providing guidance and training for companies and in strengthening listing requirements. By focusing on these actions, exchanges play a vital role in achieving this SDG and in ensuring transparency in their market.	**Sustainable Finance Week** ■ 2,800+ people attending; ■ 120 speakers; ■ 40 events across 9 locations.	Launch of the 2023 edition of the pre-IPO programmes TechShare and IPOready with 140+ Tech companies participating coming from 16 European countries.
17 PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalize the global partnership for sustainable development. As a stock exchange Euronext has always played a key role in bringing stakeholders together, and now more than ever they will be pivotal players in achieving global efforts. By being an Official Partner of SSE, Euronext is already making its mark in this area.	**STAR conference** From 21 to 23 March 2023, Euronext hosted its annual STAR investor conference in Milan, where 63 companies listed on Borsa Italiana's STAR segment met with 250 investors representing 153 asset management firms. Over 2,700 meetings have been organised, with 250 investors representing 153 asset management firms, of which 53% are based outside Italy, and with over 100 analysts and intermediary representatives supporting the conference.	Euronext actively seeks out new global partnerships for sustainable development, as evidenced by its annual increase in the number of commitments it makes. Furthermore, Euronext is committed to strengthening the existing global partnerships it has established by actively engaging in webinars, participating in working groups, and supporting various initiatives, detailed on page 100.

3.4.3 Our People

Key Issues:

- Develop skills and retain talents in an open culture of dialogue
- Promote diversity and inclusion
- Respect human rights and local labour laws

KPI:

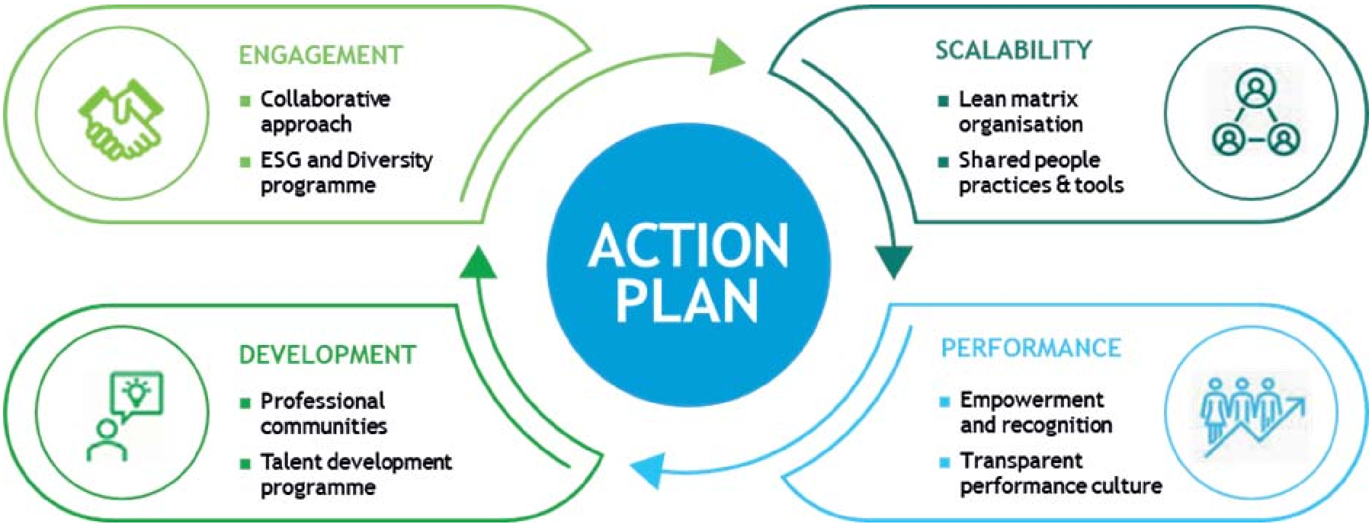
- 7: Diversity in the Senior Leadership Team (SLT)

New material topics making use of the CSRD:
In its recent double materiality assessment (see Section 3.1. - Value creation by Euronext), Euronext has identified Diversity and Inclusion, Working Conditions, and Training and Development as material ESG topics. Reporting in line with the new material topics will occur in 2024, when Euronext is to be aligned with the CSRD.

At Euronext, sustainability and diversity are part of its identity. Euronext conducts its business ethically, taking the impact of its actions on its employees into careful consideration. Euronext promotes an environment that encourages collaborative work, learning and innovation allowing each employee to shape his/her future and the future of the Company.

As part of the "Growth for Impact 2024" strategic plan (for more details on the strategy, see 1.2.1 "Growth for Impact 2024" Strategic Plan), Euronext continues to focus on empowering its people. This is summarised through Euronext's “Reinforce One Euronext” action plan guided by four distinct areas: Engagement, Performance, Scalability and Development.
Actions are formulated at both Group and local levels, ensuring cross-fertilisation of the best initiatives. The Managing Board, local management teams and human resources teams monitor progress on a monthly basis.

Euronext has set up a framework of policies, procedures and documents, that provide more details on its commitments: Business Conduct and Ethics, Performance Management & Remuneration, Talent Acquisition & Development, Diversity, Inclusion and Anti-Discrimination, Health, Safety and Ways of Working and Social Dialogue.



3.4.3.1 Develop skills and retain talents in an open culture of dialogue

Human Capital Development

Employee engagement

Employee engagement is central to the execution of the "Growth for Impact 2024" strategic plan.

Euronext tracks employee engagement and satisfaction by conducting on a regular basis a Group employee survey, complementing the client survey. The Group employee survey is used to improve Euronext’s diversity and inclusion culture to foster innovation, enhance employee engagement and well-being, and contribute to overall business success.
Additional country surveys are organised, when needed, to support local action plans.

In 2023, the Group employee survey mainly focused on engagement and communication, with a large emphasis on diversity and inclusion. With a high participation rate of 85%, the survey indicated an engagement score of 82%.
Additionally:

- 87% of employees believe in Euronext’s purpose “Shaping capital markets for future generations”;
- 90% of employees agree with the statement 'in my function we respect and trust one another";
- 87% of employees " (…) understand how (their) work contributes to Euronext’s purpose and strategy".

This successful outcome highlights the Group's commitment to its cultural transformation. Euronext engaged all staff members and distinct communities, including D&I champions, to identify and execute initiatives aimed at enhancing its strengths and also addressing areas for growth.

Additionally, Euronext maintains an open dialogue with employees sharing information on key initiatives and business updates, through quarterly town halls facilitated by the Group CEO and Managing Board members. In 2023, Euronext organised a dedicated webinar on ESG, as well as 3 Town Halls, gathering on average more than 1,500 employees each time. Newsletters or designated Microsoft Teams groups complemented this communication approach. These approaches were duplicated at both function and local levels, ensuring that every employee could maintain connections with the Company and with one another.

Euronext's attrition rate for 2023 was 8.2%[10]. Attrition remains at a reasonable level in line with company objectives. Specific retention and knowledge transfer plans are in place for employees with critical skills. Emergency and short-term internal successors are identified for all the critical senior roles within Euronext, as confirmed in the latest company succession plan reviewed in 2023. Euronext employees have an average length of service of 9.9 years.

Performance management and remuneration

Performance development and management

The performance management process is detailed in the Performance Management and Remuneration policy. This key process aims to ensure employees have clear goals aligned with the business strategy, strengthen the performance culture, develop the skills and talent pipeline of the company, and recognise the contributions of each employee.

In 2023, Euronext continued to strengthen the feedback culture, with a dedicated training for all employees and managers on how to deliver effective feedback. Training documentation and sessions are shared with both managers and employees to raise their awareness and accompany them along the performance and development campaign.

The 2023 objective setting guidelines ensure the alignment of the initiatives to support Euronext's "Growth for Impact 2024" strategic plan and corporate purpose, including at least one ESG and one transformation initiative.

In 2023, 98%[11] of employees have had their annual performance and career development form completed in the HR system, and 96%[12] their objective setting.

Remuneration

Euronext aims to ensure competitive and fair compensation, with a significant variable component, fostering new initiatives, growth, and sustainable performance. The Company provides a competitive annual fixed salary in line with market standards, short term incentives to reward performance, and long-term incentives for some retention situations, in the form of a Performance Shares reward, to align the interests of Euronext employees with those of the company and long-term shareholders. In 2023, 89% of the Euronext employees received a short term incentive reward, in addition to their annual fixed salary. All employees are eligible for local benefit programmes.

All permanent Euronext employees, including part-time, have also access to a share ownership program, with an annual grant of 10 performance shares, reinforcing the message that each member of the team is co-owner of the business objectives, working together to grow Euronext in ambition, impact and profitability. The renewal of this program has been approved by the Supervisory Board every year since 2020. This program follows the same conditions as the long-term incentive plan with a three-year cliff vesting schedule.

[10] Voluntary employee turnover from January to end of December 2023.
[11] Excluding Nord Pool.
[12] Excluding Nord Pool.

For specific information on Managing Board and Supervisory Board remuneration please refer to Section 4.4 - Remuneration Report.

Enforcing Euronext's matrix and scalable model

In 2023, Euronext focused on strengthening its business model to achieve the "Growth for Impact 2024" strategic plan, and reinforcing the Euronext matrix model, while responsibly managing reorganisations.

Euronext continues to invest in dedicated programmes for its new businesses to support organisational and cultural change, as well as the adoption of common HR practices. The change management programmes in place for Euronext Securities and Euronext Clearing have strengthened their knowledge of the Group's culture, processes and tools through training and communication actions.

The Euronext Human Resources team is organised around countries and functions/business lines which allows to strengthen the implementation of the strategy.

Talent

Euronext's Talent Acquisition and Development policy details its framework and principles to attract, retain and nurture high quality talent.

Developing exciting career opportunities

During 2023, the Group continued to leverage on its core HR processes to accelerate career opportunities for all its employees, including annual performance and development, talent review and succession planning. Outside of change of positions, employees also have the opportunity to grow in their job through new projects, enlarged scope of the Group, short and long term international assignments, and exposure to new products and technologies.

The Career Framework provides a comprehensive overview of professional roles and potential career development paths for all permanent and fixed-term employees across its various entities, to design their career path at Euronext. This tool is updated annually to ensure its alignment with the evolving job landscape within the company. In 2023, Euronext expanded the Career Framework to incorporate its new businesses, including Nord Pool, and to mirror changes in its organisational model. Currently, it encompasses 13 job families, 69 subfamilies, and 231 roles, offering options in both "management" and "specialist" tracks.

Euronext enhanced its international mobility opportunities across its various locations, to bolster its federal model, with 29 employees taking short-term and long-term international assignments in 2023.

Fostering learning & development

Euronext's training programmes are developed with the intention to ensure the current and future employability of its employees, career development, and to foster internal mobility. In 2023, 98% of Euronext employees (permanent and fixed-term contracts) who worked in the organisation between January and December participated at least once in a training.

	2023	2022	2021
% of employees trained (reported training or development activity)	98	98	89
Total time allocated to training (hours)	26,584	21,174	20,458

Euronext's priorities for 2023 have been:

- To sustain the delivery of the "Growth for Impact 2024" strategic plan, including investment on some specific IT and business expertise;
- To empower employees to grow, perform and innovate to support the company's cultural transformation and deliver the strategic objectives.

A visual representation of an extract of the 2023 training roadmap:

Specific business expertise	Core Euronext fundamentals	Transformation priorities
Business line expertise	Leadership	Organic growth & innovation
Operation & IT expertise	Presentation & Negotiation skills	Artificial intelligence
Support function expertise	Project Management & Operational excellence	ESG
Capital Markets essentials	Euronext new joiners onboarding	Cross cultural management & diversity

Euronext organizes every year the Euronext Learning Week, an initiative dedicated to learning and development on various topics such as business knowledge, innovation, ESG, and soft skills. This event is open to all employees, including interns, apprentices, and international graduates. In 2023, a total of 26 learning events were held, with an encouraging 41% female participants.

- 150h training on environment and climate
- +120h training on diversity & inclusion
- +200h training on well-being and mental health

Other examples of topics covered include Inclusive leadership, diversity & inclusion in the financial industry, working across cultures, effective remote work & hybrid teams, and well-being and cultural awareness.

Euronext Academy, the Group's e-learning platform, is accessible to all employees, interns, apprentices, international graduates and contractors. The platform contains training courses developed by internal and external experts. Employees are also invited to join regular webinars, focusing on business knowledge, ESG and Innovation, to learn about capital markets and new technologies trends.

Training programmes are provided by best-in-class educational institutions, together with selected internal Euronext experts. For example, Euronext invited selected employees to take the certification programme "Driving Corporate Sustainability Transformation", developed and delivered by Academy - Euronext Group, in partnership with Leonardo Business Centre for Society - Imperial College.

A dedicated initiative is in place to cultivate engaged and inclusive leaders. Tailored learning journeys are provided by internationally recognised experts, along with recurrent workshops designed to reinforce leadership and management skills. Two illustrative examples encompass:

- Management essentials: tailored for newly appointed managers seeking to accelerate their learning curve, or for seasoned managers aiming to practice and update their skills.
- Leading High Performing Teams: designed to support leaders to accelerate their team performance, in particular those working with international remote teams, and focusing on effectively engaging them through change.

Euronext also provides training programmes dedicated to specific roles and functions. These trainings are deployed at functional and/or local level, for example for the IT and Sales teams. Moreover, a platform is available for Euronext's IT population with dedicated courses.

Employees, interns, apprentices, international graduates and contractors are assigned mandatory trainings every year through the Euronext Academy, in order to improve Euronext's risk and compliance approach and provide updated content on Information Security, GDPR, Conflict of Interest.

Training programme	Number of employees trained
Financial & Euronext Market Knowledge	1,426
ESG*	1,483
IT	1,285
Leadership, Management and Coaching	637
Digital Tools	823
Cross Cultural Management	286
Project Management	139

*Including diveristy, inclusion, wellbeing, enviornmental, and sustainability topics.

Attracting the best talents

The key principles of Euronext's Talent Acquisition strategy are detailed in the Group's Talent Acquisition and Development policy. Attracting, retaining and nurturing high quality talent is fundamental to delivering Euronext's "Growth for Impact 2024" strategy. Its people are at the core of Euronext's business, with both its customers and stakeholders, benefiting from the expertise, commitment and innovation Euronext employees bring.

Euronext meticulously anticipates its staffing requirements through strategic workforce planning. This forecasting is a result of utilising a Workforce Strategic Planning tool, which is updated monthly. These regular updates ensure an accurate estimation of specific staffing needs across various business units and geographic locations.

In 2023, Euronext onboarded 392 new employees in permanent and fixed-term contracts, to support the priority areas of the strategic plan. This number is stable compared to 2022. Euronext continues to develop its talent pool by reinforcing referral, internal mobility and recruitment partnerships with best-in-class agencies. Euronext has also established partnerships with schools or organisations to co-develop projects and improve its visibility as an attractive employer in different locations. Finally, Euronext participated in several job fairs at various universities.

New employees are offered induction programmes with a mix of online and on-site resources, industry and onboarding on all company policies, and compulsory training on compliance matters.

Employees hired	2023	2022	2021
Permanent and Fixed-Term	392	409	273
% of Women / Men	38 / 62	38 / 62	38 / 62

As of the end of 2023, as part of the talent pipeline strategy of the company, 193 trainees and apprentices were part of Euronext and trained on the latest technologies and critical skills. Thanks to its continuous efforts and commitments towards gender equality and diversity, Euronext is proud that 49% of trainees and apprentices are female.

Euronext extended its International Graduate programme (V.I.E) with 39 graduates as of the end of 2023, of which 59% are female. The number of International Graduates increased by 56%, compared to end of 2022. Graduates are deployed to different countries and undergo several international rotations over a two-year period. This programme strengthens the connections between teams and provides graduates with a culturally enriching experience, fostering innovation and dynamism in support of Euronext's strategic ambitions.

3.4.3.2 Promote Diversity and Inclusion

Euronext's Commitment

As described in its ESG policy Diversity, Inclusion and Anti-discrimination, Euronext has built a strong approach to maintain a culture of equity and inclusion, welcoming and promoting Diversity in all its forms.

Euronext's organisation naturally creates an environment where people of diverse cultures and backgrounds collaborate and drive the organisation forward. 2023 demonstrated an acceleration in Euronext's agenda to bring more diverse talents and to foster an inclusive culture for all.

Euronext's commitment also aims to ensure all actions and activities related to Diversity, Equity and Inclusion (DEI) answer a concrete need and resonate in Euronext's various businesses and countries. In direct correlation with the Group's engagement approach, in 2023 Euronext strived to get bottom-up and open dialogue opportunities with its staff on DEI topics.

Euronext has a firm commitment to combatting discrimination and harassment and linked to any diversity criteria. In compliance with local regulations, all countries where Euronext operates are equipped with group and local appropriate grievance escalation and investigation processes. This is facilitated by Euronext's Group whistleblowing policy and process. Additionally, employees and managers receive appropriate training to ensure they are well-equipped to handle these issues effectively.

To monitor and evaluate the level of Diversity, Equity and Inclusion within Euronext, Euronext has established a KPI focused on the representation of women in senior leadership positions (KPI n° 7). Through this KPI, Euronext can evaluate its efforts in creating equal opportunities for women to advance and thrive in leadership roles. In 2023, Euronext achieved its target of 30%, with 34% of women in Senior Leadership Positions.

	2023	2022	2021
% of Women in Senior Leadership Team	34	34	34

Additionally, as part of its "Fit for 1.5", Euronext set a 30% target for women in management levels below the Senior Leadership Team to be achieved by 2023. This has been achieved, with 35% of women in management positions in revenue-generating functions and 30% of women in junior management positions. Lastly, the Euronext Managing Board and Supervisory Board have reached their gender diversity targets in two years, with 30% and 40% gender diversity respectively already delivered.

Employee Survey

In 2023 Euronext ran a Group wide employee survey. This survey focused significantly on Diversity, Equity and Inclusion topics, with 21 related questions. Euronext is proud to have achieved a DEI score[13] of 81% at Group level.

As part of the key highlights of this survey:

- 88% of employees believe Euronext is free of harassment and discrimination related to ethnicity, skin colour.
- 87% of employees believe that their manager genuinely supports equality between genders.
- 86% of employees believe that they can be themselves at Euronext without worrying about being accepted.

Detailed results have been used by country and function, and with the D&I Network, to foster discussions within teams and identify areas of improvement for 2024.

This survey reflects Euronext's strong commitment to fostering open and active dialogue with its employees. It provides an additional space for employees to share their views, contribute to the company's strategy, and shape its culture.

Fostering an inclusive culture

In 2023, Euronext continued to deliver trainings on unconscious bias, to help its employees identify and mitigate their own biases, notably regarding gender and ethnic background, based on the implicit bias test methodology.

This training is open to all Euronext employees, and is particularly recommend to all new joiners.

In 2023, 7 sessions were organized, including one dedicated to our Senior Leadership Team. Since 2022, 402 permanent and fixed term employees have received a training on unconscious bias.

D&I Networks annual activity report

Euronext supports diversity in all its forms, as highlighted from the D&I Network's annual activity report.

As of the end of 2023, Euronext's D&I Network was composed of 24 volunteers, named "D&I Champions", from each of Euronext's locations, who act both at local and Group level. 2023 was the first year where they were able to concretely activate new initiatives, in partnership with their respective local HR and Management teams. Beyond all the initiatives carried out, the D&I network also gathered 3 times in 2023.

13 Score based on the computation of all favourable answers for the 21 questions related to Diversity, Equity and Inclusion.

Country	Examples of D&I initiatives deployed in 2023
Belgium	▪ Renewed partnership with A Seat At The Table, promoting young diverse talent through weekly leadership, entrepreneurship and mentoring programmes with the Belgian and international business community. ▪ Collaborated with Capitant, the largest female student organisation in Belgium, for a Ladies Night event to enhance financial literacy among female students.
Denmark	▪ Renewed partnership with the Københavns Universitet to attract women with IT profiles. ▪ Local teams celebrated several days during the year, and notably International Women's Day and Pride Week to foster a more inclusive and equitable environment by bringing together diverse perspectives, promoting understanding, and encouraging open dialog to celebrate differences within our community.
France	▪ Signed a partnership with Nos Quartiers ont du Talent (NQT) to support the professional integration of disadvantaged youth in search of work, traineeships or apprenticeships. Euronext colleagues mentor young students. ▪ Organized conferences on various topics: Gender Identity during Pride Month, Cancer prevention in October and November. ▪ Established the first Women's Network, which consists in a tailor-made range of events open to all employees, as well as a dedicated networking program for a cohort of Euronext women based in Paris which included women leadership trainings led by a certified leadership training provider.
Ireland	▪ Established a partnership with An Cosán, to support marginalised women of all ages in gaining skills to re-enter the workforce. An all-staff conference was held in December 2023. ▪ Renewed partnership with local recruitment agency with a mandate to deliver a diverse pipeline of candidates for vacancies. ▪ Renewed membership with the Executive Institute's 'Women in Business' network and with the Advisory Group of Balance for Better Business to promote gender balance in senior leadership in Ireland.
Italy	▪ Partnered with secondary schools in Milan to provide training on Euronext and financial markets, led by female colleagues showcasing diverse career opportunities within the financial field. ▪ Organised a conference to mark The International Day for the Elimination of Violence Against Women. ▪ Hosted a webinar led by MIA-Milano in azione, a non-profit organization aimed at assisting the underprivileged in Milan, to explore support measures for returning to work. ▪ Renewed several initiatives in 2023: inclusive hotellerie project with Allianz Foundation for recruiting disadvantaged candidates, SheLab Scholarship aimed at reskilling and upskilling disadvantaged women in STEM with She Tech and Aulab coding school, Women to go beyond program to increase female candidates in Technology with Statale University, and Empower women program with Valore D association to foster C-level and Board level positions.
Netherlands	▪ Support "Emma at work" which helps young people with physical limitations in their development, with the final objective to find a job. ▪ Joined GAP200 as a member for 1 year to invest in a young people who can complete the GAP track development programme and participate in mentoring program with 4 Euronext mentors and 4 mentees from Emma at work. ▪ Renewed the Women's Network with a new cohort, focused on enhancing leadership skills for women colleagues.
Norway	▪ Renewed the Women's Network for an annual cohort of women across the Nordic entities, offering tailored leadership trainings by certified training providers and networking events with female leader ▪ The local teams also celebrated International Women's Day and Pride month, with events for all employees.
Portugal	▪ Launched the Women's Network, offering networking programme for the annual cohort, several events opened to all employees, and access to the annual Skills program academy with the Professional Women Network. ▪ Employer branding initiatives in collaboration local Universities near Porto to attract diverse talent.
UK/US	▪ Established a partnership with The Youth Group to mentor young people from various socio-economic backgrounds seeking employment. ▪ Renewed partnership with Woodhouse College / Career Ready program, including a 1-day session in June at the office. The program aims to prepare young people, particularly those from underprivileged backgrounds, for the professional world. Offered summer internships, practice interview sessions, and networking opportunities to further support the career development of these young individuals.
India	▪ Established PAN India Grad Hiring Program with a focus on improving gender diversity in lateral hiring. ▪ Conducted 'Cinematherapy' session addressing challenges women face in saying 'No' to tasks, including discussions on mental health. ▪ Hosted on LinkedIn a Contest on Equity on International Women's Day.

Focus on Gender

In 2023, Euronext signed the Women's Empowerment Principles. By signing these principles, which result from a collaboration between the UN Global Compact and UN Women, Euronext committed to the corporate delivery on gender equality dimensions of the 2030 agenda and the United Nations Sustainable Development Goals, while working collaboratively in multi-stakeholder networks to foster business practices that empower women.

In 2023, Euronext was included in two Euronext Gender Equality Indices: the Euronext Equileap Eurozone 100 and the Euronext Equileap Gender Equality France 40. This inclusion is a result of the Group's improvement in its Equileap score, when compared to the previous year. In 2023, Euronext achieved an increase of its score by more than 5 percentage points, surpassing the global average score that rose from 41% to 44%.

In 2023, Euronext hosted "Ring the bell" ceremonies in each of its countries on the 8th of March on the International Women's Day for the 9th consecutive year.

Euronext is represented in several leading Women's networks across Europe: Women in Trading, Women in ETFs, Women in Clearing.

After the success of local Women's networks in various Euronext locations, a Euronext Women's Network programme was launched in March 2023. Almost 70 women talents of Euronext participated to these initiatives across the various locations. The objective of the internal Women's Network programme is to enhance equal career opportunities for everybody, with a focus on fostering women's empowerment. This initiative brings together local and group resources:

- Local programmes for women in each country or region, with tailor-made trainings held by certified training providers to help women develop their skills and grow in their career. These programmes are made of a one-year cohort to ensure more impact for the participants. Euronext ensured to welcome men in at least one of the sessions proposed.
- A Euronext Global Community to engage all employees regardless of their gender, share best practices, create connections between locations and give broader visibility to the topic.

All KPIs related to Diversity, Equity and Inclusion are reported in the appendix 03 - "Summary social data".

Gender pay action plan

Euronext is deeply committed to promoting equal opportunities and professional development for women and for all employees. Throughout the employee journey, recruitment, training, promotion, compensation, we actively prevent any instances of gender inequality, and more broadly any form of inequality.

Equal pay is monitored thanks to active compensation monitoring throughout the year, making sure each employee with the same level of responsibilities and performance receives the same level of reward.

Gender equality is a priority in all compensation decisions at Euronext, with a dedicated focus during each compensation review process. While closely aligning with its ongoing efforts to manage structure costs, the company has consistently allocated a higher salary increase budget to female employees compared to male employees

In order to make sure all potential gender inequality situations are addressed during the compensation review, over the last 5 years, more than 10% of the overall salary increase budget has been allocated to the gender equality purpose. 14% of the overall AFS increase budget was dedicated to gender equality in 2023/2024.

Euronext has rolled-out a unified Career Framework across all locations and functions in the last few years, empowering employees to design their career paths, and allowing managers to manage closely their management pyramid. This tool is also supporting the management team in its efforts to achieve gender balance at each level of the organisation, starting with a target of more than 30% women at Excutive Level and at Senior Leadership Team level.

At the hiring stage, Euronext ensures that all employees receive a competitive Annual Fixed Salary, which aligns with market standards. This determination is independent of gender and takes into account several factors, including the individual's role, level of accountability, experience, and overall responsibilities.

Gender pay budget	Salary increase dedicated to gender equality
Compensation process 2019/2020	16%
Compensation process 2020/2021	14%
Compensation process 2021/2022	13%
Compensation process 2022/2023	11%
Compensation process 2023/2024	14%

As part of Euronext's willingness to support gender equality throughout the employee journey, the Group has implemented specific measures, on top of the usual compensation monitoring during the annual reviews:

- Since 2022, Euronext has made a clear commitment: parental leave will not impact Short-Term Incentive (STI) payouts. This decision ensures that parental leave does not lead to proration of bonuses. By doing so, Euronext upholds its Gender Equal Pay approach and prevent pay gaps between female and male employees.
- For women returning from maternity leave, Euronext takes proactive steps. Annual fixed salary reviews are conducted in the year of their return or during the subsequent compensation review process. This practice ensures that women receive fair and equitable compensation as they resume their roles after maternity leave.
- Euronext places significant emphasis on succession planning , with a dedicated focus on gender equality.

3.4.3.3 Respect human rights and local labour laws

Employee well-being, health and safety and embracing new ways of working

Euronext's commitment to health and safety and respect of human rights

Euronext always looks to improve its health and safety measures, adapting them to a changing world.

The Company is committed to providing all employees and others who are on its property, with a safe and healthy work environment. Accordingly, all employees comply with all health and safety laws and regulations as well as Company policies governing health and safety.

Euronext ensures to provide a working environment that complies with the latest requirements and that all its buildings and workplace infrastructure are maintained in a safe condition.

Euronext also appoints and trains employees on local regulations, to take on special health and safety responsibilities, such as first responders, facilities teams, and where applicable security officers. All employees and managers are responsible for immediately reporting accidents, injuries and unsafe equipment, practices or conditions to a designated person. Monitoring of those accidents allows to prevent any re-occurrence. Furthermore, Euronext's business activity prevents its employees from being exposed to major physical occupational risk.

Embracing new ways of working

Euronext offers the possibility to work from home on a voluntary basis, up to 2 days per week. The possibility of remote working options may vary depending on the location and function within Euronext's federal model and matrix organization.

While recognizing the benefits of remote work, Euronext firmly believes in the value of office-based work to foster teamwork, innovation, and creativity, particularly during a period of innovation and organic growth. To promote an inspiring and collaborative workplace, each country CEO has committed to organizing regular face-to-face internal events throughout 2023, including lunch and learns, local town halls, and other gatherings.

Euronext also acknowledges the importance of flexibility for its staff and offers flexible working hours and/or part-time options wherever possible, in accordance with local regulations and within the context of each role. This allows employees to perform their duties optimally while considering individual circumstances.

Employee well-being

All Euronext offices comply with local health and safety regulations. Risk assessments are performed on a regular basis. To minimise the occurrence of accidents, Euronext has implemented various preventive measures in some of its countries.

Euronext also continued in 2023 to invest in its WellNext programme, covering all Euronext employees, aimed at improving the health and well-being of employees at work. This specific attention paid to employees aims to help them build resilience and preserve their mental health.

Euronext's focus on well-being for all employees is reinforced thanks to dedicated learning and awareness actions. A page of the intranet is dedicated to Health and Well-being, where employees can easily access all information.

All employees are provided with locally-tailored information and invited to training sessions at least once a year. An illustration of additional group-wide and local initiatives:

- psychological support and confidential employee assistance helplines;
- health seminars, subsidised subscriptions to virtual meditation tools and bespoke talks on health prevention;
- ergonomic assessments, health assessments, anti-flu vaccination campaigns for employees;
- physical activities such as steps challenges for charity, beach cleaning and tidying of towns in the cities Euronext is located

Each Euronext location proposes adapted initiatives based on local needs. Below is a list of examples of local initiatives:

Euronext Location/ Entity	Activities
Italy	Yoga sessions for all employees; Training to promote mutual respect ; Family day.
France	Gym at the office; Flu vaccination; Weekly sports and relaxation sessions; 4 inspiring health conferences (stress, cancer, sleep...) ; Family Day.
Belgium	Free organic fruit and vegetables; Flu Vaccination; Free massage; Sport and culture voucher; Training session on how to boost energy.
Norway	Conferences on mental health; Physiotherapist available at the office once a week; Participation to sports events (Holmenkollstaffetten); Flu vaccination.
Netherlands	Gym at the office; physiotherapist available at the office.
Portugal	Family day; partnership with Pulso, proposing monthly activities such as Yoga and mindfulness; Workshops; Celebrated International Mental Health Day; Flu vaccination.
Denmark	Subsidy for fitness activities; Massage available at the office once a week; Yoga; Cross-Fit; Flu vaccination; Subsidy for smoking cessation; Screen spectacles.
Ireland	Corporate events gathering employees twice a year.
United Kingdom	Cycle to work scheme; fresh fruit twice a week; flu vaccination; gym discount; private medical; EAP service; Wellbeing app.
United States of America	Fresh fruit; EAP service; private medical.
India	Workshops on mindfulness, mental wellness, yoga; organised sports team events; classrooms on communicating with people with culture, personal and ethnic diversity; long leave of absence or time off to employees in need to attend to their mental health prerogatives.
Nord Pool	Regular communication on well-being, including mental health; 1-1 coaching sessions to educate managers on well-being.

Finally as part of its well-being approach, Euronext ensures to dedicate specific measures to all care givers and notably for employees in their parental role. Euronext is committed to enable all its employees to care for and bond with a new-born or a newly adopted child and as such respects and encourages parental leave in each location in conformance with local regulations.

Euronext monitors stress and energy levels with regular opinion surveys.

Social Dialogue

Euronext's commitment

As outlined in its Social Dialogue policy, Euronext is committed to social dialogue, supporting employee's representation rights and facilitating worker representation bodies.

Works council at local and European level

In accordance with local laws and regulations, local works councils and staff representative forums are in place in Italy, France, the Netherlands, Portugal (Porto), Norway, Denmark, Finland and Sweden. The works councils and staff representative forums represent Euronext employees, are informed and/or consulted on economic, financial, social and organisational matters, and complement collective or national labour negotiations.

Euronext is currently engaged in a negotiation process for a European Works Council (EWC) agreement. According to European and local law, a Special Negotiating Group (SNG) has been set up in November 2022. 4 negotiation meetings have been held in 2023 between the SNG and Central management.

Social dialogue with Workers Representative Bodies

Local Council and staff representative forums held in 2023	Work sessions
Portugal	3
Finland	4
Sweden (Nord Pool)	4
Denmark	5
Norway (Nord Pool)	6
Norway (other entities)	10
France	24
Netherlands	24
Italy	69

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Euronext is committed to maintain a close and ongoing dialogue with all staff representatives, unions, and work councils on any major reorganisation, in compliance with each local regulation.

In 2023, Euronext held regular meetings with unions, staff representatives and work councils in every legal entity, with several consultations and agreements on new organisations, workplace assessment, new tools used for project management.

In all countries Euronext is committed to complying with labour law and does not have any ongoing litigation or dispute regarding staff representatives or unions' rights

	Collective bargaining coverage Employees (EEA only) For countries with > 50 employees representing > 10% total employees	**Social dialogue** Workplace representation (EEA only) For countries with > 50 employees representing > 10% total employees
0-19%	Norway (other)	
20-39%		
40-59%	Norway (Nord Pool)	
60-79%		
80-100%	France Italy	France Italy Norway

3.4.3.4 Reporting "Our People" against the SDGs

SDG	Targets	Qualitative results	Quantitative achievements
5 GENDER EQUALITY	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life. As a market infrastructure, Euronext may take leadership in the area of diversity namely with the stock exchange bell ringing ceremonies in support of empowering women in the workplace, marketplace and community	■ In 2023, the gender equality index applicable to Euronext's French legal entities reached 93/100 for Euronext Paris SA and 88/100 for Euronext Technologies SAS. ■ The percentage of women in the Senior Leadership Team is 34%. ■ The percentage of women in management positions is 31%. ■ Euronext hosted "Ring the bell" ceremonies in all of its countries on the 8th of March on the International Women's Day. ■ In 2023, Euronext has been included in two Euronext Gender Equality Indices, the Euronext Equileap Eurozone 100 and the Euronext Equileap Gender Equality France 40. ■ These indexes comprise European companies that have demonstrated a commitment on gender balance in leadership and workforce, equal compensation and work-life balance, policies promoting gender equality and commitment, transparency, and accountability.	■ Building on the success of Euronext's Diversity Day and International Women's Day initiatives, each Euronext country has taken the commitment to reinforce local diversity partnerships with schools and recruitment providers, as well as early mentoring programmes as part of the Group's financial literacy initiatives.

3.4.4 Our Society

Key Issues:

- Act ethically, with integrity and the highest standards in terms of good governance
- Educate and engage with our local Community

KPI:

- 8: Use of the whistleblowing process
- 9: GDPR Training employees
- 10: Personal data breaches

New material topic making use of the CSRD :
In its recent double materiality assessment (see Section 3.1. - Value creation by Euronext), Euronext has identified Culture and Governance as material ESG topics. Reporting in line with the new material topics will occur in 2024, when Euronext is to be aligned with the CSRD.

3.4.4.1 Act ethically, with integrity and the highest standards in terms of good governance

Euronext's commitment to high ethical and legal standards of conduct is core to Euronext businesses, and the Group aims to be a model for the industry by supporting the highest ethical standards in its dealings with its colleagues, employees, business partners, customers, and in its communities.

Good Corporate Governance

Euronext respects the Corporate Governance Guidelines, Recommendations and Codes set in place in the Netherlands (see section *4.1 - Dutch Corporate Governance Code*), and aims to comply with the ones set in place in the other Euronext locations.

The Managing Board is charged with the management of the Company. The Managing Board serves as the main decision-making body for the management of the Euronext Group, subject to the supervision of the Supervisory Board. The responsibilities of the Managing Board include, among other things, compliance with legislation and regulations as well as compliance with and maintenance of the corporate governance structure of the Company subject to and in accordance with or with due observance of applicable law and regulations, applicable regulatory declarations of non-objection, approvals and licenses, the Company's articles of association and, to the extent applicable and not deviated from, any and all corporate governance codes applicable in any relevant jurisdiction.

The role of the Supervisory Board is to supervise the policy of the Managing Board and the general affairs of the Company and its businesses, as well as to assist the Managing Board by providing advice as a separate and independent body. Key decisions of the Managing Board require approval of the Supervisory Board. In discharging its role, the Supervisory Board shall be guided by the interests of the Company and its businesses and shall take into account the relevant interests of the Company's stakeholders. The Supervisory Board shall also have due regard for corporate social responsibility issues that are relevant to the Company's business.

Euronext N.V. has adopted a Code of Business Conduct and Ethics that reaffirms Euronext N.V. 's commitment to high standards of ethical conduct and reinforces its business ethics, policies, and procedures.

This Code of Business Conduct and Ethics applies to Euronext N.V. and all subsidiaries and entities controlled by it (collectively, the "Company") and the Company's Board members, and employees.

The Managing Board is entrusted with the task of ensuring that the Code of Conduct and the company's corporate policies govern all business activities without exceptions. They hold the responsibility for approving any updates to the Code of Conduct and all corporate policies, which are reviewed on an annual basis. The compliance department is responsible for the day-to-day implementation, management, and maintenance of the Code of Conduct and corporate policies, as delegated by the Managing Board.

On the other hand, the Supervisory Board specifically takes charge of addressing suspicions or allegations of fraud related to accounting and auditing matters, handling whistleblower reports concerning Board Members, managing conflicts of interest, and granting waivers of the Code of Conduct for Board Members. They are also responsible for making decisions regarding any conflicts of interest involving Board members, with a requirement to document such decisions. Furthermore, any measures aimed at mitigating conflicts of interest for a Board member must be approved by the Supervisory Board.

By the end of 2023, the Supervisory Board was composed of ten non-executive directors including four female directors.

Four committees report to the Supervisory Board: the Audit Committee, the Risk Committee, the Nomination and Governance Committee and the Remuneration Committee. In 2023, the Supervisory Board and its four related committees held 29 sessions though in-person meetings or video conferencing.

By the end of 2023, the Managing Board was composed of ten directors including three female directors, and the Senior Management was in addition composed of twelve executive managers including four female managers who attended all its meetings (the Chief Financial Officer, the General Counsel, the Chief Talent Officer, the Head of Compliance and Risk, the Chief Investor Relations and Communications Officer, the Global Head of Derivatives and Post-trade, the Head of Diversified Services, the Head of Cash Equity and Data Services, the Head of Primary Markets, the Head of CSDs, the Head of MTS, the Head of Group Data Services).

To align with best practices regarding executive compensation and ensure adequate performance based rewards, all members of the Managing Board have a 10% Short Term Incentive objective linked to ESG performance. For further details see section 4.4 - *Remuneration Report*.

Detailed information about Euronext's Governance can be found on the Corporate Governance page on Euronext's website as well as in section 4 - *Corporate Governance* of this Universal Registration Document.

ESG Policies and Statements

Euronext has adopted a set of policies and statements that reaffirm its commitment to operating a sustainable global business for the benefit of all. The ESG policies and Statements aim to ensure that its business practices and operations respect the environment, embrace diversity, value employee contribution, and respect basic human rights and appropriate rules for business ethics and professional conduct.

Important topics included are:

- Business Conduct and Ethics;
- Human Rights;
- Diversity, Inclusion and Anti-Discrimination;
- Misconduct Report & Handling;
- Sustainable Lobbying;
- Anti-Money Laundering and Terrorism Financing;
- Anti-corruption, anti-fraud, anti-bribery, gifts and entertainment;
- Data privacy;

The policies apply to Euronext and its majority owned subsidiaries, and to all Euronext employees and consultants (including interns and temporary staff) and agents. They are reviewed and approved on a yearly basis by the Euronext Managing Board, and can be found online on Euronext's website.

Euronext Compliance Policies

Euronext has nine Corporate Compliance policies. These policies aim at ensuring compliance with the laws and regulations and promoting best practice as well as high ethical standards.

They intend to raise awareness among Euronext employees and avoid non-compliance and reputational risks. They are available to Company employees on the Intranet and employees are required to participate in mandatory compliance trainings.

The nine Corporate Compliance policies are:

- Anti-fraud policy;
- Anti-bribery policy;
- Gift, business meals and business entertainment policy;
- Anti-money laundering and sanctions policy;
- Whistleblower policy;
- Confidential and inside information policy;
- Conflicts of interests policy;
- Personal trading policy;
- Policy preventing insider training on Euronext N.V. financial instruments;

While Euronext has developed a set of nine Corporate Compliance policies, it's important to note that only a subset of these policies are publicly available. These policies can be accessed in Euronext's ESG Policies and Statements.

Euronext Code of Business Conduct and Ethics

Euronext's upholds to very high standards its Code of Business Conduct and Ethics, reaffirming its commitment to ethical conduct and reinforcing its business integrity, by providing clear policies and procedures. The Code of Business Conduct and Ethics explains the Company's core values and basic ethical obligations in conducting business.

For more information on the Code of Business Conduct and Ethics see section 2.6 - *Corporate Compliance – Code of Business Conduct and Ethics.*

Whistleblowing Programme

The Company, via its Whistleblower Policy and Procedure, enables all employees of the Euronext group as well as third parties, e.g. shareholders, former employees, job applicants or persons working for the Company's suppliers, to report in confidence a breach or a suspected breach of any law, regulation, or Company policies, and protects anyone who reports in good faith. The policy also ensures that proper reporting channels and procedures for internal reporting and follow up are established and that employees and third parties who report alleged breaches in good faith are free to do so without fear of retaliation. The protection against retaliation also applies to facilitators (persons who assist a reporter), to persons connected with a reporter, and to officers in the company who conduct the investigation or receive a report.

The policy provides internal and external channels to report unlawful and unethical behaviours. The internal channel allows reporters to report alleged breaches either to the Compliance department, directly to their management, to the Chairman of the Supervisory Board under specific circumstances or through a third party website which allows anonymous reporting. Additionally, the policy includes the possibility making an external report by either reporting to competent authorities, or through a public disclosure of the alleged breach.

Managers who have been notified by an employee of an alleged breach must promptly inform the Compliance Department of the content of the report. Reports of alleged breaches will be examined promptly by the Compliance Department to determine whether they actually meet the provisions of the Policy and should be investigated. The Compliance Department will also assess the risk linked with the report. Without prejudice to the confidentiality provisions of the Policy, the Compliance Department may involve officers and staff of the Company as well as external advisors or institutions in the assessment and investigation of the report. Alleged breaches regarding accounting and auditing matters will be investigated by the Compliance Department under the direction and oversight of the company's Audit Committee. Alleged breaches related to a member of the Managing Board of Euronext may also be reported directly to the Chairman of the Supervisory Board. The Supervisory Board will follow up on the report in accordance with the Whistleblower Policy.
The Whistleblower Policy is available on Euronext Website[14] and on the Euronext Intranet and employees are informed on the mechanisms to report unlawful and unethical acts and behaviours.

Euronext tracks the number of whistleblowing cases reported each year (KPI n°8). In 2023, no whistleblower reports have been received .

[14] https://www.euronext.com/fr/node/721

Whistleblowing Policy	2023	2022	2021	2020	2019
Use of the Whistleblowing mechanism	0	3	2	0	0

Data Protection

Euronext is strongly committed to protect the personal data and uphold the right to privacy as provided by GDPR and any national implementing laws and regulations of the GDPR.

Euronext has adopted a set of internal policies/procedures and internal/public notices/statements.

These processes are circulated to employees through a global training specifically designed by and for Euronext and in-depth training for specific functions more exposed to certain risks. Staff training and awareness sessions are conducted regularly in all company locations to promote GDPR compliance. Each new employee is trained shortly after joining.

Euronext maintains all the organisational and technical measures put in place to ensure the protection of privacy. Among all these organisational measures, the highlight are :

- The use of an IT tool dedicated to the GDPR, OneTrust, which automates the processing register;
- The use of an IT tool for monitoring and assessing the risks of personal data breaches as well as for carrying out impact analyses relating to data protection (carried out for any new project or supplier), Jira;
- The designation of "Business Data Owners" within each department whose role is to ensure the link between the department concerned and the Data Protection Officer (DPD) on the one hand and InfoSec and Data Management Office on the other hand;
- The setting up of several tools by the InfoSec department to classify or supervise access to data;
- Internal and external monitoring programme in order to assess the GDPR compliance of its businesses and vendors.

Finally, governance around data in general and personal data in particular has been maintained within the group as well as monthly reporting to the Data Governance Steering Committee.

In that context, Euronext tracks two key indicators:

GDPR training for newly joined employees (KPI n°9)

GDPR training	2023	2022	2021	2020
Staff assigned to the training (new joiners[a])	325	328	201	266
Staff completing the training (new joiners)	317	270	90	189
Percentage of assigned employees trained (%)	97.5	82	43	71

a) New joiners still in Euronext as of 31.01.2024.

The KPI includes only permanent and fixed-term contracts, and excludes new joiners who are experiencing long term absences. In 2023, the scope of this KPI has expanded to include all new joiners from Borsa Italiana and Nordpool. This training is carried out through Euronext Academy which keep track of the achievement of this by the employees. Other more specific awareness-raising / training campaigns are carried out in parallel either physically (with the signing of an attendance sheet), or through distribution by email or publication on the intranet on more specific or more in-depth subjects.

Personal Data breaches (KPI n°10)

The number of personal data breaches is the number of security breaches leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data transmitted, stored or otherwise processed.

The analysis and risk assessments of these breaches conducted by the crisis team have permitted to conclude that 2 of them shall be reported to the competent data protection authority.

	2023		2022		2021		2020	
	Number	Reported	Number	Reported	Number	Reported	Number	Reported
Personal data breach cases	13	2	7	0	10	0	3	0

Internal audit

As the third line of defence, Internal Audit has no operational responsibilities over the entities/processes it reviews. The objectivity and organisational independence of the internal audit function is achieved through the Head of Internal Audit not performing operational management functions and reporting directly to the Chair of the Audit Committee. Internal Audit also has a dotted reporting line to the CEO.

Validated by the Audit Committee at least annually, the internal audit plan is developed based on prioritisation of the audit universe using a risk-based methodology, including input of senior management.

For each audit, a formal report is issued and circulated. This includes recommendations for corrective actions with an implementation plan and the comments of the auditees. Implementation of accepted corrective actions is systematically followed up, documented and reported to the Audit Committee.

3.4.4.2. Educate and engage with our local Community

The Euronext Foundation has been created to support the materialization of our Euronext purpose: "Shaping Capital Markets for Future Generations". Euronext's purpose translates into a strong will to deepen its commitment to the Our Society pillar.

The Euronext Foundation harnesses and concentrates the existing efforts already voted to this cause, throughout the various geographies of the Group, and will act as the umbrella that encompasses all its philanthropic and educational support in these areas via funding, mentorship, and dedicated initiatives.

The Foundation focuses on the three key areas that already are part of its ESG strategy, specifically under the Our Society pillar, deepening its commitment and impact on each one:

- Financial literacy;
- Diversity and inclusion in Finance;
- Marine resources.

Euronext supports community activities that have a direct, positive and measurable impact and that are aligned to its corporate values.

Through training, volunteering, charitable activities, and thought leadership, Euronext employees contribute in three main areas that are relevant to its business:

- Financial Literacy: Euronext seeks to improve the financial knowledge, skills, and attitudes of young Europeans while giving unique mentoring opportunities to its own employees.
- The Blue Economy: Euronext's goal is to be a leader in advancing the Blue Economy in order to mitigate this development, address the threats to the oceans, and contribute to enhanced ocean and coastal resilience.
- Climate change: Euronext is conscious of the challenges linked to climate change, the need to reduce greenhouse gas emissions, and to manage natural resources.

In 2023, Euronext introduced a new policy that allows employees to benefit from two paid volunteering days per year to engage in charity and community work through the organisations supported by the Euronext Foundation.

The Blue Challenge

Euronext has a partnership with Junior Achievement to inspire students aged 16 to 18 about sustainable finance whilst helping them develop core job skills such as teamwork, problem solving, presentation, and entrepreneurial skills. With its partnership, Euronext intends to boost financial literacy and encourage innovation to limit Climate Change and to foster the Blue Economy amongst young entrepreneurs in nine countries. Taking the form of a competition that involves a series of activities including two webinars, one on financial literacy and one on blue economy, the challenge culminates in a final competition at European level on the United Nations World Oceans Day.

In 2023, over 70 Euronext employees across 9 countries volunteered to become mentors for the third edition, with over 250 students benefitting from their mentoring.

Coastal clean-up

Being the first exchange signatory of the UNGC Sustainable Ocean Principles, the conservation of the oceans, seas and marine resources is a sustainable goal that is embraced by Euronext.

Each year, Euronext volunteers engage during a week in the water-front clean-up initiatives, in celebration of the International Coastal Clean-Up Day and the European Sustainable Development Week. In 2023, over 200 Euronext employees from across 14 different places in Europe walked miles alongside the water's edge, filling dozens of bags with trash, preventing it to end in the ocean.

Financial literacy initiatives

Location	Activity
Brussels	Employees contributed to several financial education events and webinars, including courses at the University or to secondary school students and several slots on financial radio channel LN24.
London	Woodhouse College students visited Euronext offices where they learned about Euronext and the Financial Services industry. The college serves as a bridge between school and university, fostering students' confidence and independent learning skills.
Milan	Educational activities with Starting Finance (Italian start-up for financial literacy).
Portugal	A partnership with JA to promote financial literacy for all school age students.
Amsterdam	A volunteering program with AEX Experience and Dutch Central Bank Volunteering for young students to be tour guides at the Amsterdam exchange and at the Central Bank where Euronext employees will be their tour guides.
Paris	L'Ecole de la Bourse, France is a long-standing partner of Euronext, based in its premises in Paris. They specialise in financial education and aim to train retail investors in stock market activities.

Charitable activities

In addition to educational and societal initiatives, several Euronext locations provided support to local charities active in the fields supported by the Euronext Foundation, including:

Location	Charity	Activity
Belgium	A Seat at the Table	A programme that allows diverse individuals to advance in society by offering mentoring by top businesses, Euronext being one.
Ireland	An Cosan	A programme to support women from marginalised communities, providing services, including early years education and care, counselling and family support, and community education, including financial literacy.
The Netherlands	Emma at Work	A mentoring programme to help young people with physical limitations develop, with the goal of finding a job.
UK	The Youth Group	A mentoring programme for young people from poor socio-economic backgrounds, seeking employment within the financial sector.
Norway	Styrelisten	An initiative working to increase board room diversity by recommending and matching talented female board candidates with board nomination committees.
France	Nos Quartiers ont du talent	A programme to help young graduates find work and apprenticeships through professional mentoring.

3.4.4.3 Reporting "Our Society" against the SDGs

SDG	Targets	Qualitative results	Quantitative achievements
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. As a stock exchange, Euronext is committed to making a positive impact on its local and global communities and will focus community activities on two topics: Financial Literacy and Blue Finance.	**Euronext Blue Challenge** Programme developed on the sustainable blue economy platform. **Next Challenge** Euronext has partnered with NextWise, a fintech company specialising in financial education, to organise an innovative 6-month challenge with over 2,000 university students. The challenge utilises an app that simulates a trading environment, leveraging real-time market data from Euronext, while providing all the information needed to support decision-making. The aim is to enhance students' comprehension of financial markets and equip them with practical trading skills.	**London Benchmarking Group Framework** A few hundred students attended multiple workshops, seminars, and lectures hosted by Euronext on Financial literacy impacting new skills development. Over 250 students and around 70 mentors from Euronext participated to the Euronext Blue Challenge helping students develop core job skills, such as teamwork, problem solving and entrepreneurship.
14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Water-themed ESG indices create an incentive for upgrading issuers' water-related practices: As an exchange, Euronext enables companies active in the blue economy to raise capital.	**Euronext Blue Challenge** Several business ideas linked to blue economy were developed by the students in each Euronext country.	**International Coastal Cleanup Day** 200 Euronext volunteers took part in local clean-up events in the framework of the International Coastal Cleanup Day.
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. As a company, Euronext commits to the highest ethical and legal standards of conduct.	▪ Zero cases of corruption; ▪ Zero cases of anti-competition; ▪ Zero whistleblower report received; ▪ No political donation.	Euronext respects the Corporate Governance Guidelines, Recommendations and Codes set in place in the Netherlands and with the ones set in place in the other Euronext locations.

3.4.5 Our Environment

Key Issue:

- Reduce our own carbon footprint and contribute to the protection of the environment

KPI:

- 11: Carbon emissions

New material topic making use of the CSRD :

In its recent materiality assessment (see Section 3.1. - Value creation by Euronext), Euronext has identified Climate Change as a material ESG topic. Reporting in line with the new material topics will occur in 2024, when Euronext is aligned with the CSRD.

3.4.5.1 Reduce Euronext's carbon footprint and contribute to the protection of the environment

Fit for 1.5° is Euronext's commitment to developing services and products that help its business, partners, clients and the European economy in general to curb the increase in global temperatures from pre-industrial times. The company's goal is to help ensure this increase remains below the 1.5°C target, as set out in the Paris Agreement.

As mentioned above, Euronext has been working to prepare for the CSRD. In this context, in 2023 Euronext released two key documents that address the material impact, risks and opportunities posed by the Climate Change: a Group Environmental Policy and the first edition of its Climate Transition Plan.

Euronext's Environmental Policy outlines the Group's key commitments and actions to address Climate Change Mitigation and Adaptation. The Environmental Policy applies comprehensively, covering all of the company's activities and operations across all geographies where Euronext operates. It extends to Euronext's employees. The Group's Head of ESG is responsible for overseeing Euronext's Environmental Policy, and it has been approved by the Managing Board.

Euronext's Climate Transition Plan outlines the Group's steps to transition toward a low-carbon economy. This document provides detailed insights into how Euronext plans to achieve its approved SBTi decarbonization targets with specific actions, milestones, and timelines. An integral part of the "Fit For 1.5°" climate commitment involved Euronext setting science-based quantitative climate targets that will inform in-house climate action efforts. The Transition Plan also sheds light on the Environmental Governance framework established by Euronext.

Based on its activities, Euronext is not subject to any exclusion from the EU Paris-aligned Benchmarks in accordance with exclusion criteria stated in Article 12.1 (d) to (g) and 12.2 of Commission Delegated Regulation (EU) 2020/1818 (Climate Benchmark Standards Regulation).

Setting SBTI targets

Euronext has committed to setting science-based quantitative climate targets by signing the "Business Ambition for 1.5°C", a campaign led by the Science Based Targets initiative in partnership with the UN Race to Zero commitment. Euronext's upgraded greenhouse gas emissions reduction targets have been validated by the Science-Based Targets initiative (SBTi) in February 2023:

1. By 2030, Euronext will reduce its absolute Scope 1, and Scope 2 emissions by 73.5% compared to 2020
2. By 2030, Euronext will reduce its scope 3 travel emissions by at least 46.2% compared to 2019
3. By 2027, Euronext suppliers, representing 72% of Euronext's greenhouse gas emissions derived from purchased goods and services, must set targets on their Scope 1 and Scope 2 emissions (KPI n°6)

The Group may, at some point of time, decide to go further in its effort to reduce its carbon footprint and readjust its targets according to the evolution of the group. Euronext also acknowledges that there are some existing risks not to reach those targets. For more information on the Group's climate risk analysis, see Euronext's TCFD report.

To achieve its decarbonisation targets, Euronext has developed a comprehensive action plan and a dedicated governance ("the Environmental Governance") has been put in place to mobilize internal actors and to facilitate the implementation of an integrated approach to ensure the targets being reached. Euronext's Environmental Governance involves all relevant departments (IT, Facilities, Procurement, ESG, Risk and Finance) and stakeholders internally with monthly project committee meetings and Steering Committee meeting at least on a quarterly basis to provide oversight and decision approval. For more information on the governance put in place, see Section 3.2. ESG Governance and the Sustainability Policy available on the Euronext's website.

The Action plan includes:

- Enhancing, and increasing investments in energy efficiency within the building portfolio, and monitoring temperature in offices;
- Phasing-out gas-fired boilers and decarbonizing the vehicle fleet;
- Moving office spaces and data centres to renewable energy. This includes the move of Euronext's Core Data Centre to the Aruba Data Centre near Bergamo, Italy. The new Core Data Centre is powered 100% by renewable energy sources and self-produces energy through solar panels and its own hydroelectric power stations. A huge decommission plan is under way and will be finalised in 2024;
- Setting a sustainable travel programme and fixing carbon budget by department;
- Engaging with Euronext's key suppliers directly and deploying a new supplier onboarding program, which

would enable Euronext to follow namely its suppliers engagement;

- Training Euronext's staff through Climate Workshops, organised in partnership with Climate Fresk and Digital Fresks, to develop awareness and ability to act by keeping environmental impacts in mind, at both individual and company level.

More details on the actions undertaken by the Group and the dedicated governance to achieve its SBTi targets are available in Euronext's TCFD report available on the Euronext website.

Calculation of Euronext's carbon footprint

Euronext calculated its carbon footprint based on the Bilan Carbone methodology, which is the reference carbon inventory methodology in France, compliant with ISO 14064; GHG Protocol and the Directive No.2003/87/EU.

The chosen boundary of Euronext's footprint is Operational Control: emissions for the installations over which Euronext exercises control. All emissions sources relevant to Euronext's activities have been included in the assessment, following the location based method. This method uses the emission factors of the energy mix from the different locations where the energy is provided, and does not take into account Euronext's achievements in moving to Green electricity. Euronext's GHG emissions reduction targets were set in the same perimeter as for the carbon footprint calculation.

Euronext Group's primary GHG emissions arise from energy consumption in its offices and data centres, from staff travel, and indirectly but mostly from its supply chain (purchase of goods and services, Scope 3). Euronext has a direct grip only on Scope 1, Scope 2 and travels. Euronext reports only on relevant and material Scope 3 emission categories. For example, it does not report on financed emissions (Category 15 of Scope 3 GHG emissions as defined by GHG Protocol) as its business model does not involve investment activities such as loans, equity investments, and underwriting. More details can be found in the TCFD Report.

In 2023, Euronext's teams concentrated their efforts to improve the granularity of the Group's data centres-related GHG emissions assessment and developed a new methodology with the help of Carbone 4. This more granular methodology, whereby the carbon footprint of cloud services is deduced from the details of the invoices for each service from each supplier, and emission from physical data centers are adapted to Euronext's ownership (servers are currently owned by Euronext and installed in rented buildings), new acquisitions (purchases, rentals, etc) and the Power Usage Efficiency (PUE) at the various sites, was successfully implemented in the carbon footprint calculator tool used by Euronext and will enable a more accurate calculation of GHG emissions linked to the data centers.

To allow comparison, figures of 2022 have been recalculated based on the new methodology.

The new results of the carbon footprint calculation for 2022 are the following:

- Total emissions: 44,048 tCO_2 compared to 41,042 tCO_2 with the spend methodology. The increase of 7.3% is mainly due to an increase in the scope 3.
- Scope 1: 336 tCO_2 compared to 341 tCO_2, the new methodology hardly impacting scope 1. Originally Scope 1 accounted for refrigerant gas leaks from air conditioning systems. However, Euronext identified that emissions emitted by data centers buildings belonging to external providers should be categorized under scope 3, rather than scope 1 because they occur off-site;
- Scope 2 (location-based): 6,413 tCO_2 compared to 6,346 tCO_2, the new methodology hardly impacting scope 2;
- Scope 2 (market-based): 680 tCO_2 compared to 296 tCO_2. This large increase can be explained by the fact that Euronext's calculation for 2022 Scope 2 emissions (market-based) underwent some adjustments due to inaccuracies in its electricity consumption data. Rectifying these errors ensures a more precise evaluation of the group's environmental impact, reflecting its commitment to transparency.
- Scope 3: 37,300 tCO_2 compared to 34,355 tCO_2. The increase of 8.5% is due to the fact that data centers accounted in scope 3 has risen from 10 to 14. Moreover, additional categories of equipments are now taken into account, for example, electricity consumed by air conditioning is now based on electricity consumption and Power Usage Efficiency (PUE), which was not the case in the past.

Euronext's Carbon footprint in 2023

The results of the carbon footprint calculation for 2023 are as follows and are compared to the results of 2022 recalculated with the new methodology:

- Scope 1: 355 tCO2, showing an increase of 5.9% compared to the previous year;
- Scope 2 (location-based): 6,359 tCO2, showing a small decrease of 0.8% compared to the previous year;
- Scope 2 (market based): 372 tCO2 compared to 680 tCO2 in the previous year, representing a decrease of 45.3%;
- Scope 3: 42,660 tCO2, indicating an increase of 14.4% compared to 2022.

As a reminder, in 2022 and partially in 2023 Euronext had a double-run of the new Core Data Centre in Bergamo, Italy, and previous data centres, for a transitional period. Moreover, colocation services are now provided directly by Euronext to its clients in the Bergamo data centre since the migration. This has impacted both scopes 1 and 2 emissions. In addition, the growth of scope 1 emissions is partially attributed to an increase in total domestic fuel oil consumption in Euronext's Milan facilities due to increased testing and use of emergency power generators. Additionally, there was an increase of Scope 1 mobility emissions due to a 6% increase in staff numbers in 2023 (including both permanent and trainee employees) compared to 2022. Moreover, new hires, particularly in Italy and India, live further from the office, contributing to the increase.

The decrease in scope 2 emissions on a market-based basis is attributed to the transition to Green energy. In 2023, Euronext continued its efforts to expand the use of green energy in its portfolio of buildings. The number of buildings with certified energy performance by qualified entities also increased.

Additionally, tenants occupying some of the buildings committed to making the necessary investments to guarantee energy efficiency certifications.

Scope 3 emissions are mainly linked to the purchase of goods and services. The increase in scope 3 emissions, compared to 2022, is linked to higher spending in some categories and the increase in scope to include recent acquisitions. To mitigate this, and further increases in the future, Euronext has initiated a "Supplier engagement program". This programme will focus on identifying vendors in the Group's supply chain that have not made commitments to carbon reductions. Euronext will offer training and incentives to encourage a change in behaviour. In addition, Euronext will benchmark itself against competitors and other industry leaders in best practices for scope 3 greenhouse gas management.

Additionally, Euronext has implemented a Data Centers Consolidation Strategy that aims to reduce the overall physical and carbon footprints of the Group by 2028. Major milestones were achieved in 2023, including the decommissioning of Basildon and Oslo primary Data Center, and MTS secondary Data Center. This strategy also involves running Euronext operations on green Data Centers and utilizing the latest generation of infrastructure devices, which will result in a lower environmental impact.

Moreover, recycling electronic devices is a crucial step towards a more sustainable future. It reduces the environmental impact of e-waste, conserves resources, and promotes a circular economy. Aware of the importance of reducing electronic waste, Euronext has ensured that obsolete equipment is properly recycled. In 2023, recycling contributed to a 515 tons reduction in carbon emissions.

More information on Euronext's carbon footprint can be found in the TCFD report available on the Euronext webpage.

SBTi progression towards SBTI targets

In terms of its three SBTi targets, Euronext's progressed well in 2023.

Scope 1 and scope 2 have decreased by 79% (vs 70.5% in 2022) in market-based compared to the base year 2020. The main driver of this decrease is the switch to green electricity in the majority of the buildings and the migration of the Core Data Centre to the Aruba Data centre powered 100% by renewable energy sources and self-produces energy through solar panels and its own hydroelectric power stations.

Scope 3 travel emissions have decreased by 37.6% compared to the base year 2019. Those numbers show that the resumption of travels is taking place gradually and is not yet at the same level as pre Covid. So results linked to business travels may increase again in the coming years. Euronext continues to closely monitor them namely by introducing an internal carbon budget in order to continue to comply with the agreed targets.

Scope incl. categories	2023	Base year	2023 vs base year
Scope 1 tCO_2 (base year 2020)	355	346	
Scope 2 tCO_2 market-based (base year 2020)	372	3,062	
SBTi target scope 1 + scope 2 (market based - base year 2020)	727	3,442	(79)%
SBTI target scope 3 travel emissions (base year 2019)	2,082	3,336	(38)%

Finally on the suppliers engagement, 51 of the 160 vendors (32%) representing over 72% of the emissions derived from purchased goods and services, have fixed SBTi targets at the end of December 2023.

	2023	2022
Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 GHG emissions (%)	32	20

Further details on Euronext's carbon footprint

(in tCO_2)	2023	2022 (Restated)	2022	2021
Scope 1				
Scope 1	355.0	336.0	341.0	380.0
Scope 2				
Scope 2 (Location-based)	6,359.0	6,413.0	6346.0	4280.0
Scope 2 (Market-based)	372.0	680.0	296	796.0
Scope 2 Buildings (Market-based)	371.7	602.0	20	594.0
Scope 2 Data Centers (Market-based)	0.3	78.0	276	202.0
Scope 1 + Scope 2 (market based)	727.0	1,016.0	637.0	1176.0
Scope 3				
Scope 3 (Business Travel)	2,082.0	1,407.0	1407	581.0
Scope 3 (Waste generated in Operations)	12.8	10.0	9	6.0
Total Scope 3	42,660.0	37,300.0	34,355.0	37,680.0
Total carbon footprint				
Total Emissions	49,375.0	44,048.0	41,042.0	42,340.0

3.4.5.2 Reporting "Our Environment" against the SDGs

SDG	Objectives	Qualitative	Quantitative
	Take urgent action to combat climate change and its impacts. As a company, Euronext can contribute to the global and national challenges of climate change.	Euronext's science-based quantitative climate targets have been validated by SBTi in February 2023.	■ 49,375tCO_2 ■ Scope 1 355 tCO_2 ■ Scope 2 6,359 tCO_2 ■ Scope 3 42,660 tCO_2

3.5 Summary of ESG KPI

1. Number of serious incidents on the regulated markets reported to the College of Regulators

	2023	2022	2021	2020	2019
Serious Incidents reported to the College of Regulators	5	7	6	14	11

2. Number of operational alerts treated by EMS

Number of operational alerts	2023	2022	2021	2020	2019
Euronext cash regulated markets	52,936	59,719	47,995	99,409	44,046
Borsa Italiana cash regulated markets	38,974	N/A	N/A	N/A	N/A
Euronext derivatives regulated markets	185,677	505,522	458,626	1,195,733	427,535

3. Availability time of the system Optiq®

Availability of Optiq®	2023	2022	2021	2020	2019
Cash regulated markets (%)	99.98	100	99.99	99.84	100
Derivatives regulated markets (%)	100	99.98	99.94	99.9	99.95

4. Proportion of revenues linked to ESG products and services in the global revenues of the Group

	2023	2022	2021
Total ESG Revenues (€k)	69,874	65,390	59,352
Total Revenues (€k)	1,474,706	1,418,809	1,298,655
% of Total ESG Revenues on Total Revenues	4.7 %	4.6 %	4.6 %

5. Net Promoter Score

NPS	2023	2022
Debt and Equity Listing	+37	+27
Market Data	+32	+23
Euronext Clearing	+10	+41
Euronext Securities	+42	+54
Trading Members	+31	+47
Corporate Services - excluding iBabs	+52	+46
iBabs	+18	NA[1]

[1] iBabs is part of Corporate Services, newly included in the scope for 2023. Its presented in a separate line to allow for consistent comparison year-on-year.

During the previous years, the survey consisted of short phone interviews with the following results:

NPS	2021	2020	2019	2018	2017
Debt and Equity Listing	+24	+27	+12	+14	+9
Market Data	+39	+17	+20	+3	+15
Euronext Clearing	NA	NA	NA	NA	NA
Euronext Securities	+33	+27	+49	+29	+47
Trading Members	+18	+10	+15	+13	-15
Corporate Services	NA	NA	NA	NA	NA

6. Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 GHG emissions

	2023	2022
Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 (%)	32	20

7. Percentage of women in the Senior Leadership Team

	2023	2022	2021	2020	2019
Number of women in the SLT (%)	34	34	34	36	33

8. Use of the Whistleblower mechanism

	2023	2022	2021	2020	2019
Use of the Whistleblower mechanism	0	3	2	0	0

9. Data Protection training by new joiners to the company (new joiners still in Euronext as of 31.01.2024)

	2023	2022	2021 comparable [(a)]	2021	2020
Staff assigned to the training (new joiners)	325	328	201	572	266
Staff completing the training (new joiners)	317	270	90	413	189
Percentage of total employees (%)	97.5	82	43	72	71

(a) These figures have not been assured. These figures are the adjusted numbers of 2021 to reflect the modifications of 2022 in the definition.

10. Personal Data breaches

	2023		2022		2021		2020	
	Number	Reported	Number	Reported	Number	Reported	Number	Reported
Personal Data Breaches	13	2	7	0	10	0	3	0

11. Carbon Footprint (location based)

	2023	2022 [(b)]	2021	2020 comparable[15]
Euronext Carbon footprint	49,375 tCO_2	44,048 tCO_2	42,340 tCO_2	36,272 tCO_2
Scope 1	355 tCO_2	336 tCO_2	380 tCO_2	346 tCO_2
Scope 2	6,359 tCO_2	6,413 tCO_2	4,280 tCO_2	4,432 tCO_2
Scope 3	42,660 tCO_2	37,300 tCO_2	37,680 tCO_2	31,494 tCO_2

(b) Figures for 2022 have not been assured. These figures are the adjusted numbers of 2022 to reflect the more granular way to calculate the carbon footprint of data centers.

GLOSSARY AND REPORTING CRITERIA

As a general rule, all the entities belonging to the Euronext group are in the scope for non-financial information as described in this ESG chapter except when it is specified otherwise.

1. Definition of "Serious Incident" has been agreed with the College of Regulators and is understood a "an event that has caused a market to stop or an event that although the market is still running a material number of members are prevented from trading for a technical reason. Such events could include, but not be limited to trading engine failures, market data dissemination issues, the calculation and/or publication of Official Index Values, issues with tools used to manage and operate the markets". Severity 1 level corresponds to critical severity incidents and Severity 2 level corresponds to high severity incidents that may upgrade to a Serious Incident. The KPI concerns all clients and all equities, exchange traded funds (ETFs), warrants & certificates, bonds, derivatives, commodities and index markets. This KPI covers all the markets operated on the Optiq® trading technology. This KPI does cover Borsa Italiana from the date of the migration of the Italian markets on the Optiq® platform. This migration has taken place in different steps: Phase 1 migration of Equities and ETF in March 2023, so the scope of KPIs after March 2023 includes Borsa Italiana (BITA) in those two segments of Optiq - Phase 2 migration of Warrants and Fixed Income in September 2023, so the scope of KPIs after September includes BITA in 4 different segments of Optiq.

2. Euronext defines operational alerts as alerts that are automatically identified based on defined algorithms and followed-up by our Euronext Market Services (EMS) department. Examples of operational alerts are irregularities in price, volumes and/or market conditions. Alerts help the operational teams of EMS to secure the smooth running of the markets. The type or the scope of alerts may change over time. The KPI is to track the number of alerts being been raised and processed by EMS in order to secure a proper running of the markets and allowing a fair and orderly trading meaning the alerts which have been raised and processed by EMS. This KPI covers all the markets operated on the Optiq® trading technology. This KPI does cover Borsa Italiana from the date of the migration of the Italian markets on the Optiq® platform.

3. Optiq® is Euronext's enhanced, multi-market trading platform, providing customers with maximum flexibility, simplified and harmonized messaging as well as high-performance and stability. Euronext aims to have the trading platform available to its members at least 99.99% of the time. The target is a platform availability between 99.9% and 100% overall on a yearly basis. Any Severity 1/Severity 2 Serious Incident impact Euronext regulated markets which are on the Optiq® trading platform, on trade reporting systems (TCS and Saturn) or impacting one of Euronext MTFs (platforms operated by Euronext but for which it is not license holder) focused on trading activity. This includes the

[15] *These figures have not been assured*

activities linked with the CCPs but it excludes the CSD part. Also excluded are Euronext FX activities and Technology solutions. This KPI covers all the markets operated on the Optiq® trading technology. This KPI does cover Borsa Italiana from the date of the migration of the Italian markets on the Optiq® platform.

4. The KPI consists of calculating the percentage of net revenues related to ESG products and services offered by Euronext in all of its markets, including Borsa Italiana, compared to its overall revenues.Due to limitations of the systems, part of the ESG revenues have been calculated based on estimations. One estimated revenue is linked to pre-migration to Optiq for Borsa Italiana. This revenue is mostly trading fee for Bonds & ETFs which represent a very small part of the overall ESG revenue. This estimation due to pre-migration data will disappear going forward. An estimation that will remain in the future will be connectivity fee. It is expected that the overall connectivity trend on trading is the same for the ESG trading fee. It's a conservative approach and a very small part of the overall ESG revenue. ESG trading revenue is calculated by applying an average fee by product to the total ESG trading volumes. The scope of the KPI has been slightly extended compared to 2022, to include the Sustainable Finance Partnership. The following are considered as ESG revenues:
   - ESG bonds: listing and the trading revenues linked to bonds admitted to listing/admitted to trading on all Euronext markets that are clearly labelled green, social, sustainability, sustainability-linked, etc… and are supported by a framework that is clearly aligned with recognizable industry standards such as the ICMA Principles, and by an independent external reviewer to verify.
   - ESG ETFs: listing and the trading revenues linked to ESG ETF for which the issuer has, in the admission form or post listing, confirmed the fund is ESG OR the index tracks an ESG index OR for which the Euronext ETF product team has – to the best of their knowledge and considering all publicly available information (such as issuer declaration, e.g. SFDR classifications) – determined the fund to be ESG.
   - ESG Funds: listing and the trading revenues linked to ESG Funds for which the issuer has, in the admission form or post listing, confirmed the fund either (i) promotes ESG characteristics or (ii) has a sustainable investment objective.
   - ESG indices: licencing on indices that are categorized as ESG in the benchmark statement issued according to the BMR.
   - ESG services: all the revenues generated by services delivered by Corporate services and Euronext Securities
   - Corporate Services: all the revenues generated by the fully-owned subsidiary of the Euronext Group called "Corporate Services" which help companies with innovative solutions and tailor-made advisory services in Governance (iBabs), Compliance (ComplyLog), Communication (Company Webcast) and Investor Relations (Advisory and IR Solutions).
   - Euronext Securities (CSDs): all the revenues generated by the various solutions provided by Euronext securities to companies to facilitate and improve the accessibility to their general meetings (AGMs & EGMs), to enable them to digitalize most of their governance processes, reduce the use of paper, reduce the travels, and therefore increase shareholder engagement.
   - The ESG revenues are also generated by the shareholders identification and shareholders register services.
   - The revenues generated by the initiative "Sustainable finance partnership" for which partners are provided with the «Borsa Italiana –Sustainable Finance Partner» Label.

5. The Net Promoter Score (NPS) indicates the difference between the so-called detractors and promoters on a scale from 1 to 10. Respondents are grouped as follows: "Detractors" (scores 0-6), "Neutral" (scores 7-8), and Promoters" (scores 9-10). By subtracting the percentage of detractors from the percentage of the promoters the NPS per brand is calculated. This figure can be somewhere between -100% and +100%. The survey has been conducted by an external provider IPSOS and concerns all kind of clients (issuers, trading members, market data providers, etc.) and all locations.The survey is performed once a year in Q3. The results enclosed in the URD are the results from the 2023 survey. As Euronext has done over the past few years, it is progressively expanding the scope of the survey in line with the expansion of the Group. Only FishPool, Commcise, Elite and Technology Solutions have been excluded.

6. Euronext aims to have 72% of purchased goods and services come from suppliers who have set targets on their scope 1 and 2 GHG emissions. This KPI is therefore calculated by first determining the top 72% of Euronext's purchased goods and services, based on spend. This percentage this year is covered by Euronext's top 160 suppliers ranked by spend. This is in line with SBTi guidance on calculating scope 3 emissions using the spend based approach. Subsequently, we determine how many, out of the top 160 suppliers, have set SBTi targets. This KPI represents that percentage.

7. The Senior Leadership Team (SLT) is an internal Executive group which is composed of senior managers from across the Group who are invited to help Euronext develop and achieve its strategic ambitions. The SLT is calculated annually based on the most recent SLT event. The composition is

changing according to the strategy of the company. The SLT includes the Managing Board members.

8. The Company, via its Whistleblowing Policy, allows Employees and third parties to report in confidence alleged breaches of the laws or Company policies. The policy provides internal and external mechanisms. The internal mechanism allows employees to report alleged breaches either to the Compliance department or directly to the management or to the Chair of the Supervisory Board under specific circumstances, in which cases they must necessarily inform the Compliance department of the report received. The external mechanism is managed by the Compliance department per internet by a specialized provider and allows employees anonymous reporting. The KPI only concerns reported cases of whistleblowing. The KPI includes all the employees of the Group.
9. Data protection training by new joiners to the company is expressed in the total of new joiners assigned to this training and in the total of new joiners who completed the training. New joiners are defined as a new Euronext employee (as recorded in Euronext's HR system: Workday) which are still in Euronext as of 31st of January 2024. The KPI includes only permanent and fixed-term contracts, and excludes new joiners who are experiencing long term absences. All new acquisitions (100%) made by Euronext are integrated in these processes as well after harmonisation where applicable. In 2023, the scope of this KPI has expanded to include all new joiners from Borsa Italiana and Nordpool. This training is carried out through Euronext Academy which keep track of the achievement of this by the employees. Other more specific awareness-raising / training campaigns are carried out in parallel either physically (with the signing of an attendance sheet), or through distribution by email or publication on the intranet on more specific or more in-depth subjects.
10. The KPI Personal data breaches concerns the total amount of reported data breaches in line with the GDPR Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of Personal Data and on the free movement of such data ("GDPR"). Personal Data Breach' is defined as "a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data transmitted, stored or otherwise processed". This KPI includes all Euronext employees.
11. Euronext's carbon footprint is calculated based on the Bilan Carbone methodology. The chosen boundary of the footprint was Operational Control: emissions for the installations over which Euronext exercises control. All emissions sources relevant to Euronext's activities have been included in the assessment. The emission factors used are the last version of the ones from ADEME (French Environment and Energy Management Agency) and other various official sources selected by Carbone 4, with sometimes reprocessing, except for business travels for which the factors are the ones defined by DEFRA (Department for Environment Food and Rural Affairs - UK). Those emissions factors are updated on a regular basis. The analysis covers the following scopes:
    - Scope 1: Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.
    - Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam
    - Scope 3 : GHG emissions including other indirect emissions that occur in a company's value chain i.e. employee travel and commuting, emissions associated with contracted solid waste disposal and wastewater treatment, transportation and distribution (T&D), etc.

Euronext internalises the carbon footprint calculation with a dedicated software which automises the process. This implies a more accurate and complete coverage of the carbon footprint. Travel data are issued from the travel agency's tool at the date of the booking.

In 2023, Euronext's teams concentrated their efforts to improve the granularity of the Group's data centres-related GHG emissions assessment and developed a new methodology with the help of Carbone 4. This more granular methodology, whereby the carbon footprint of cloud services is deduced from the details of the invoices for each service from each supplier, and emission from physical data centers are adapted to Euronext's ownership (servers are currently owned by Euronext and installed in rented buildings), new acquisitions (purchases, rentals, etc) and the Power Usage Efficiency (PUE) at the various sites, was successfully implemented in the carbon footprint calculator tool used by Euronext and will enable a more accurate calculation of GHG emissions linked to the data centers.

Appendix - ESG section

Appendix 1) Taxonomy aligned-economic activities

Proportion of Turnover from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

	Year			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
Economic Activities (1)	Code (2)	Turnover (3)	Proportion of Turnover, 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover, 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		k€	%	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	%	E	T
A. Taxonomy-Eligible Activities																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0																
Of which Enabling		0	0															E	
Of which Transitional		0	0																T
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Turnover of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0	0																
A. Turnover of Taxonomy eligible activities (A.1+A.2)		**0**	**0**																
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy non-eligible activities		**1,474,707**	**100**																
TOTAL		**1,474,707**	**100**																

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

Economic Activities (1)	Year			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
	Code(2)	CapEx (3)	Proportion of CapEx, 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) CapEx, 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		k€	%	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	%	E	T
A. Taxonomy-Eligible Activities																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
Installation, maintenance and repair of renewable energy technologies	CCM - 7.6	51	0.04	Y	N/EL	N/EL	N/EL	N/EL	N/EL		Y	Y	Y	Y	Y	Y	0.22	E	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		51	0.04	0.04	0	0	0	0	0		Y	Y	Y	Y	Y	Y	0.22		
Of which Enabling		51	0.04	0.04	0	0	0	0	0		Y	Y	Y	Y	Y	Y	0.22	E	
Of which Transitional		0	0	0							Y	Y	Y	Y	Y	Y	0		T
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Renovation of existing buildings	CCM - 7.2	0	0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								7.65		
Installation, maintenance and repair of energy efficiency equipment	CCM - 7.3	116	0.09	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0		
Installation, maintenance and repair of renewable energy technologies	CCM - 7.6	0	0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0		
CapEx of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		116	0.09	0.09	0	0	0	0	0								7.65		
A. CapEx of Taxonomy eligible activities (A.1+A.2)		**166**	**0.13**	0.13	0	0	0	0	0								7.87		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy non-eligible activities		**130,187**	**99.87**																
TOTAL		**130,353**	**100**																

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

	Year			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
Economic Activities (1)	Code (2)	OpEx (3)	Proportion of OpEx, 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) OpEx, 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		k€	%	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N; N/EL	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	Y ; N	%	E	T
A. Taxonomy-Eligible Activities																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0																
Of which Enabling		0	0															E	
Of which Transitional		0	0																T
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
OpEx of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0	0																
A. OpEx of Taxonomy eligible activities (A.1+A.2)		**0**	**0**																
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy non-eligible activities		**858,470**	**100**																
TOTAL		**858,470**	**100**																

Appendix 2) Summary Social data

The following tables present a comprehensive overview of "Our People" data as of end of December 2023, encompassing various dimensions such as work contract, gender, country, diversity, mobility, training, performance, pay, and turnover.

Workforce per contract type as of 31st of December 2023	Female	Male	Other	Not disclosed	Total
Permanent employees (headcount)	769	1,450	0	0	2,219
Fixed term employees (headcount)	43	53	0	0	96
Non-guaranteed hours employees (headcount)	0	0	0	0	0
Trainees and apprentices (headcount)	94	99	0	0	193
International graduate programme (headcount)	23	16	0	0	39
Full-time employees (headcount)	771	1,488	0	0	2,259
Part-time employees (headcount)	41	15	0	0	56

Employee headcount by gender as of 31st of December 2023	Number of regular employees (Permanent and Fixed Term)
Male	1,503
Female	812
Other	0
Not reported	0
Total employees	2,315

Employee headcount per country as of 31st of December 2023	Regular employees			New joiners (Regular employees hired)
	Total	Women	Men	Total
Italy	788	275	513	89
France	442	158	284	58
Norway	232	89	143	35
Portugal	216	69	147	76
Netherlands	185	61	124	45
Denmark	137	52	85	15
United Kingdom	78	29	49	18
Ireland	69	38	31	15
India	52	12	40	20
Others (less than 50 employees)	116	29	87	21

Contract type by region as of 31st of December 2023	Italy	France	Norway	Portugal	Netherlands	Denmark	United Kingdom	Ireland	India	Total
Number of employees (headcount)	788	442	232	216	185	137	78	69	52	2,315
Permanent employees (headcount)	748	438	228	213	146	135	76	68	52	2,219
Non-guaranteed hours employees (headcount)	0	0	0	0	0	0	0	0	0	0
Fixed term employees (headcount)	40	4	4	3	39	2	2	1	0	96
Full-time employees (headcount)	778	431	226	216	175	129	72	65	52	2,259
Part-time employees (headcount)	10	11	6	0	10	8	6	4	0	56

Diversity	Total	Women	Men
Senior Leadership Team	80	27 (34%)	53 (66%)
Nationalities represented	63	44	54
Average age	43.5 years	43.0 years	43.7 years
Average length of service	9.9 years	10.2 years	9.8 years
Share of women in all management positions (as % of total management positions)	31%		
Share of women in junior management positions [1] (as % of total junior management positions)	30%		
Share of women in management positions in revenue-generating functions (as % of all such managers)	35%		
Share of women	35%		

[1] First level of management.

Training	Total	Women	Men
Average number of training hours per person (regular employees)	11 hours	12 hours	11 hours
Average number of training hours per person, in category "executive"	12 hours		
Average number of training hours per person, in category "non-executive"	10 hours		
Employees trained	98%		
Employees trained: Up to 25 years old	93%		
Employees trained: 26 to 30 years old	98%		
Employees trained: 31 to 35 years old	98%		
Employees trained: 36 to 40 years old	97%		
Employees trained: 41 to 45 years old	99%		
Employees trained: 46 to 50 years old	99%		
Employees trained: 51 to 55 years old	97%		
Employees trained: 56 years old and above	94%		

Performance	Total	Women	Men
Employees with an annual performance and career development discussion/form completed (excluding Nord Pool)	98%	99%	98%
Employees with objectives forms completed (excluding Nord Pool)	96%	97%	96%

Gender pay budget	Salary increase dedicated to gender equality
Compensation process 2019/2020	16%
Compensation process 2020/2021	14%
Compensation process 2021/2022	13%
Compensation process 2022/2023	11%
Compensation process 2023/2024	14%

Staff turnover	Total	Women	Men
Joiners: regular (permanent and fixed term) employees hired	392	149 (38%)	243 (62%)
Joiners: Up to 25 years old	84	31	53
Joiners: 26 to 30 years old	134	55	79
Joiners: 31 to 35 years old	64	26	38
Joiners: 36 to 40 years old	31	13	18
Joiners: 41 to 45 years old	33	9	24
Joiners: 46 to 50 years old	25	8	17
Joiners: 51 to 55 years old	13	3	10
Joiners: 56 years old and above	8	4	4
Leavers	295	108 (37%)	187 (63%)
Attrition rate [2]		8.2%	

[2] Voluntary employee turnover from January to end of December 2023.

Other	
Absenteeism rate [3]	2.17%

[3] Number of days of sickness compared to total number of available workdays. For sake of clarity, maternity/paternity leaves and long term leave of more than one year are not considered in this calculation.

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BØRSEN

4

4 CORPORATE GOVERNANCE

A description of the shareholding structure of the Company is provided in section 6 "General description of the Company and its share capital".

4.1 Dutch Corporate Governance Code, "Comply or Explain" DR

In 2022, the 2016 Dutch Corporate Governance Code ("Code") has been reviewed and updated in consultation with affected parties comprising labour unions and large and listed companies. On 20 December 2022, the Corporate Governance Code 2022 was published by the Monitoring Commission Corporate Governance Code. As of 1 January 2024, management reports for 2023 will need to account for compliance with the updated Code. The Code applies to Euronext as it has its registered office in the Netherlands and its shares are listed on the regulated markets of Euronext Amsterdam, Euronext Brussels, Euronext Lisbon and Euronext Paris. Dutch and English language versions of the Code are available at:

https://www.mccg.nl/publicaties/codes/2022/12/20/corporate-governance-code-2022 and

https://www.mccg.nl/publicaties/codes/2022/12/20/dutch-corporate-governance-code-2022

The Code is based on the notion that a company is a long-term alliance between the various stakeholders of the Company. Stakeholders are groups and individuals who, directly or indirectly, influence – or are influenced by – the attainment of the Company's objectives: employees, shareholders and other lenders, suppliers, customers and other stakeholders. The Managing Board and the Supervisory Board are responsible for balancing these interests, generally with a view to ensuring the continuity of the Company and its subsidiaries, as the Company seeks to create sustainable long-term value. If stakeholders are to cooperate with the Company, they must be assured their interests are duly taken into consideration. Good entrepreneurship and effective supervision are essential conditions for stakeholder confidence in management and supervision. This includes integrity and transparency of the Managing Board's actions and accountability for the supervision by the Supervisory Board.

The Code is based on a "comply or explain" principle. Accordingly, companies are required to state the extent to which they comply with the principles and best practice provisions of the Code in the director's report and, where it does not comply with them, why and to what extent it deviates.

Euronext acknowledges the importance of good Corporate Governance and endeavors to comply with the provisions of the Code. However, there are a limited number of best practice provisions that it currently does not comply with, as further explained below. The fact that Euronext is not compliant with a number of best practice provisions is partly related to the fact that Euronext is an international company supervised since its creation in 2000 by a College of international Regulators, supervising Euronext on a joint basis, which has required some specific features which may interfere with the specific provisions of the Dutch Code. Euronext is active in a number of European jurisdictions, each with different laws, regulations, best practices, codes of conduct, regulatory guidelines and views.

Provision of the Dutch Code regarding corporate law matters, that Euronext did not apply in 2023:

- Euronext did not apply best practice provision 2.1.7, item iii ("for each shareholder, or group of affiliated shareholders, who directly or indirectly hold more than ten percent of the shares in the Company, there is at most one Supervisory Board member who can be considered to be affiliated with or representing them"). Three members of the Supervisory Board namely Diana Chan, Alessandra Ferone and Olivier Sichel, have been proposed by Euronext's Reference shareholders, who as a group acting via the Reference shareholders' Agreement held 23.81% of Euronext's shares on 31 December 2023. This group of shareholders has committed to a lock-up of their shares in Euronext for a certain period, and acts jointly in relation to certain voting matters and has been granted a declaration of non-objection by the Dutch Ministry of Finance. The background of the presence of three members in Euronext's Supervisory Board who can be considered to be affiliated with or representing the Reference shareholders is related to the request of the Euronext College of Regulators at the moment of its IPO in 2014 for it to have a number of stable, long-term shareholders who could propose one third of the members of the Supervisory Board.

Provisions of the Dutch Code regarding the remuneration policy of the Managing Board that Euronext did not apply in 2023:

- Euronext did not apply best practice provision 3.1.2 vi ("…Shares should be held for at least five years after they are awarded"). However, starting 2021 and in order to be aligned with Dutch Corporate Governance Code recommendation and to strengthen the alignment of the Chief Executive Officer exposure to the Euronext development with the shareholders' exposure, the Supervisory Board introduced to the Managing Board Remuneration Policy an additional 2 years lock-up for the Chief Executive Officer resulting in a total five-year period from the date of grant and increased motivation for sustainable performance.
- Euronext did not apply best practice provision 3.2.3 ("the remuneration in the event of dismissal should not exceed one year's salary (the "fixed" remuneration component"). In the event of dismissal by the Company of a member of the Managing Board the

Company has decided to align progressively all new Managing Board members' contracts on the same basis as was decided at the time of recruitment of the Chair of the Managing Board in September 2015, and disclosed at the Shareholders' Meeting of 27 October 2015: the limitation to twelve months of fixed salary as provided in the Dutch Corporate Governance Code has been balanced against governance codes and relevant best practices in the various other jurisdictions in which it is active. E.g. the French AFEP-MEDEF Corporate Governance Code recommendations provide for a maximum termination indemnity of twenty-four months compensation, fixed and variable remuneration. The termination indemnity has been limited to twice the annual fixed salary. Managing Board members' contracts have been amended to that effect.

Provision of the Dutch Code regarding meetings with analysts that Euronext did not apply in 2023:

- Euronext did not apply best practice provision 4.2.3 ("meetings with analysts, presentations to analysts, presentations to investors and institutional investors and press conferences shall be announced in advance on the Company's website and by means of press releases, enabling all shareholders to follow these meetings and presentations in real time, for example by means of webcasting or telephone"): Euronext does not always allow shareholders to follow meetings with analysts and institutional investors in real time. Euronext ensures that all shareholders and other parties in the financial markets are provided with equal and simultaneous information about matters that may influence the share price.

4.2 MANAGEMENT STRUCTURE DR

4.2.1 General Information

No information on family relationships between members of the Supervisory Board, members of the Managing Board and senior staff, as well as on convictions in relation to fraudulent offences, bankruptcies, receiverships, liquidations, companies put into administration, official public sanctions or official public incriminations with regard to these persons has been included in this Universal Registration Document, as these matters are not applicable to these persons.
Further, up to the date of the publication of this Universal Registration Document, the members of the Supervisory Board, of the Managing Board and senior staff do not have potential conflicts of interest between any duties to the Company and private interests. In addition, there are no potential conflicts of interest between the duties carried out on behalf of the Company by members of the administrative, management or supervisory bodies or any senior manager of the Company who is relevant to establishing that the Company has the appropriate expertise and experience for the management of the Company's business, and their private interest or other duties.

When new cases are discussed at Supervisory Board and Managing Board meetings, a regular conflict check is performed in accordance with the Conflict of Interest policy. Conflicted board directors, if any, will neither be allowed to attend nor to participate in such discussion.

The professional address of all members of the Supervisory Board, Managing Board and senior staff of Euronext is Beursplein 5, 1012 JW, Amsterdam, the Netherlands.

Statement of the Managing Board

Responsibilities for the Financial Statements and Directors' Report

In accordance with Article 5:25c(2)(c) of the Dutch Financial Supervision Act (*Wet op het financieel toezicht*), the Managing Board of Euronext hereby declares that, to the best of its knowledge, (i) the Financial Statements prepared in accordance with IFRS as adopted by the European Union and with Part 9, Book 2 of the Dutch Civil Code give a true and fair view of the assets, liabilities, financial position and profit or loss of Euronext and the enterprises included in the consolidation as a whole, and (ii) the directors' report gives a true and fair view of the position on the balance sheet date, the course of events during the financial year of Euronext and the enterprises included in the consolidation as a whole, together with a description of the principal risks that Euronext faces.

Responsibility for this Universal Registration Document

The Managing Board declares that the information contained in the Universal Registration Document, including the Financial Statements and the directors' report, is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import. The Managing Board is responsible for this Universal Registration Document.

In Control Statement

Euronext's first and second lines of defence perform their roles in risk assessments, evaluations of the operating effectiveness of controls, and reporting on risk management and control. The concluding results are regularly discussed at senior and executive management level and in the Risk Committee. Internal Audit, as the third line of defence, evaluates both the design and effectiveness of Euronext's governance, risk management and control processes. Audit reports are discussed with risk and process owners and the Audit Committee.

Based on the risk management processes, the Managing Board makes the following statements regarding internal risk management and control, taking into account Euronext's strategy and risk profile.

In accordance with best practice provisions 1.4.2. and 1.4.3 of the Dutch Corporate Governance Code, Euronext's Managing Board is of the opinion that, in respect of financial reporting risks, the design and operation of the internal risk management and control system, as described in 2.3.2.2 "Risk management" and 2.3.2.5 "Internal control" (i) provides a reasonable level of assurance that the financial reporting in this Universal Registration Document does not contain any errors of material importance, and (ii) has worked properly during the financial year 2023.

As set out in section *2.2 - Mitigation Measures*, Euronext has a robust Enterprise Risk Management Framework and

Governance, which allow the Managing Board to identify and assess the Company's principal risks to enable strong decision making with regards to the execution of the stated strategy. On the basis hereof the Managing Board has assessed the risk profile and the design and operating effectiveness of the risk management and control systems; this was discussed with the Audit Committee of the Supervisory Board.

The Managing Board declares that, based on the current state of affairs including financial position and strategic prospects, the implementation of the Business Continuity Framework and the reporting process on existing or potential material risks, as set out under 2.2.1, this Universal Registration Document provides sufficient insights into any failings in the effectiveness of the internal risk management and control systems with regard to the risks as referred to in best practice provision 1.2.1, the aforementioned systems provide reasonable assurance that the financial reporting does not contain any material inaccuracies, based on the current state of affairs, it is justified that the financial reporting is prepared on a going concern basis, and this Universal Registration Document states the material risks, as referred to in best practice provision 1 .2.1 , and the uncertainties, to the extent that they are relevant to the expectation of the company's continuity for the period of twelve months after the preparation of this Universal Registration Document.

Stéphane Boujnah,

CEO and Chairman of the Managing Board

Øivind Amundsen,

CEO of Oslo Børs

Manuel Bento,

COO

Daryl Byrne,

CEO of Euronext Dublin

Delphine d'Amarzit,

CEO of Euronext Paris

Simone Huis in 't Veld,

CEO of Euronext Amsterdam

Fabrizio Testa,

CEO of Borsa Italiana

Isabel Ucha,

CEO of Euronext Lisbon

Benoît van den Hove,

CEO of Euronext Brussels

Availability of Documentation

The Articles of Association of Euronext, historical information and relevant documentation for investors and shareholders may be viewed on Euronext's website in the Investor Relations section at www.euronext.com/en/investors.

4.2.2 Supervisory Board

Euronext has a two-tier governance structure with a Supervisory Board and a Managing Board. The governance arrangements of the Supervisory Board described in this section are based on, among other things, Dutch law, Euronext's Articles of Association and the rules of procedures for the Supervisory Board. These arrangements include additional provisions and modifications agreed with the Euronext College of Regulators designed to ensure the long-term stability and autonomy of Euronext and curb possible disproportionate levels of influence that large shareholders may have on it.

Responsibilities

The Supervisory Board is responsible for the supervision of the activities of the Managing Board and the supervision of the general course of the business of Euronext. The Supervisory Board may on its own initiative provide the Managing Board with advice and may request any information from the Managing Board that it deems appropriate. In performing their duties, the members of the Supervisory Board must act in the interests of Euronext and those of its business. The Supervisory Board is collectively responsible for carrying out its duties.

Appointment and Dismissal

Members of the Supervisory Board are appointed by the General Meeting (i) in accordance with a proposal of the Supervisory Board or (ii) from a binding nomination to be drawn up by the Supervisory Board, with due observance of the profile (*profielschets*) for the size and the composition of the Supervisory Board adopted by the Supervisory Board and reviewed annually. The profile sets out the scope and composition of the Supervisory Board, taking into account the nature of the business, its activities, and the desired expertise, experience, diversity and independence in matters of capital markets in general and in particular in the areas of finance, economics, human resources and organisation, information technology and data processing, legislation and regulation, legal matters and compliance.

The Articles of Association of Euronext provide that each member of the Supervisory Board is appointed for a maximum period of four years provided that unless such member of the Supervisory Board has resigned or is removed at an earlier date or unless otherwise specified in the relevant proposal for appointment, his or her term of office shall ultimately lapse immediately after the day of the first General Meeting to be held during the fourth year after the year of his or her appointment. An appointment can be renewed for a term of up to four years at a time.

The General Meeting may suspend or dismiss a member of the Supervisory Board at all times. The Supervisory Board can make a proposal for the suspension or dismissal of a member of the Supervisory Board. If the suspension or dismissal occurs in accordance with a proposal thereto by the Supervisory Board, a resolution of the General Meeting for suspension or dismissal of a member of the Supervisory Board requires an absolute majority of the votes cast. However, such resolution of the General Meeting requires a majority of at least two-thirds of the votes cast representing more than one third of the outstanding and issued share capital, if the suspension or dismissal does not occur in accordance with a proposal by the Supervisory Board.

Meetings and Decision-Making

The Articles of Association provide that the Supervisory Board shall adopt resolutions by an absolute majority of the votes cast. Each member of the Supervisory Board has one vote. In the event of a tie of votes, the Chair of the Supervisory Board has a casting vote.

A member of the Supervisory Board may not participate in the deliberation and the decision-making process of the Supervisory Board if it concerns a subject in which this member of the Supervisory Board has a direct or indirect personal interest which conflicts with the interest of Euronext and its business enterprise. In such event, the other members of the Supervisory Board shall be authorised to adopt the resolution. If all members of the Supervisory Board have a conflict of interest as indicated, the resolution shall nevertheless be adopted by the Supervisory Board, notwithstanding the conflicts of interest. In 2023, no transactions have taken place in which members of the Managing Board and Supervisory Board were conflicted.

Members of the Supervisory Board

The Articles of Association provide that the number of members of the Supervisory Board will be determined by the Supervisory Board and will consist of at least three members. Only natural persons can be members of the Supervisory Board. In the event of a vacancy, the Supervisory Board continues to be validly constituted by the remaining member or members of the Supervisory Board.

As per 1 January 2023, the Supervisory Board was composed of Piero Novelli, Dick Suimers, Diana Chan, Rika Coppens, Alessandra Ferone, Manuel Ferreira da Silva, Padraic O'Connor, Nathalie Rachou, Olivier Sichel and Morten Thorsrud.

The Chair of the Supervisory Board, Piero Novelli, is not a former member of the Managing Board of the company and is independent within the meaning of best practice provision 2.1.8 of the Dutch Corporate Governance Code.

Euronext has assessed that the re-appointments to the Supervisory Board in 2023 are in compliance with the requirements as included in art. 5:29a of the Dutch Financial Supervision Act "Wet op het financieel toezicht" regarding the maximum number of Supervisory Board positions.

The Supervisory Board consisted of ten members as at 31 December 2023 and was composed as follows:

Piero Novelli

Piero Novelli is the Chair of the Supervisory Board, chairs the Nomination and Governance Committee and is a member of the Remuneration Committee. He was appointed to the Supervisory Board in 2021.

Mr Novelli has been Co-President of the Investment Bank of UBS and a member of UBS Group Executive Board since October 2018. He was appointed Co-Executive Chairman of Global Investment Banking in 2017 and in 2016 became sole Global Head of Mergers and Acquisitions (M&A). Mr Novelli was a member of the UBS Deutschland AG Supervisory Board from 2013 to 2016. Mr Novelli rejoined UBS in 2013 as Chairman of Global M&A and Group Managing Director. From 2011 to 2012, he was Global Co-Head of M&A at Nomura, having worked as Global Head of M&A at UBS between 2004 and 2009. Before that he worked for Merrill Lynch and held the position of Head of European M&A and Head of European Industrials. Over the course of his 27-year career in investment banking, Mr Novelli has advised corporate boards on many large and complex M&A transactions across all sectors and geographic areas. He is a senior lecturer at the MIT Sloan School of Management and at Imperial College London.

Mr Novelli holds a master's degree in management from the MIT Sloan School of Management and a master's degree in mechanical engineering from Università degli Studi di Roma La Sapienza.

Dick Sluimers

Dick Sluimers is the vice-chair of the Supervisory Board, chairs the Audit Committee and is a member of the Risk Committee. He was appointed to the Supervisory Board in 2016. He is also the Chair of the Supervisory Board of Euronext Amsterdam N.V.

Mr Sluimers is the former CEO of APG Group. He currently is the Chairman of the Supervisory Board of NIBC B.V. and a member of the Supervisory Board of AkzoNobel N.V., as well as a member of the board of directors of FWD Holdings Group Limited. He is a senior advisor of Bank of America and member of the Advisory Board of Spencer Stuart Executive Search.

Mr Sluimers was CFO and later CEO in the management board of pension fund ABP from 2003 to 2008. Between 1991 and 2003 he held various positions at the Dutch Ministry of Finance, most recently as Director General of the Budget. Prior to that he was Deputy Director General at the Ministry of Public Health and held senior positions at the Ministry of Social Affairs and the Ministry of Finance. In addition, he was a member of the Supervisory Boards of Fokker N.V., the National Investment Bank N.V., Inter Access N.V. and ABP Insurance N.V. He was also Trustee of the International Financial Reporting Standards Foundation (IFRS), a member of the Advisory Board of Rabobank, Chairman of the board of Governors of the Postgraduate Programme for Treasury Management at the Vrije Universiteit Amsterdam, a member of the Advisory Board of Netspar and a Board member of Holland Financial Centre.

He studied economics at the Erasmus University in Rotterdam and read politics at the University of Amsterdam for several years.

Diana Chan

Diana Chan is a member of the Supervisory Board and a member of the following committees: Audit Committee, Nomination and Governance Committee, Remuneration Committee and Risk Committee. She was appointed to the Supervisory Board in 2021.

Ms Chan was most recently an Independent Director of Euroclear SA/NV. Prior to that, she was Chief Executive of European Central Counterparty Limited and European Central Counterparty N.V. (EuroCCP) from 2007 to 2018, where she played a leading role in transforming the industry through competitive clearing. She headed EuroCCP from its inception at the start of pan-European equities clearing to its becoming the largest equities CCP in Europe. By the time she left EuroCCP in 2018, it had become the most connected central counterparty for equities trades, with access to around 30 national stock exchanges and Multilateral Trading Facilities where nearly 90% of equities trades are executed.

Ms Chan has worked in the post-trade sector almost her entire career – gaining experience from all segments of the post-trade value chain, from market infrastructures to various intermediaries serving clients investing worldwide. From 2003 to 2015, she was an active member of various industry expert groups set up by the European Central Bank, European Commission and European Securities and Markets Authority to consult and advise on post-trade issues. She contributed to the removal of complex barriers to efficient cross-border investment within the European Union.

Prior to 2007, Ms Chan worked at Euroclear Operations Centre, JP Morgan, Bank of New York, and Citi. At these institutions, she had a variety of global and regional management roles in Europe, America and Asia, with responsibilities for strategy, market policy, product management, network management and financial control.

Ms Chan has been a volunteer throughout her career in charities that alleviate hunger and poverty. While CEO of EuroCCP, she organised the annual Women Leaders in Financial Infrastructure conference to help aspiring women in the financial industry reach their career potential. She currently serves as Corporate Advisor to PAWA, a volunteer-led charity that raises funds for grass-roots projects which promote inclusive and equitable quality education.

Ms Chan was born in The People's Republic of China and is a graduate of the University of Hong Kong and Harvard Business School.

Rika Coppens

Rika Coppens is a member of the Supervisory Board, and was in 2022 a member of the Audit Committee and a member of the Risk Committee. As per 9 February 2023 she retired from both committees and became a member of the Remuneration Committee and the Nomination and Governance Committee. She was appointed to the Supervisory Board in 2021.

Rika Coppens obtained a master's degree in commercial engineering at the University of Leuven, whereafter she kicked off her career as audit manager at PWC and CFO at Bureau Van Dijk Computer Services. After that, Ms Coppens was CFO at Zenitel and EFR Group (currently Eurogarages), where she became CEO. In 2017 she moved to the HR-world as CEO of House of HR and Accent Jobs. Since October 2020 she is fully concentrating on her CEO-role at House of HR. Under her guidance, the group realised a strong growth strategy and high profitability, with a focus on specialised niche markets and innovative HR-applications.

Ms Coppens has gained a vast experience in international mergers and acquisitions, audit and finance, with a keen eye for innovative business development, female entrepreneurship and 'human resourcefulness'. She calls herself 'missionary of work', holding a warm plea for work as the driving force behind wellbeing and welfare. She is a sought-after speaker and opinion leader in the world of entrepreneurship and HR. Within House of HR, Ms Coppens also founded the JobRoad Foundation, focusing on finding a job for people with a longer distance to the labour market, in this way advocating that work is a means to integration in society. In January 2023 Ms Coppens was granted the title manager of the year by Trends magazine in Belgium.

Ms Coppens started in 2016 as independent director at House of HR, where she held the position of chair of the audit committee. She currently is a non-executive board member at Colruyt Group and chair of the Audit Committee and a non-executive board member at La Lorraine Bakery group, both entities having also a strong focus on sustainability, mainly in saving energy in facilities, the production or transportation process relating to food production and retail and in sustainable agriculture.

Alessandra Ferone

Alessandra Ferone is a member of the Supervisory Board, a member of the Audit Committee and a member of the Risk Committee. She was appointed to the Supervisory Board in 2021.

Alessandra Ferone was appointed Risk Director and Secretary of the Risk and Sustainability Committee at Cassa Depositi e Prestiti (CDP) Group, which is also in charge of assessing ESG risks. Ms Ferone is a Non-Executive Director at Saipem, where she is also a member of the Remuneration and Nomination Committee. From 2016 to 2019 she served as Chief Financial Officer for the real estate business of the CDP Group. Prior to that, from 2012 to 2016 she headed the Public Interest Financing at CDP business at CDP Group. Previously, she held a number of positions within CDP, Banca OPI (Intesa SanPaolo Group), SanPaoloIMI Private Equity, BancaIMI, Telecom Italia Mobile and Coopers & Lybrand. From 2017 to 2019 she was a Non-Executive Director at SACE, the Italian Export Credit Agency.

Ms Ferone holds a degree in Economics and Business (summa cum laude) from the University of Naples and obtained the chartered accountant professional qualification in Italy.

Manuel Ferreira da Silva

Manuel Ferreira da Silva is a member of the Supervisory Board, and was in 2022 a member of the Remuneration Committee and a member of the Nomination and Governance Committee. As per 9 February 2023 he retired from both committees and became a member of the Audit Committee and the Risk Committee. He was appointed to the Supervisory Board of Euronext N.V. in 2012.

Mr Ferreira da Silva is Vice-Chairman of the board of the SERRALVES Foundation, Museum of Contemporary Art. He served for thirty-five years as a banker at Banco BPI where he was executive member of the board for the last sixteen years and the CEO of its wholly-owned investment bank. He was a member and, between 2012 and 2014, Chairman of the council of the University of Porto School of Economics and is the Vice-Chairman of the Supervisory Board of Porto Business School. He was a member of the Audit Board of ITAÚ BBA Europe from 2019 to 2022. Mr Ferreira da Silva was member of the board of the Lisbon and Porto Stock Exchanges between 2000 and 2001 and a member of the Advisory Board of the Portuguese Securities Market Commission (CMVM) between 2001 and 2005. Between 1980 and 1989, Mr Ferreira da Silva lectured at the University of Porto School of Economics and spent two years as an assistant director of the Navy's Centre of Operational Research. He graduated with a degree in Economics from the Universidade do Porto in 1980 and holds a MBA from the Nova School of Business and Economics (Lisbon, 1982).

Padraic O'Connor

Padraic O'Connor is a member of the Supervisory Board, a member of the Nomination and Governance Committee and a member of the Remuneration Committee. He was appointed to the Supervisory Board in 2018. He previously was the Chair of the Irish Stock Exchange.

Mr O'Connor began his career in economic roles at the Department of Finance and the Central Bank of Ireland. He was Chief Economist at NCB Group between 1987 and 1991 when he became Managing Director of the Group. He oversaw the sale of the stockbroking and corporate finance group to Nat West Bank, which completed in 1999. He became Chairman of ACC Bank in 1999 and guided its strategic reorientation and sale to Rabobank in 2002. He served on the Board of Rabobank Ireland from 2002 until 2016. Mr. O'Connor was a director of Eircom plc and Beazley plc and chaired the Boards of a number of asset management companies, including LGIM Europe Ltd and Fideuram Asset Management Ireland Ltd.

Mr O'Connor is a member of Chapter Zero, The Directors Climate Forum.

He holds primary and postgraduate degrees in Economics from University College Dublin.

Nathalie Rachou

Nathalie Rachou is a member of the Supervisory Board, chairs the Remuneration Committee and is a member of the Nomination and Governance Committee. She was appointed to the Supervisory Board in 2019.

Ms Rachou is a Non-Executive Director at Veolia Environnement (since 2012) and UBS Group (since 2020). In 1999, she founded Topiary Finance Ltd, an asset management company based in London, of which she remained the CEO until its merger with Rouvier Associés in 2015. She stayed on at Rouvier Associés-Clartan as a Senior Advisor until 2020. Prior to that, from 1978 to 1999, she held a number of positions within Banque Indosuez and Crédit Agricole Indosuez, mostly in capital markets. She was a Non-Executive Director at Laird plc from 2016 to 2018, at Société Générale from 2008 to 2020 and at Altran from 2012 to 2020. In 2023 she joined Fondation Leopold Bellan, a French NGO managing 75 medical establishments mostly for handicapped and dependant people, as a Non-Executive Director. In 2020, she was a founding member of Chapter Zero France, an NGO part of the Climate Governance Initiative. Ms Rachou has a Masters in Management at Ecole des Hautes Etudes Commerciales (HEC) and completed an executive programme at INSEAD.

Olivier Sichel

Olivier Sichel is a member of the Supervisory Board. He was appointed to the Supervisory Board in 2021.

Olivier Sichel is a graduate from ESSEC Business School, Paris Institute of Political Science (Sciences Po Paris) and an alumnus of the ENA (National School of Administration).

Starting out in 1994 as a Finance Inspector in the Ministry of Economy and Finance, he became director of a France Télécom agency in 1998. In 2000, he was appointed Chairman and CEO of Alapage.com, a pioneering e-commerce company and subsidiary of Wanadoo, whose Chairman and CEO he later became in 2002. He then oversaw the integration of the French Internet access leader into the parent company, France Télécom, where he became Executive Director of the Landline & Internet Europe Division. Having made it the number two ADSL provider worldwide, he left the company in 2006, after launching the triple play services with Livebox and VOIP.

As a Partner of the venture capital firm Sofinnova from 2006 to 2012, he supervised investments in innovative tech businesses. He particularly worked on developing diverse platforms and open source stakeholders. He also performed a range of financial transfers or IPO transactions. In 2012 he became Chairman and CEO of the European leader for online shopping guides, LeGuide.com, which he sold to Kelkoo in 2016.

Mindful of the oligopolistic development of the Internet, he has since committed to championing an open and humanistic European perception of the web. As such, in 2015, he founded the Digital New Deal Foundation, a think-tank dedicated to the tech sector which proposed a Digital Pact to the presidential election candidates. Since January 2018, he has been Deputy CEO of Caisse des Dépôts et Consignations, overseeing the group's strategic subsidiaries and holdings (seating on the Board of some of them including La Poste, Transdev, or CDC Habitat). In May 2018, he also became Head of CDC's Banque des Territoires, providing financing and advisory to local administrations, corporates, and projects throughout France.

Under Mr Sichel's leadership, Banque des Territoires has been playing a pivotal role in the sustainable and inclusive transition of the French economy. For example, since its creation in 2018, Banque des Territoires has financed the installation of over 5,700 MW of renewable energy production capacity, as well as the refurbishment of 100,000 social housing units and 165,000 public buildings.

In addition, in 2021, Mr Sichel conducted a mission on the financing of energy efficiency retrofits for private housing at the request of the Minister of Economy and Finance and the Minister of Housing.

Morten Thorsrud

Morten Thorsrud is a member of the Supervisory Board, chairs the Risk Committee, and a member of the Audit Committee. He was appointed to the Supervisory Board in 2019.

Mr Thorsrud is the President and CEO of If P&C Insurance Company, a position he has held since 2019. He has been with the company in various roles since 2002. In addition, he has been a member of the Sampo Group Executive Committee since 2006, a member of the Board of Finance Norge and a member of the Board of Topdanmark, all since 2019, as well as member of the Board of Hastings Group since 2020. Previously, from 1996 to 2002, he was with McKinsey & Company, most recently as an Associate Partner. Mr Thorsrud has a Master of Business and Economics from the Norwegian School of Management.

The table below contains information on the members of the Supervisory Board that has not been included above (also as at 31 December 2023).

Name	Age	Gender	Nationality	Profession	Member since	Independent/non-independent	End of current term
Piero Novelli	58	Male	Italian	Banker	11/05/2021	Independent	2025
Dick Sluimers	70	Male	Dutch	Economist	14/07/2016	Independent	2024
Diana Chan	69	Female	American	Director	09/09/2021	Non-independent	2025
Rika Coppens	51	Female	Belgian	Director/CEO	09/09/2021	Independent	2025
Alessandra Ferone	53	Female	Italian	Business Consultant	09/09/2021	Non-Independent	2025
Manuel Ferreira da Silva	66	Male	Portuguese	Director	15/03/2014	Independent	2024
Padraic O'Connor	74	Male	Irish	Economist	06/06/2018	Independent	2026
Nathalie Rachou	66	Female	French	Director	05/11/2019	Independent	2027
Olivier Sichel	56	Male	French	Director	09/09/2021	Non-independent	2025
Morten Thorsrud	52	Male	Norwegian	Director/CEO	05/11/2019	Independent	2027

Of the two members whose term of appointment ends in 2024, Dick Sluimers has been nominated for re-appointment of a third term of two years taking into account his continued value for the Supervisory Board and the need for continuity that is felt by its members in view of the changes in the Supervisory Board in 2024. Manuel Ferreira da Silva will retire from the Supervisory Board after the Annual General Meeting to be held on 15 May 2024.

Three members of the Supervisory Board, namely Diana Chan, Alessandra Ferone and Olivier Sichel, were proposed by the Company's Reference shareholders, who as a group hold more than ten percent of the Company's shares. The Company regards these three members of the Supervisory Board as non-independent within the meaning of the Dutch Corporate Governance Code. The background of the presence of three non-independent members in Euronext's Supervisory Board is related to the wish of Euronext College of Regulators for Euronext to have a number of stable, long-term shareholders.

Legislation is in place expecting Dutch large companies to represent at least one third of men and women on the supervisory board (Wet ingroeiquotum en streefcijfers). This bill also includes an obligation for large companies in general to strive for appropriate and ambitious targets for the top and sub top of the company. Euronext aims at representing at least 40% of each gender at its Supervisory Board. The new law will be evaluated five years after its introduction.

Euronext meets the gender diversity targets with respect to the Supervisory Board, as four of the ten members are women.

Euronext will continue to promote gender diversity within its Supervisory Board by taking into account all relevant selection criteria including, but not limited to, gender balance, with regard to future appointments.

During 2023, no Supervisory Board member acted as a delegated Supervisory Board member, nor was any Supervisory Board member involved in Euronext's management.

There were no transactions in which there were conflicts of interest with the members of the Supervisory Board that were of material significance to Euronext and/or to any of its subsidiaries during the 2023 financial year.

Euronext's Articles of Association provide for an indemnity for each present or former member of the Managing Board and each present or former member of the Supervisory Board against all costs, charges, losses and liabilities incurred by them in the proper execution of their duties or the proper exercise of their powers in any such capacities in the Company including, without limitation, any liability incurred in defending proceedings in which judgment is given in their favour or in which they are acquitted, or which are otherwise disposed of without a finding or admission of material breach of duty on their part, other than cases of willful misconduct or gross negligence (*opzet of grove nalatigheid*).

The Supervisory Board is supported by Euronext N.V.'s Company Secretary, Sylvia Andriessen.

Euronext N.V.'s registered address serves as the business address for all members of the Supervisory Board, being Beursplein 5, 1012 JW, Amsterdam, the Netherlands.

Committees of the Supervisory Board

Audit Committee

As per 1 January 2023, the Audit Committee was composed of Dick Sluimers, Diana Chan, Rika Coppens, Alessandra Ferone and Morten Thorsrud. As per 9 February 2023, Rika Coppens was succeeded by Manuel Ferreira da Silva. As per 31 December 2023, the Audit Committee was composed of Dick Sluimers, Diana Chan, Alessandra Ferone, Manuel Ferreira da Silva and Morten Thorsrud. The Audit Committee has a majority of independent members and has been chaired by Dick Sluimers throughout the year.

Dick Sluimers, Alessandra Ferone, Manuel Ferreira da Silva and Morten Thorsrud are all identified as members of the Audit Committee having knowledge of accounting and/or audit of financial statements.

The Audit Committees assists the Supervisory Board in supervising and monitoring the Managing Board by advising on matters such as the compliance by Euronext with applicable laws and regulations, Euronext's disclosure of financial information, including its accounting principles, the recommendation for the appointment of Euronext's external auditor to the General Meeting, the recommendations from Euronext's internal auditor and external auditor, and the review of the internal risk management and control systems and IT and business continuity safeguards, as well as technologies and security issues.

The roles and responsibilities of the Audit Committee as well as the composition and the manner in which it discharges its duties are set out in the charter of the Audit Committee included in the regulations of the Supervisory Board. The Audit Committee will meet as often as the Chair of the Audit Committee or a majority of the members of the Audit Committee deems necessary but in any event at least twice a year.

Risk Committee

As per 1 January 2023, the Risk Committee was composed of Morten Thorsrud, Diana Chan, Rika Coppens, Alessandra Ferone and Dick Sluimers. As per 9 February 2023, Rika Coppens was succeeded by Manuel Ferreira da Silva. As per 31 December 2023, the Risk Committee was composed of Morten Thorsrud, Diana Chan, Alessandra Ferone, Manuel Ferreira da Silva and Dick Sluimers. The Risk Committee has been chaired by Morten Thorsrud throughout the year.

The Risk Committee assists the Supervisory Board in supervising and monitoring the Managing Board by advising on matters such as the current and future risk exposures of the Group, reviewing and approving the Group's risk management framework, monitoring its effectiveness and adherence to the various risk policies. The roles and responsibilities of the Risk Committee as well as the composition and the manner in which it discharges its duties are set out in the charter of the Risk Committee included in the rules of procedure of the Supervisory Board. The Risk Committee will meet as often as the chair of the Risk Committee or a majority of the members of the Risk Committee deems necessary but in any event at least two times a year.

Nomination and Governance Committee

As per 1 January 2023, the Nomination and Governance Committee was composed of Piero Novelli, Diana Chan, Manuel Ferreira da Silva, Padraic O'Connor and Nathalie Rachou. As per 9 February 2023, Manuel Ferreira da Silva was succeeded by Rika Coppens. As per 31 December 2023, the Nomination and Governance Committee was composed of Piero Novelli, Diana Chan, Rika Coppens, Padraic O'Connor and Nathalie Rachou. The Nomination and Governance Committee has been chaired by Piero Novelli throughout the year.

The responsibilities of the Nomination and Governance Committee relating to selection and appointment include recommending criteria and procedures to the Supervisory Board for the selection of candidates to the Managing Board and the Supervisory Board and its Committees, identifying and recommending to the Supervisory Board candidates eligible to serve on the Managing Board and the Supervisory Board and its Committees, establishing and overseeing self-assessment by the Managing Board and the Supervisory Board and its Committees, conducting timely succession planning for the CEO and the other positions of the Supervisory Board and the Managing Board and reviewing and evaluating the size, composition, function and duties of the Managing Board and the Supervisory Board, consistent with their respective needs.

The responsibilities of the Nomination and Governance Committee relating to governance include the supervision and evaluation of compliance with the Dutch Corporate Governance Code.

The roles and responsibilities of the Nomination and Governance Committee as well as the composition and the manner in which it discharges its duties are set out in the charter of the Nomination and Governance Committee included in the regulations of the Supervisory Board. The Nomination and Governance Committee will meet as often as necessary and whenever any of its members requests a meeting.

Remuneration Committee

As per 1 January 2023, the Remuneration Committee was composed of Nathalie Rachou, Diana Chan, Manuel Ferreira da Silva, Piero Novelli and Padraic O'Connor. As per 9 February 2023, Manuel Ferreira da Silva was succeeded by Rika Coppens As per 31 December 2023, the Remuneration Committee was composed of Nathalie Rachou, Diana Chan, Rika Coppens, Piero Novelli and Padraic O'Connor. The Remuneration Committee has been chaired by Nathalie Rachou throughout the year.

The responsibilities of the Remuneration Committee include analysing the possible outcomes of the variable remuneration components and how they may affect the remuneration of the members of the Managing Board, preparing proposals for the Supervisory Board concerning remuneration policies for the Managing Board to be adopted by the General Meeting, preparing proposals for the Supervisory Board concerning the terms of the service agreements and total compensation of the individual members of the Managing Board, preparing proposals for the Supervisory Board concerning the performance criteria and the application thereof for the Managing Board, preparing proposals for the Supervisory Board concerning the approval of any compensation plans in the form of share or options, reviewing the terms of employment and total compensation of employees directly reporting to the Managing Board and the total compensation of certain other specified employees, defined in consultation with the Managing Board, overseeing the total cost of the approved compensation programmes, preparing and publishing on an annual basis a report of its deliberations and findings and appointing any consultant in respect of executive remuneration.

The roles and responsibilities of the Remuneration Committee as well as the composition and the manner in which it discharges its duties are set out in the charter of the Remuneration Committee included in the regulations of the Supervisory Board. The Remuneration Committee will meet as often as necessary and whenever any of its members requests a meeting.

Other than as set out in section *2.1 - Risk Factors* above and in accordance with provision 2.1.10 of the Dutch Corporate Governance Code, the Supervisory Board complies with the requirements of independence, as set out in the best practice provisions 2.1.7 - 2.1.9 of the Code.

4.2.3 Managing Board

The Managing Board is responsible for the day-to-day management of the operations of Euronext and is supervised by the Supervisory Board. As described in the Articles of Associations, the Managing Board is required to inform or seek approval from the Supervisory Board depending on the matter. In performing their duties, the members of the Managing Board must act in the interest of Euronext and that of its business. The Managing Board, as a whole or represented by two of its members, is authorised to represent Euronext. In addition, specific authorisations to other senior members of staff are in place.

As per the rules of procedure of the Managing Board, the Managing Board consists of the Chief Executive Officer ("CEO") of the Euronext group, the Chief Operating Officer ("COO") of the Euronext Group, the Head of Global Sales and the CEOs of the local exchanges. The members of the Managing Board are appointed by the General Meeting only in accordance with a proposal of the Supervisory Board or upon a binding nomination by the Supervisory Board. Prior to making a nomination, the proposed nomination must be submitted to the College of Regulators and the Dutch Ministry of Finance for approval.

The Managing Board shall adopt resolutions by an absolute majority of the votes cast knowing that conflicted members cannot participate and that the Chair of the Managing Board has a casting vote.

The following matters require the approval of the Supervisory Board:

- issue and acquisition of shares in the capital of Euronext and debt instruments issued by it or of debt instruments issued by a limited partnership or general partnership of which Euronext is a fully liable partner;
- application for admission of such shares to trading on a Regulated Market or a Multilateral Trading Facility as described in section 1:1 of the Dutch Financial Supervision Act or a similar system comparable to a Regulated Market or Multilateral Trading Facility from a state which is not a member state or the withdrawal of such admission;
- a proposal to reduce the issued share capital;
- entering into or terminating a long-term cooperation with a legal entity or company or as fully liable partner in a limited partnership or general partnership, if such cooperation or termination is of major significance to Euronext;
- the acquisition or disposal of a participating interest in the capital of a company, if the participating interest represents an amount of at least €50 million or such greater amount as the Supervisory Board may determine from time to time and communicates to the Managing Board in writing;
- other investments representing an amount of at least of €25 million or such greater amount as the Supervisory Board may determine from time to time and communicates to the Managing Board in writing;
- a proposal to amend the Articles of Association;
- a proposal to dissolve Euronext;
- a proposal to conclude a legal merger or a legal demerger or to convert Euronext in another legal form;
- application for bankruptcy and for suspension of payments;
- termination of the employment of a considerable number of employees at the same time or within a short period of time;
- far-reaching changes in the employment conditions of a significant number of employees, or far-reaching changes in management incentive schemes or pension schemes;
- the annual budget for the next financial year, including the underlying budgets of the Euronext Market Subsidiaries; and
- proposed investments not covered by the budgets referred to in the preceding paragraph, including proposed investments submitted to the Managing Board by any of the local exchanges, in each case involving an amount greater than such amount as the Supervisory Board may determine from time to time and communicates to the Managing Board in writing.

Additionally, pursuant to Dutch law, resolutions of the Managing Board involving a major change in Euronext's identity or its business require the prior approval of the General Meeting and the Supervisory Board, which in any case include:

- the transfer of the enterprise or practically the whole enterprise to third parties;
- the entering into or the termination of a long-term joint cooperation with another legal entity or company or as fully liable partner in a limited partnership or a general partnership if this cooperation or termination of such a cooperation is of major significance to Euronext;
- the acquisition or disposal of a participating interest in the capital of a company having a value of at least one-third of the amount of the assets according to the balance sheet with explanatory notes thereto, or if Euronext prepares a consolidated balance sheet, according to such consolidated balance sheet with explanatory notes in the last adopted annual accounts.

The Rules of Procedure of the Managing Board provide that the Managing Board of a Euronext Market Subsidiary has the right to reject a resolution by the Managing Board if such resolution solely or principally has an impact on the exchange operated by such Euronext Market Subsidiary and such impact is material or of strategic importance for the Exchange operated by such Euronext Market Subsidiary. Each member of the Managing Board of such Euronext Market Subsidiary has the right to request that the item is placed on the agenda of the Supervisory Board of Euronext. The Supervisory Board shall then discuss the matter with the Managing Board of Euronext, and consider the arguments of the Managing Board of the Euronext Market Subsidiary, following which the Supervisory Board will take a final and binding decision on the matter.

Appointment and Dismissal

Members of the Managing Board are appointed by the General Meeting of shareholders (i) in accordance with a proposal of the Supervisory Board or (ii) from a binding nomination to be drawn up by the Supervisory Board.

The General Meeting of shareholders may suspend or dismiss a member of the Managing Board at all times. Managing Board members may also be suspended by the Supervisory Board.

Members of the Managing Board

The table below lists the members of the Managing Board at 31 December 2023.

Name	Age	Position	Appointed on
Stéphane Boujnah	59	Group CEO	4 November 2015
Øivind Amundsen	56	CEO Oslo Børs	14 May 2020
Manuel Bento	48	COO	17 May 2023
Daryl Byrne	52	CEO Euronext Dublin	24 October 2018
Delphine d'Amarzit	50	CEO Euronext Paris	27 May 2021
Simone Huis in 't Veld	53	CEO Euronext Amsterdam	5 November 2019
Fabrizio Testa	55	CEO Borsa Italiana	18 May 2022
Isabel Ucha	58	CEO Euronext Lisbon	16 May 2019
Benoît van den Hove	48	CEO Euronext Brussels	1 July 2023

On 1 January 2023, the Managing Board was composed of Stéphane Boujnah (Chair), Øivind Amundsen, Daryl Byrne, Delphine d'Amarzit, Simone Huis in 't Veld, Fabrizio Testa, Chris Topple, Isabel Ucha and Vincent Van Dessel.

At the Annual General Meeting held on 17 May 2023, Manuel Bento was appointed to the Managing Board with immediate effect and Benoît van den Hove was appointed to the Managing Board with effect from 1 July 2023.

Vincent Van Dessel resigned from the Managing Board with effect from 1 July 2023.

Chris Topple resigned from the Managing Board with effect from 30 October 2023. The appointment of his successor, Simon Gallagher, is on the agenda of the Annual General Meeting to be held on 15 May 2024.

All the appointments and re-appointments that occurred since were made for four year terms in compliance with the Dutch Corporate Governance Code.

Euronext's registered address serves as the business address for all members of the Managing Board, being Beursplein 5, 1012 JW, Amsterdam, the Netherlands.

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Nationality:
French

First appointment:
2015

Second appointment:
2019

Third appointment:
2023

Location:
Paris

Stéphane Boujnah

CEO and Chairman of the Managing Board

Previous experiences:
Head of Santander Global Banking and Markets for continental Europe

Biography:

Stéphane Boujnah has been the CEO of Euronext and Chairman of the Managing Board of Euronext since 2015. Before joining Euronext, Mr Boujnah was Head of Santander Global Banking and Markets for continental Europe. From 2005 to 2010, he was Managing Director at Deutsche Bank responsible for the development of the investment banking operations in France. Previously he founded KM5 Capital, an advisory company specialised in equity raising and M&A advice for venture capital funds and innovative technology companies. From 2000 to 2002, he was Director of the European M&A team of Credit Suisse First Boston Technology Group in Palo Alto and London. From 1997 to 1999, Mr Boujnah was senior adviser to the French Minister for Economy, Finance and Industry. He began his career in 1991 as a business lawyer at Freshfields.

Mr Boujnah was a member of the Commission pour la Libération de la Croissance Française established by the then President Nicolas Sarkozy in 2007. He is founder and Vice-President of the board of directors of the think tank En Temps Réel and President of the board of directors of Accentus and Insula Orchestra, a non-profit cultural initiative.

He is also a member of the board of Borsa Italiana.

He graduated from the Institut d'Études Politiques de Paris. He holds a Master degree and a DEA in Law from La Sorbonne Paris, a LLM in Law from the University of Kent, and a MBA from Insead.

Other current mandates:
- Member of the Board of Borsa Italiana
- Vice-President of the Board of directors of the think tank En Temps Réel
- President of the Board of directors of Accentus and Insula Orchestra

Age:
56
Nationality:
Norwegian
First appointment:
2020
Location:
Oslo

Øivind Amundsen

CEO of Oslo Børs

Previous experiences:
Executive Vice President Primary Markets and Legal Affairs on Oslo Børs

Biography:
Mr Amundsen took up his position as President and Chief Executive Officer of Oslo Børs on 1 February 2020. He came to Oslo Børs in 2010 as Executive Vice President Primary Market and Legal Affairs. He has former positions as partner in the lawfirm Selmer working with Public Equity Capital Transactions and Executive Vice President Corporate Affairs in KLP. Prior to this he worked, among others, several years as lawyer in the legal department with Oslo Børs. Mr Amundsen is Cand. jur from the University in Bergen, Authorised Financial Analyst from The Norwegian School of Economics and Business Administration in addition to higher officer from the Norwegian Naval Academy.

Other current mandates:

- Chair of the Board of Fish Pool
- Member of the Board of Singapore Norway Chamber of Commerce

48
Nationality:
Portuguese
First appointment:
2023
Location:
Paris

Manuel Bento

COO

Previous experiences:
CEO of Euronext Technologies in Porto and CTO IT Transversal

Biography:

Manuel Bento is Chief Operating Officer of Euronext. Mr Bento previously held the position of CEO of Euronext Technologies in Porto and CTO IT Transversal. In the last six years, he held various technology and operations positions and led major transformation programmes within Euronext since joining in 2016. He has been responsible for delivering several critical projects such as the setup of the Porto technology centre, the development of Euronext cyber security platform, the Core datacenter migration to Bergamo, Italian and Norwegian markets migration onto the Optiq® and Cash Clearing migration.

Mr Bento has an Engineering degree, an Executive MBA from I.E. and several executive education diplomas from HBS, Insead, Stanford GSB and MIT.

Other current mandates:
- Member of the Board of Euronext IP & IT Holding B.V.
- Member of the Board of Euronext Technologies S.A.S.
- Member of the Board of Euronext Technologies Srl.
- Member of the Board of Euronext Technologies Unipessoal Lda
- Member of the Board of Nord Pool

Age:
52
Nationality:
Irish
First appointment:
2018
Second appointment:
2023
Location:
Dublin

Daryl Byrne

CEO of Euronext Dublin

Previous experiences:
Chief Regulatory Officer of Euronext Dublin

Biography:

Daryl Byrne became the CEO of Euronext Dublin in 2018. He joined the Irish Stock Exchange in 2000 and has held a number of senior management roles. Since 2011, as Chief Regulatory Officer, he was responsible for Euronext Dublin's regulatory functions and operations relating to the listing of financial instruments on Euronext Dublin's markets, as well as regulatory advocacy. Mr Byrne was instrumental in the development of Euronext Dublin's global markets for securities. Previously he held the position of Head of Strategy Planning and Brand. Mr Byrne is a member of the Advisory Group of Balance for Better Business. He participated on the ESMA Corporate Finance Standing Committee Consultative Working Group, the European Corporate Governance Codes Network, the Irish REITs Forum and the Company Law Review Group.

Mr Byrne is a Fellow Chartered Accountant and holds a Bachelor of Business Studies degree from Trinity College Dublin.

Other current mandates:

- Member of the Board of Euronext Dublin

Age:
50
Nationality:
French
First appointment:
2021
Location:
Paris

Delphine d'Amarzit

CEO of Euronext Paris

Previous experiences:
Deputy CEO of Orange Bank

Biography:

Delphine d'Amarzit is Euronext Paris CEO since 2021. She joined from Orange Bank where, as Deputy CEO since 2016, she was responsible for the oversight of the Operations, Finance, Risk and Compliance functions. Delphine d'Amarzit holds an extensive knowledge of European and French capital markets, notably having held senior positions within the French Treasury Department for several years with responsibilities for capital markets development, European financial regulation, and corporate financing. From 2007 to 2009, she was also in charge of financial and economic affairs at the office of the French Prime Minister where she participated in the definition of the public response to the financial crisis, rescue package and recovery plans and coordinated the action on all matters related to economic reform and financial services.

Delphine d'Amarzit graduated from Institut d'Etudes Politiques de Paris, holds a Master's degree in Business law from Paris I Pantheon-Sorbonne and is an alumna of the French National School of Administration.

Other current mandates:
- Member of the Board of MTS
- Member of the Board of Euroclear Holding
- Member of the Board of Euroclear SA
- Member of the Board of Institut Pasteur

Age:
53
Nationality:
Dutch
First appointment:
2019
Second appointment:
2023
Location:
Amsterdam

Simone Huis in 't Veld

CEO of Euronext Amsterdam

Previous experiences:
Managing Director and Country COO of Deutsche Bank NL

Biography:

Simone Huis in 't Veld is CEO of Euronext Amsterdam and member of the Managing Board of Euronext N.V. since 2019. She joined Euronext from her position as Managing Director and Country COO of Deutsche Bank in the Netherlands. In that role she was responsible for the oversight of the Operations, Finance, Risk, Compliance, Legal and Regulatory Affairs functions. She holds an extensive knowledge of the European and Dutch Financial markets. Her previous professional experience includes over twenty-five years of senior management experience in the financial sector (Deutsche Bank, ABN AMRO, Rabobank), of which over fifteen years in Executive/Board roles in an international environment.

She holds a Master's degree in Sociology from the University of Amsterdam and participated in several (non)executive management courses (Nyenrode Business University, London Business School, Singularity University, among others).

Other current mandates:
- Member of the Board of MTS
- Member of the Board of Euronext Securities Copenhagen
- Member of the Board of VNO-NCW
- Member of the Advisory Panel of the Autoriteit Financiële Markten

Age:
55
Nationality:
Italian
First appointment:
2022
Location:
Milan

Fabrizio Testa

CEO of Borsa Italiana

Previous experiences:
CEO of MTS

Biography:

Mr Testa was appointed Chief Executive Officer and General Manager of Borsa Italiana, part of the Euronext Group, in November 2021 and joined the Managing Board of Euronext N.V. in May 2022. His appointment as CEO of Borsa Italiana coincided with his return to Italy, after spending more than 20 years in London. From 2014 to 2021 he held the position of CEO of MTS, the leading electronic market in Europe for trading fixed income securities. Mr Testa spent the first years of his career in the Milan and London branches of Bank of America, where he was part of the Treasury team responsible for trading government bonds.

Before graduating in Economics and Finance at "Bocconi" University in Milan, Mr Testa served as a second lieutenant in the Italian Carabinieri army.

Other current mandates:
- Member of the Board of Euronext Holding Italia
- Member of the Board of Borsa Italiana
- Member of the Board of MTS

Age:
58
Nationality:
Portuguese
First appointment:
2019
Second appointment:
2023
Location:
Lisbon

Isabel Ucha

CEO of Euronext Lisbon

Previous experiences:
Advisor for Economic Affairs to the Portuguese Prime Minister

Biography:

Isabel Ucha is CEO of Euronext Lisbon and Member of the Board of Interbolsa (Euronext Securities Porto),

the Custody and Settlement service provider (CSD) for the Portuguese market. Having joined the Portuguese Stock Exchange in 2008, her previous professional experience includes several senior roles, including serving as Advisor for Economic Affairs to the Prime Minister, Head of Issuing and Markets at the Portuguese Treasury and Debt Management Agency (IGCP), and at the Portuguese securities market regulator (CMVM). Ms Ucha has also been an assistant lecturer at Universidade Católica, teaching different economic and financial programs (Economics, Corporate Finance, Economics of Finance, Economics of Regulation, European Economics, Portuguese Economy, Corporate Governance).

Ms Ucha holds a degree in Economics from Universidade Católica and a Masters in Economics from Universidade Nova, as well as a Masters in Finance from London Business School

Other current mandates:
- Member of the Board of Verdipapirsentralen
- Member of the Board of Interbolsa
- Chait of the Board of Elite

48
Nationality:
Belgian
First appointment:
2023
Location:
Brussels

Benoît van den Hove

CEO of Euronext Brussels

Previous experiences:
Head of Listing of Euronext Brussels

Biography:

Benoît van den Hove is the CEO of Euronext Brussels since July 2023. Prior to that he was the Head of Listing of Euronext Brussels, since July 2018. Mr van den Hove has more than 20 years of experience in various roles in capital markets' and financial markets' roles, advising Belgian and international clients on the financing topic through capital markets' transactions. Prior to joining Euronext, he spent 17 years at ING, a global Benelux bank. In his last role, he was the Belgian Head of the Legal Financial Markets' team of ING as well as the Product Head of Capital Markets. He started his career as a lawyer at Linklaters.

Mr Van den Hove holds a Master's Degree in Law (KULeuven) and an International Executive MBA (Louvain School of Management).

Other current mandates:
- Member of the Board of Stichting Euronext Foundation
- Member of the Board of the Belgian Corporate Governance Committee
- Member of the Board of the Association Européenne pour le Droit Bancaire et Financier

Senior Management

Sylvia Andriessen

Sylvia Andriessen is the General Counsel and Corporate Secretary of the Company. She has more than 25 years of experience in various international legal functions both in listed, private equity and privately owned companies. On 1 September 2018 Ms Andriessen joined the Euronext group as Deputy General Counsel, and became General Counsel as per 20 December 2019. Prior to joining Euronext she was the Chief Legal Officer of the commodity trading group Nidera, based in Rotterdam/Geneva, including responsibility for ESG and Insurance, and Deputy GC of COFCO International. Before her role at Nidera/COFCO, Ms Andriessen was General Counsel and part of the Executive Management Committee at the Odigeo Group based in Barcelona, and General Counsel at the Provimi Group based in Rotterdam. Before that during a period of 17 years she held various Legal and General Counsel positions at Unilever in Rotterdam and London, with special focus on Mergers and Acquisitions, Restructuring and Corporate Governance.

Ms Andriessen is a member of the board of Stichting Euronext Foundation.

Anthony Attia

Anthony Attia is Global Head of Derivatives and Post Trade. He was appointed in this position in 2023. Prior to that he was Global Head of Primary Markets and Post Trade from 2021 to 2023. He served as Chair and CEO of Euronext Paris from 2014 to 2020 while also in charge of the equity listing and post trade business for the Group. In addition, he has led the successful development of Euronext's Optiq® trading platform from 2017 to 2019.

Before the IPO of Euronext in 2014, Mr Attia was a Senior Vice-President and Chief of Staff at NYSE Euronext based in New York from 2009 to 2013. Areas of responsibilities included strategy, technology and integration. Mr Attia was Executive Director, Head of Business Change at NYSE Euronext from 2007 to 2009 and Executive Director, Head of Operations from 2004 to 2007 at Euronext in Paris. At the creation of Euronext in 2000, he was the Programme Director for the integration of the French, Belgian and Dutch exchanges. Mr Attia began his career in the Paris stock Exchange in 1997.

Mr Attia is Chair of the Board of Euronext Clearing and Chair of the Board of Euronext Dublin. He is the Vice President of FESE, the Federation of European Securities Exchanges.

He was the Chair of the Board of Elite from 2021 to 2023. He also served as Board Directors at Euroclear Holding from 2019 to 2021 and at LCH SA from 2014 to 2022.

Mr Attia holds an Engineering degree in computer science, applied mathematics and finance.

Camille Beudin

Camille Beudin is Head of Diversified Services at Euronext. This business line includes Euronext FX, the electronic communication network for foreign exchange, precious metal and NDF trading; Nord Pool, a leading European power infrastructure; the agricultural commodity franchise and the investor services business notably Commcise, the software services for commission management and investment research valuation solutions to the buy-side, sell-side and independent research providers; as well as future diversification projects. He was appointed in this position in 2023. Prior to that, he was Head of Strategic Development and Mergers & Acquisitions at Euronext. Mr Beudin joined Euronext in 2016 to lead the external growth and the strategic development of Euronext. Before joining Euronext, Mr Beudin spent 8 years in the investment banking industry working on corporate finance products such as mergers & acquisitions, equity capital markets advisory and structuring of financing solutions. He was notably Vice President in the Investment Banking Division of Deutsche Bank between 2012 and 2016 and an Associate at Royal Bank of Scotland prior to that. He graduated from EDHEC Business School with a Master in Management.

Mr Beudin is the Chair of the Board of Directors of Nord Pool, Euronext FX, and Commcise. He is also a director of Oslo Børs, Euronext Dublin and Euronext Holding Italia.

Mathieu Caron

Mathieu Caron is Group Head of Primary Markets, appointed in this position in November 2023 in charge of equity and debt listing, funds, Elite and Corporate Services. Prior to that, he was Head of Listing and Corporate Services since February 2021.

Today Euronext is the largest equity listing franchise in Europe with nearly 1,900 equity issuers worth €6.6 trillion in aggregated market capitalisation, the #1 global leading bond listing venue with 55,000+ bonds listed, and Corporate Services is our high-growth suite of leading digital and corporate solutions delivering best-in-class B2B solutions to 4,800+ clients.

Mathieu Caron joined Euronext in 2010, and before joining Euronext he was working for large fast-paced international companies at Dell Technologies from 2006 to 2009, Accenture from 2004 to 2006 and Vivendi Universal/Canal+ from 2000 to 2004.

He holds a Master of IGS in Paris, attended executive leadership programs at INSEAD, and is a Director of Elite, Euronext Corporate Services, iBabs, Company Webcast and ComplyLog.

Aurélie Cohen

Aurélie Cohen is Chief Communications and Investor Relations Officer at Euronext. She was appointed to this position in July 2020. She manages investor relations and external and internal communications for the Group, and leads the medium-term strategic plan building process. Ms Cohen joined Euronext in 2017 as Head of Investor Relations. Prior to that, Ms Cohen was Head of Investor Relations from 2013 to 2017 at Groupe ADP, the leading international group operating, designing and building Paris and international airports. She began her career at EY as a senior auditor from 2009 to 2013.

Ms Cohen is a graduate of the Ecole Supérieure des Sciences Economiques et Commerciales (ESSEC) in Paris.

Ms Cohen is Member of the Board of Directors of Borsa Italiana SPA and Member of the Board of Directors of CLIFF, the French investor relations association.

Pierre Davoust

Pierre Davoust is Head of Central Securities Depositories. He was appointed in this position in 2020.

Prior to that, he was Head of Business Development from 2019 to 2020.

Before joining Euronext, Mr Davoust was Head of Markets at SETL, a UK-based blockchain company focusing on financial services, Chief Executive Officer of Iznes, a fund distribution platform and Non-Executive Director of ID2S, a blockchain-based Central Securities Depository.

Prior to that, he held various positions at the French Treasury, and served in particular as deputy head of financial markets.

Mr Davoust holds Master's degrees from Ecole Polytechnique, Ecole des Ponts ParisTech and Paris School of Economics.

Mr Davoust is the chair of the board of directors of Euronext Securities Copenhagen, Euronext Securities Milan, Euronext Securities Oslo, Euronext Securities Porto.

Simon Gallagher

Simon Gallagher is CEO of Euronext London and Head of Global Sales. He was appointed to this position in November 2023, subject to approval in the Annual General Meeting to be held on 15 May 2024. Prior to this, he held various roles within Euronext, most recently Head of Cash and Derivative Markets from 2018 and Head of Cash Equity trading from 2014. He had previously held various roles in Sales, Finance, Strategy within the group. Before joining Euronext, Mr Gallager held positions within the oil and gas sector. He is a CFA Charterholder and holds Masters Degrees in Business Administration and in Philosophy from the University of Birmingham, as well as a BSc in French and Economics from the University of Surrey. Mr Gallagher is a Member of the Board of Euronext Clearing, Oslo Børs and MTS.

The appointment of Mr Gallagher to the Managing Board is on the agenda of the Annual General Meeting to be held on 15 May 2024.

Amaury Houdart

Amaury Houdart is the Chief Talent Officer of the Company. He leads the Human Resources function and strategic initiatives related to employee engagement, talent development, and organisational changes across Euronext. Mr Houdart joined Euronext in 2016.

Prior to joining Euronext, Mr Houdart was Group Director of Human Resources and Employee Shareholding at Groupe Steria SCA, a leading European IT services company. In his earlier roles, he was Business Consulting Manager, Mergers & Acquisitions Director and then Human Resources Director at Unilog LogicaCMG, a leading international IT services company. Mr Houdart graduated from Paris Dauphine University in International Affairs.

Daniela Melato

Daniela Melato is Head of Group Data Services and she was appointed in this position in November 2023.

Prior to that, she was responsible for the Data Solutions business in charge of managing non-real time data assets, including End of Day Index data, Reference data, Corporate Actions, Historical Trading data as well as Quant Research and Analytics, with the objective to monetize proprietary data and create growth by diversifying the source of market data revenues on top of the traditional Real Time data business. In her role Ms Melato had also the responsibility to improve cross selling by accelerating creation of new data product offering across the Group leveraging synergies of existing data capabilities in product design, fast prototyping, tools and expertise in pricing and market data policies.

Ms Melato has more than 20 years of experience in the market data industry, starting from designing the Real time Borsa Italiana market data business, managing sales and audit team, strategy planning and budget management up to become responsible for the London Stock Exchange Group market data business before joining Euronext.

Giorgio Modica

Giorgio Modica is the Chief Financial Officer of the Company. He joined Euronext in 2016. His responsibilities include also Euronext's financial and corporate facilities and services. Mr Modica joined from BNP Paribas (Paris and Milan), where he was a senior Corporate Finance banker in Financial Institutions for nine years, holding the responsibility for the Stock Exchange sector globally and for the overall FIG markets in Italy and Spain. In over fifteen years of international investment banking experience, Mr Modica covered both M&A and ECM, as well as the structuring of financing solutions (equity and debt).

Since 2011, as advisor to NYSE Euronext and then Euronext, Mr Modica has supported the Euronext group very closely throughout its key milestone transactions, including the attempted combination with Deutsche Börse, the carve-out of Euronext and its subsequent IPO. Mr Modica started his career at the venture capitalist firm MyQube in Geneva, and then moved to investment banking at HSBC in Milan and MCC/ Capitalia in Rome. Mr Modica graduated cum-laude from Bocconi University and holds a Master in Finance from SDA Bocconi.

He is the Chair of Oslo Børs, the Vice-Chair of Cassa di Compensazione e Garanzia, and a Director of Borsa Italiana, Euronext Holding Italia, Monte Titoli, MTS, and Euronext FX Inc..

Angelo Proni

Angelo Proni is CEO of MTS SpA and EuroMTS Ltd. He was appointed to this position in March 2022. Prior to that, at MTS, he was Head of New and Domestic Markets from 2003 to 2022, CEO of Coredeal MTS Ltd. from 2002 to 2003, Head of Market and Client Relations from 2000 to 2002, and Director of Product and Market Management from 1999 to 2000. Before joining MTS, Mr Proni was Marketing & Sales Executive at Deutsche Bank in Milan from 1996 to 1999, and Senior Analyst at LIFFE in London from 1992 to 1995.

He was born in Milan, grew up in London and Brussels, where he obtained his European Baccalaureate, before returning to Milan where he graduated in Economics from Bocconi University.

Mr Proni is Board Director of MTS SpA, EuroMTS Ltd. and MTS Associated Markets SA, as well as Executive Chair of MTS France.

Nicolas Rivard

Nicolas Rivard is the Global Head of Cash Equity and Data Services at Euronext. Created in November 2023, this business line regroups cash equity trading, colocation and connectivity services, Market Data, and Quant products, with the ambition to offer clients with enhanced and innovative trading and data services.

Mr Rivard was previously Head of Advanced Data services since 2019, and joined Euronext as Chief Innovation Officer in 2016, after 6 years at the Boston Consulting Group where he worked mainly in the financial service sector. He holds an MBA from INSEAD and an engineering degree from Ecole Centrale de Paris.

Tatyana Valkova

Tatyana Valkova is Head of risk and compliance (Chief Risk and Compliance officer). She was appointed in this position in October 2023. Prior to that, she was Head of Internal Audit (Chief Internal Audit Executive) from 2021 to 2023. Before joining Euronext, Ms Valkova was Supervisor Internal Audit on capital market from 2011 to 2020 at Société Générale and Supervisor audit on asset management from 2007 to 2011 at PWC. She has a masters degree in economics from Université Paris II Pantheon Assas.

Ms Valkova is Director of Nord Pool Holding AS, Nord Pool AS and Nord Pool European Market Coupling Operator AS.

Diversity

In accordance with Dutch legislation (Wet ingroeiquotum en streefcijfers), Euronext strives for appropriate and ambitious diversity targets at the top and sub top. Euronext aims at representing at least 30% of women at its Managing Board and Senior Leadership Team and 40% at its Supervisory Board.

Euronext qualifies as a large Dutch Company and complies with its gender diversity targets with respect to the Managing Board, as three of its ten[16] members were female as at 31 December 2023, and the Supervisory Board as 4 out of 10 members were female as at 31 December 2023.

Euronext complies with its gender diversity targets with respect to the Senior Leadership team in 2023 that was composed of 34% of women. The balance of country representation was the following: 39% France, 23% Italy, 9% the Netherlands, 6% United Kingdom, 6% Norway, 6% Ireland, 4% Denmark, 4% Portugal, 3% Belgium and 1% United States of America. The average age of this group is 48 years.

[16] Including Simon Gallagher, whose membership in the Managing Board is subject to regulatory and shareholder approval

Euronext will continue to promote diversity within its Managing Board by taking into account all relevant selection criteria including, but not limited to, gender balance, with regard to future appointments.

Euronext management gender diversity as of December 2023

	Managing Board	Senior Leadership Team
Men	7	53
Women	3	27

4.3 REPORT OF THE SUPERVISORY BOARD

4.3.1 Meetings

The Supervisory Board met nine times in 2023: there were four in-person meetings, and five meetings by videoconferencing.

The Supervisory Board discussed amongst others the following topics: the quarterly, half year and full year results, the dividend proposal, the 2024 budget and forecast, the agendas of the General Meetings, including the nomination for appointments and re-appointments to the Supervisory Board and the Managing Board, the nomination of the external auditor, the strategy, the implementation of the strategy and the principal risks associated with it, the risk profile, cyber security, ESG risks and opportunities, M&A opportunities, the integration of the Borsa Italiana Group and the migration of clients to the Core Data Centre, to Euronext Clearing and to Optiq. It monitored the activities of the Managing Board with regard to creating a culture aimed at long-term value creation for the company and its affiliated enterprise, and with regard to procedures for reporting actual or suspected irregularities.

It also discussed the items that its committees reported on, and their deliberations and findings. Among those items were, in addition to the items mentioned above, the investor base, the share price development, the internal and external audit planning and reports, litigations, annual performance criteria, compensation programs, the evaluation and assessment of the Managing Board and the Supervisory Board, the composition of the Managing Board, the composition and rotation schedule of the Supervisory Board and succession planning.

The personal information of the individual Supervisory Board members can be found in paragraph 4.2.2.

The composition of the Supervisory Board and its committees is in line with the independence standards as set by articles 2.1.7 and 2.1.9 of the Dutch Corporate Governance Code. Diana Chan, Alessandra Ferone and Olivier Sichel are considered non-independent Supervisory Board members.

4.3.2 Supervisory Board Attendance Record

On average, 98.89% of the Supervisory Board members were present at the Supervisory Board meetings.

In 2023, nine Supervisory Board meetings were held.

Name	Attended	Absence ratio
Piero Novelli	9 out of 9 meetings	0.00%
Dick Sluimers	9 out of 9 meetings	0.00%
Diana Chan	9 out of 9 meetings	0.00%
Rika Coppens	8 out of 9 meetings	11.10%
Alessandra Ferone	9 out of 9 meetings	0.00%
Manuel Ferreira da Silva	9 out of 9 meetings	0.00%
Padraic O'Connor	9 out of 9 meetings	0.00%
Nathalie Rachou	9 out of 9 meetings	0.00%
Olivier Sichel	9 out of 9 meetings	0.00%
Morten Thorsrud	9 out of 9 meetings	0.00%

In 2023, six Audit Committee meetings were held.

Name	Attended	Absence ratio
Dick Sluimers	6 out of 6 meetings	0.00%
Diana Chan	6 out of 6 meetings	0.00%
Rika Coppens	1 out of 1 meetings	0.00%
Alessandra Ferone	6 out of 6 meetings	0.00%
Manuel Ferreira da Silva	5 out of 5 meetings	0.00%
Morten Thorsrud	6 out of 6 meetings	0.00%

In 2023, four Risk Committee meetings were held.

Name	Attended	Absence ratio
Morten Thorsrud	4 out of 4 meetings	0.00%
Diana Chan	4 out of 4 meetings	0.00%
Rika Coppens	1 out of 1 meetings	0.00%
Alessandra Ferone	4 out of 4 meetings	0.00%
Manuel Ferreira da Silva	3 out of 3 meetings	0.00%
Dick Sluimers	4 out of 4 meetings	0.00%

In 2023, five Nomination and Governance Committee meetings were held.

Name	Attended	Absence ratio
Piero Novelli	5 out of 5 meetings	0.00%
Diana Chan	5 out of 5 meetings	0.00%
Rika Coppens	4 out of 4 meetings	0.00%
Manuel Ferreira da Silva	1 out of 1 meetings	0.00%
Padraic O'Connor	5 out of 5 meetings	0.00%
Nathalie Rachou	4 out of 5 meetings	20.00%

In 2023, five Remuneration Committee meetings were held.

Name	Attended	Absence ratio
Nathalie Rachou	5 out of 5 meetings	0.00%
Diana Chan	5 out of 5 meetings	0.00%
Rika Coppens	4 out of 4 meetings	0.00%
Manuel Ferreira da Silva	1 out of 1 meeting	0.00%
Piero Novelli	5 out of 5 meetings	0.00%
Padraic O'Connor	5 out of 5 meetings	0.00%

Most Supervisory Board meetings were also attended by all or by most members of the Managing Board. In addition, several managers were invited to discuss specific items included on the Supervisory Board's agenda.

4.3.3 Supervisory Board Activities

The Supervisory Board was informed and consulted by the Managing Board in almost all of its meetings on the course of business and the main risks and opportunities attached to it, including related to ESG, Euronext's financial and operational performance and matters related to the Euronext's governance and strategy and sustainable value creation.

During the meetings held in 2023, the Supervisory Board approved among others the quarterly and semi-annual financial statements, the semi-annual report, the universal registration document for 2022, the budget for 2024, and the agendas of the General Meeting, including the nomination for appointments and re-appointments to the Supervisory Board and the Managing Board, the nomination of the external auditor, and a proposal regarding the dividend. All meetings of the Supervisory Board were prepared by the Chair of the Supervisory Board in close co-operation with the Chair of the Managing Board.

4.3.4 Board Evaluation

The annual evaluation of the Supervisory Board and its Committees relating to 2023 took place in February 2024. This evaluation was conducted through questionnaires, the results of which were compiled by the Corporate Secretary. The main findings and conclusions were discussed initially by the Nomination and Governance Committee and subsequently by the Supervisory Board as a whole, and centered around further enhancement of awareness of business performance, of market infrastructures and of the impact of Artificial

Intelligence. The Supervisory Board had concluded that it and its Committees had performed well in 2023.

The topics included in the questionnaires covered, among other items, the performance of and interaction with the Managing Board, the quality of Supervisory Board meetings, chairing, communication, availability of information, decision making process, risk and crisis management, succession and development planning, shareholder value, the composition and profile of the Supervisory Board, the Committee structure and the competencies and expertise of its members.

After discussing the outcomes of the questionnaires, the Supervisory Board concluded that the Supervisory Board; its Chair and its Committees and the Managing Board had properly discharged their responsibilities during 2023. During the Supervisory Board evaluation, the Supervisory Board further concluded that the relation and interaction with the Managing Board, including the flow of information, was good.

The annual evaluation of the Extended Managing Board relating to 2023 took place in January 2024. This evaluation was conducted by an external agency. The report on the outcome of the evaluation was discussed by the Supervisory Board and by the Extended Managing Board.

The topics included covered, among other items, the assessment of the Managing Board dynamics, culture, effectiveness, the quality of the meetings, communication, team spirit and challenge, availability of information, decision making process, risk and crisis management, succession and development planning, the composition of the Managing Board, the interaction with the Supervisory Board.

After discussing the outcomes of the evaluation, the Extended Managing Board concluded that it had properly discharged its responsibilities during 2023. The Extended Managing Board further concluded that the relation and interaction with the Supervisory Board was good

4.3.5 Report Audit Committee

At the start of 2023, the Audit Committee was composed of Dick Sluimers, Diana Chan, Rika Coppens, Alessandra Ferone and Morten Thorsrud. As per 9 February 2023, Rika Coppens was succeeded by Manuel Ferreira da Silva. The Audit Committee has been chaired by Dick Sluimers throughout the year. The Audit Committee has a majority of independent members.

The Audit Committee convened six times in 2023. These meetings were regularly attended by, among others, in addition to the members of the Audit Committee, the Chair of the Supervisory Board, the CEO, the CFO, the Head of Risk and Compliance department, the General Counsel, the Head of Internal Audit and the external auditors.

In addition, the Audit Committee held regular individual discussions with the external auditors and the Head of Internal Audit. The Supervisory Board was regularly informed about the results of these discussions. The Chair of the Audit Committee reported to the Supervisory Board about the activities of the Committee and about its meetings and discussions in the Supervisory Board meetings.

Among the items that were discussed by the Audit Committee were the annual, semi-annual and quarterly figures, the investor base, the share price development, the selection process performed in connection with the successor independent auditor, the internal and external audit planning and reports, litigations, impairment of goodwill and other purchased intangible assets, recognition of internally developed software, measurement of financial assets at fair value through other comprehensive income, reliability and continuity of the IT environment, management letter and fraud risk.

4.3.6. Report Risk Committee

At the start of 2023, the Risk Committee was composed of Morten Thorsrud, Diana Chan, Rika Coppens, Alessandra Ferone and Dick Sluimers. As per 9 February 2023, Rika Coppens was succeeded by Manuel Ferreira da Silva. The Risk Committee has been chaired by Morten Thorsrud throughout the year.

The Risk Committee convened four times in 2023. These meetings were regularly attended by, among others, in addition to the members of the Risk Committee, the Chair of the Supervisory Board, the CEO, the CFO, the COO, the Chief Information Security Officer (CISO), the Head of Risk and Compliance, the General Counsel, the Head of Internal Audit and the external auditors.

The Chair of the Risk Committee reported to the Supervisory Board about the activities of the Committee and about its meetings and discussions in the Supervisory Board meetings.

Among the items that were discussed by the Risk Committee were risk management, including ESG risks, the migrations and cyber security.

4.3.7 Report Remuneration Committee

At the start of 2023, the Remuneration Committee was composed of Nathalie Rachou, Diana Chan, Manuel Ferreira da Silva, Piero Novelli and Padraic O'Connor. As per 9 February 2023. Manuel Ferreira da Silva was succeeded by Rika Coppens The Remuneration Committee has been chaired by Nathalie Rachou throughout the year. The Remuneration Committee held five meetings in 2023, where the Committee:

- analysed as every year the outcome of the annual performance criteria including the ESG related criteria, their impact on short term incentive, long term incentive and total compensation of the members of the Managing Board, and proposed subsequent decisions to the Supervisory Board;
- reviewed as every year the total cost of the approved compensation programs for all employees, and proposed subsequent decisions to the Supervisory Board;
- in the perspective of the renewal of mandate of the Remuneration Policy in 2025, undertook an initial review of the Long Term Incentive scheme.

4.3.8 Report Nomination and Governance Committee

At the start of 2023, the Nomination and Governance Committee was composed of Piero Novelli, Diana Chan, Manuel Ferreira da Silva, Padraic O'Connor and Nathalie Rachou. As per 9 February 2023, Manuel Ferreira da Silva was succeeded by Rika Coppens The Nomination and Governance Committee has been chaired by Piero Novelli throughout the year.

The Nomination and Governance Committee met five times in 2023. Topics that were discussed in the Committee's meetings included the evaluation and assessment of the Managing Board, the evaluation and assessment of the Supervisory Board, the composition of the Managing Board, the composition and rotation schedule of the Supervisory Board, succession planning and recommendations with regard to nominations for appointment and re-appointment to the Managing Board and the Supervisory Board. Diversity and inclusion was an important element in the discussions.

4.3.9 Financial Statements

The Managing Board has prepared the 2023 Financial Statements and has discussed these with the Supervisory Board. The Financial Statements will be submitted for adoption at the 2024 Annual General Meeting as part of the Universal Registration Document.

4.4 REMUNERATION REPORT OF THE REMUNERATION COMMITTEE

4.4.1 2023 Report

4.4.1.1. Statement by the Chair of the Remuneration Committee

Nathalie Rachou, Chair of the Remuneration Committee

On behalf of the Board, I am pleased to present the Remuneration Report for the financial year ending 31 December 2023.

The Remuneration Committee and the Supervisory Board are committed to reinforcing our reporting year by year, complying with the latest rules, regulations and say-on-pay guidance, including the Shareholder Rights Directive and related Dutch implementation Act, the Dutch Corporate Governance Code and the 2021 Remuneration Policy. The Group engaged actively with shareholders, continuing our constructive dialogue during several roadshow meetings where we presented the implementation of the 2021 Remuneration Policy and the evolution of the Remuneration Report.

This report has been prepared by the Remuneration Committee and was approved by the Supervisory Board.

2023 Remuneration decisions

The Remuneration Committee held five meetings during 2023, where the members monitored the implementation of the 2021 Remuneration Policy.

The Remuneration Committee discussed specific contributions to the delivery of the integration plan of Borsa Italiana and some senior management retention risks during the course of the year. The Remuneration Committee addressed these specific challenges through a special one-off Integration LTI grant for the Group Chief Executive Officer and for the Chief Operating Officer, granted in February 2024. This grant will be subject to the performance conditions of the plan and to the three-year vesting period. The Supervisory Board decided to approve this exceptional remuneration within the Remuneration Policy, in the best interest of the company, to recognise specific contributions, reinforce retention, and support the next phase of growth of Euronext.

The Committee analysed, as it does every year, the outcome of the annual performance criteria, their impact on Short Term Incentives, Long Term Incentives and total compensation of the members of the Managing Board, and proposed subsequent decisions to the Supervisory Board. The key 2023 performance indicators and strategic achievements are summarised in this report and form the basis of the 2023 remuneration decisions.

2021 Remuneration Policy

The 2021 Remuneration Policy approved by shareholders at the AGM with 97.55% favourable votes on 11 May 2021 was still applicable in 2023.

Following positive feedback received from shareholders and stakeholders, the Remuneration Committee has decided to keep this policy unchanged for 2024. The Remuneration Committee will consult shareholders and stakeholders in 2024 to prepare an updated Remuneration Policy to be approved during the AGM in 2025.

4.4.1.2. Remuneration Committee

The Remuneration Committee of Euronext assists the Supervisory Board with respect to the Company's remuneration strategy and principles for members of the Managing Board of the Company (the "Managing Board"), the administration of its cash and equity based compensation plans and draft proposals to the Supervisory Board and oversees the remuneration programmes and remuneration of the Company's senior managers and other personnel. The Remuneration Committee meets as often as necessary and whenever any of its members requests a meeting.

The Remuneration Committee as at 31 December 2023 consisted of the following members: Nathalie Rachou (chair), Diana Chan, Rika Coppens, Padraic O'Connor and Piero Novelli.

4.4.1.3. 2023 Performance

In 2023, Euronext has delivered very strong performance, thanks to the ongoing delivery of the committed €115 million synergies related to the integration of Borsa Italiana[17], tight cost control in an environment of persistent labour inflation and successful diversification of the top line of the group. Euronext's focus on performance and cost discipline allowed the Company to beat the 2023 budget on both underlying revenues and underlying costs.

[17] In February 2023, Euronext announced upgrading its targeted synergies to €115 million pre-tax run-rate

i. Underlying Revenue increased +0.5% to €1,474.7 million for 2023, versus €1,467.8 million for 2022.

ii. Underlying EBITDA[18] increased +0.4% to €864.7 million, versus €861.6 million for 2022.

iii. Underlying EBITDA margin[19] was maintained at 58.6% versus 58.7% in 2022.

iv. Underlying net income increased +5.3% to €584.7 million versus €555.3 million for 2022.

v. Adjusted EPS[20] was at €5.51, versus €5.21 for 2022.

The Euronext team delivered major operational, financial and strategic milestones in 2023, in line with the "Growth for Impact 2024" strategic plan, which have clearly transformed Euronext:

a. Euronext mitigated the negative consequences of the challenging environment in 2023, with the wars in Ukraine and the Middle-East, the persistently high labour cost inflation and interest rates and lowest equity volumes since 2017, keeping its European leadership in equity trading and listing.

b. Euronext made decisive progress towards achieving its commitment on the 2024 synergies, delivering €74 million by the end of 2023, more than the €60 million initially targeted for the end of 2024; and is in a very strong position to deliver by the end of 2024 the €115 million synergies as revised in February 2023, and at a lower cost than initially anticipated.

c. Euronext completed the most decisive steps in the integration of Borsa Italiana, whose organisation, governance, operations and technology are now almost fully integrated in the group.

d. Euronext successfully completed on time the two most critical phases of the migration of Borsa Italiana markets onto the Euronext trading platform Optiq®; and is on track to deliver the last phase of the migration on 25 March 2024. This last migration will allow Euronext to fully terminate any dependency of Euronext on LSEG services provided to Borsa Italiana.

e. Euronext successfully delivered in November 2023 the first phase of the European expansion of Euronext Clearing, through the migration to the value-at-risk risk framework and the critical migration of cash clearing, thereby positioning Euronext Clearing as the CCP of choice for all its cash equity markets, paving the way for an expansion of Euronext Clearing to financial and commodities derivatives markets in June 2024.

f. Euronext rolled-out a new business organisation that empowers business line leaders to strengthen its ability to deliver more organic growth, to inject more energy and agility, to reinforce the coordination between business lines and IT, Operations and support functions and to accelerate time to market of growth initiatives.

g. Euronext took decisive steps to harmonise CSD products, technology, operations and governance to increase operational efficiencies, reinforce coordination with the rest of the group and to seize future growth opportunities. This effort complements the continuous convergence of the sales and client approach.

h. Euronext maintained its capital allocation discipline, executing a €200 million share repurchase programme without impacting the planned deleveraging process nor Euronext's M&A capabilities. Euronext was upgraded to a BBB+ rating by S&P, returning to the rating it used to have before the acquisition of Borsa Italiana, an illustration of the strong deleveraging pattern of the company.

i. Euronext expanded on its leadership on ESG. Euronext became the world leader for ESG bond listing, with a 31% global market share, and is the first exchange to make available to investors the ESG data of their issuers, through its My ESG Profile tool. Euronext is also on track to deliver its SBTI-approved carbon reduction targets.

4.4.2 Remuneration Principles

4.4.2.1 Principles of the Remuneration Policy

Euronext operates in European and global financial markets where it competes for a limited pool of talented executives. Highly qualified people, capable of achieving stretched performance targets, are essential for generating superior and sustainable returns for Euronext and its shareholders, whilst creating long term sustainable value for the overall ecosystem. Euronext's people and remuneration strategies aim to attract, develop and retain talent that will ensure to maximise long term sustainable shareholder value, support the development of capital markets and the growth of the real economy and accelerate the transition towards a sustainable economy.

The majority of remuneration for the members of the Managing Board is linked to demanding performance targets, in line with Euronext's ambitious performance culture, over both the short and long-term horizons to ensure that executive rewards are aligned with performance delivered for shareholders and long term value creation for all stakeholders.

In determining the level and structure of the remuneration of the members of the Managing Board, the Remuneration Committee takes into account, among other things, the financial and operational results as well as non-financial indicators relevant to Euronext's long-term objectives. The Remuneration Committee has performed and will perform scenario analyses to assess whether the outcomes of variable remuneration components appropriately reflect performance and with due regard for the risks to which variable remuneration may expose the Company. The minimum and

[18] As defined in section 5.2 - Other Financial information
[19] As defined in section 5.2 - Other Financial information
[20] As defined in section 5.2 - Other Financial information

maximum payout scenarios are described in the following paragraphs.

In determining the Remuneration Policy and the compensation of members of the Managing Board, the Supervisory Board has taken and will take into account (i) the transformation of Euronext, (ii) the local market practices and the competitive environment in which Euronext operates, (iii) the impact of the overall remuneration of the Managing Board on the equity ratios within the Company and (iv) the employment terms of the employees in the Company and its subsidiaries.

Euronext believes that it is crucial to provide shareholders with transparent and meaningful information about its remuneration philosophy. The first source of information for shareholders is the remuneration report. The information provided during the Company's analyst presentations, meetings with shareholders and during the Annual General Meeting of shareholders is the second most important source of information.

4.4.3 Remuneration Components

4.4.3.1 Annual Fixed Salary (AFS)

The AFS of the Managing Board is determined by the Supervisory Board upon the recommendation of the Remuneration Committee on the basis of benchmarking comparable companies in relevant markets and takes into account role, scope, accountability, and experience. Typically, AFS will be positioned at the median level of the peer group benchmark in line with the overall job responsibilities of the individual members of the Managing Board.

The AFS reflects the responsibility and scope of each role, taking into account seniority, experience and market practice.

In 2023, the Remuneration Committee conducted its annual review of the Annual Fixed Salary levels of the members of the Managing Board considering the transformation of Euronext, the local market practices and the competitive environment in which Euronext operates, the impact of the overall remuneration of the Managing Board on the pay differentials within the Company and the employment terms of the employees in the Company and its subsidiaries.

4.4.3.2 Short Term Incentive (STI)

The STI for the Managing Board is paid on a yearly basis in cash. The objective of this STI is to ensure that the Managing Board is well incentivised to achieve operational performance targets aligned with the strategic initiatives in the shorter term, whilst contributing to long term value creation.

A member of the Managing Board is eligible for an annual variable component up to a certain percentage of the Annual Fixed Salary for on target performance.

In order to take into consideration common market practices the Group Chief Executive Officer's target is set at 100% of AFS, with a maximum pay-out of 150% in case of overachievement.

Position	Minimum annual STI as % of AFS	On target annual STI as % of AFS	Maximum annual STI as % of AFS
Group Chief Executive Officer	0%	100 %	150%
Other members of the Managing Board	0%	50 - 70%	75 - 105%

Performance conditions for the Short Term Incentive are set by the Supervisory Board annually for the relevant year. They include criteria concerning Euronext's financial performance, quantitative criteria representing company performance and/or individual qualitative performance.

A threshold for payment applies at 70% of objectives reached, and no payment will be made below 70%. At 90% of the objectives reached, the STI pay-out is set at 50% of the target STI. At 100% of the objectives reached, STI pay-out will be set at 100%. At 110% of objectives reached, the STI pay-out is set at 150%. Linear extrapolation between performance bands is applied.

Performance versus objectives	STI pay-out versus target STI
110% and above	150%
100% to 110%	Calculation on a linear basis from 100% to 150%
100%	100%
90% to 100%	Calculation on a linear basis from 50% to 100%
90%	50%
70% to 90%	Calculation on a linear basis from 0 to 50%
Below 70%	0%

In 2023 the performance criteria, and weights, for the individual Managing Board members' Short Term Incentives were based on:

	Weights of performance criteria in 2023 (in % of STI)				
	Financial targets		Strategic quantitative targets at Group or Business Line level		Strategic qualitative targets at individual level
Position	**Revenue**	**Operational costs**	**Strategic execution**	**ESG**	
Group Chief Executive Officer	25%	25%	20%	10%	20%
Other members of the Managing Board	25%	25%	20%	10%	20%

In 2023, the performance criteria, and weights, for the Group Chief Executive Officer's Short Term Incentive are based on the following scorecard, and the overall performance has been assessed at 109%.

Description	Objective	Individual target and KPI	Weight
Financial targets and objectives for Euronext	Revenue	Underlying revenue target for Euronext full calendar year 2023	25 %
	Operational Costs	Comparable underlying operating costs excluding D&A budget for Euronext full calendar year 2023	25 %
Strategic quantitative targets and objectives focusing on execution of Euronext strategy	M&A Strategy and Integration	Deliver phase 1 of the Euronext Clearing expansion plan	20 %
		Deliver phase 1 and phase 2 of the Optiq® platform migration in Italy	
		Deliver cost synergies for recently acquired companies as planned for 2023	
		Deploy M&A strategy and secure smooth execution of any possible deal	
	ESG initiatives	Deploy the 2023 Group ESG roadmap and deliver a detailed carbon footprint reduction plan in the context of the "Fit for the 1.5 -degree" ambition	10 %
Strategic qualitative targets and objectives focusing on execution of Euronext strategy	Individual objectives with a discretionary weight based on complexity and impact.	Operational excellence	20%
		Strategic plan	
		Succession plan and talent development	
		Stakeholder engagement	
		Corporate purpose	
Total of target percentages			**100%**

The Remuneration Committee has assessed the key achievements on objectives:

1. **Financial targets and objectives for Euronext.**

The 2023 targets, approved by the Supervisory Board, include revenue and operational cost for the Group Chief Executive Officer and the other members of the Managing Board. Those criteria are monitored in a granular manner and their measurement is revised and controlled by the Remuneration Committee. It is to be noted that Euronext does not disclose the detailed actual financial targets as this is considered commercially/competition sensitive information, though they are in line with the published strategic, financial and sustainability goals of the Group.

Following the 2023 results:

- Underlying Revenue in 2023 was above budget target, mainly resulting from strong performance across most of the businesses. This leads to an assessment and a pay out of this scorecard criterion between target and maximum level.
- Comparable underlying operational costs excluding D&A in 2023 were below budget target, thanks to efficient costs control. This leads to an assessment and a pay out of this scorecard criterion between target and maximum level.

2. **Strategic quantitative targets and objectives focusing on execution of Euronext strategy.**

The 2023 strategic quantitative targets consist of the following two objectives for the Group Chief Executive Officer and the other members of the Managing Board:

- Deploy M&A strategy & integrations milestones ;

This objective and the 4 sub-objectives were assessed as delivered above expectations, including (i) a major milestone with the delivery of phase 1 of the Euronext Clearing expansion plan, a new reference in the market (ii) delivery of the migration of Italian equity, ETFs, warrants and fixed income markets to Optiq®, (iii) an acceleration of the Borsa Italiana synergies, with €74 million of run-rate annual synergies already delivered, (iv) disciplined M&A execution. This leads to an assessment and a payout of this scorecard criterion between target and maximum level, in line with detailed KPIs described below.

- Deploy the 2023 Group ESG roadmap and implement Euronext's carbon footprint reduction plan in the context of the "Fit for the 1.5-degree".This objective was assessed as delivered above expectations, with a detailed carbon footprint reduction developed in 2022 and demanding targets published and approved by SBTi in 2023 as planned, and a number of specific initiatives accelerating the Euronext ESG transformation. This leads to an assessment and a pay out of this scorecard criterion between target and maximum level, in line with detailed KPIs and milestones described below.

Each of the objectives and sub-objectives include measurable KPIs, assessed by the Remuneration Committee and the Supervisory Board during the annual review:

- Deliver phase 1 of the Euronext Clearing expansion plan
  a. In 2023 Euronext rolled out a new VaR-based margin methodology on Euronext Milan equities, ETFs and financial derivative markets, paving the way for the expansion of Euronext Clearing beyond Italian securities.
  b. Euronext subsequently expanded its cash clearing offering to Euronext cash markets. In November, Euronext migrated the clearing of the cash markets of Paris, Amsterdam, Dublin, Lisbon and Brussels away from LCH SA onto Euronext Clearing. Since this date, Euronext Clearing now clears equities, ETFs, structured products, warrants, and bonds from six Euronext markets.
  c. This key initiative has been praised by stakeholders as one of the most transformative projects in the industry. Despite the tight planning, 100% of the clearing members were onboarded and 100% of the LCH SA trade flow was captured.
  d. On average, Euronext Clearing clears circa 2 million transactions on a daily basis for its 52 European and local clearing members, of which 37 were onboarded as part of the expansion project, including all major clearing members of the industry.
  e. In parallel, Euronext significantly strengthened the Euronext Clearing team by recruiting and onboarding 38 new employees in 2023, and appointing Roberto Pecora as CEO and General Manager of Euronext Clearing. The expansion of Euronext Clearing towards financial and commodity derivatives is on track for June 2024, with the full engagement of Euronext Clearing teams to progress towards client and internal readiness.
- Deliver phase 1 and phase 2 of the Optiq® platform migration in Italy
  a. The migration of the Italian cash markets to Optiq® was completed on 27 March 2023, as announced to market participants and investors. 100% of Trading Members successfully connected to the Optiq® system on the first day of trading, markets opened on all migrated instruments with successful trading on all phases and seamless post-trade processing.
  b. The migration significantly improved market quality metrics, with Euronext European Best Bid and Offer (EBBO) setting progressing from c. 50% before the migration to c. 75% in Q4 2023.
  c. Euronext completed Phase 2 of the migration of Italian markets on 11 September 2023, with Borsa Italiana Fixed Income, Warrants and Certificates markets opening for trading on the Euronext Optiq® trading platform.
  d. The primary focus of Euronext was to ensure the seamless execution of both Phase 1 and Phase 2 of the migration, all while safeguarding the operation of Euronext markets. This year witnessed the highest number of releases ever deployed into production, reflecting Euronext incremental delivery model. Remarkably, amidst this heightened activity, there were no significant incidents reported, underscoring the smooth and reliable nature of the migration process.
- Deliver cost synergies for recently acquired companies as planned for 2023
  a. The initial synergy targets for the integration of Borsa Italiana have been increased by 67%, from €60 million to €100 million mainly thanks to business development projects such as the migration of the Core Data Centre and expansion of Clearing activity. In February 2023, Euronext upgraded this target to €115 million, which is almost twice the initially announced amount and demonstrates the Euronext confidence and expertise in delivering synergies.
  b. Euronext delivered €74 million of run-rate annual synergies at the end of 2023, which is twenty-three percent more than the initial target of €60 million and about two-thirds of the updated target of €115 million.
  c. In 2023, Euronext have also paved the way for the delivery of the synergies planned for 2024, thanks to careful preparation of the Derivatives Optiq® and Derivatives Clearing migrations.
  d. In addition, Euronext continue to streamline its portfolio of assets by completing the targeted divestment of a non-core and loss-making business. The sale of Tokeny for €11 million delivered a multiple of money of approximatively 2x.
- Deploy M&A strategy & integration milestones and secure smooth execution of any possible deal

a. During 2023, Euronext has been also exploring some further strategic moves and participated to numerous processes. In all cases, Euronext has maintained very strong discipline.

b. Euronext maintained its capital allocation discipline, executing a €200 million share repurchase programme without impacting the planned deleveraging process nor Euronext's M&A capabilities.

c. Euronext M&A strategy is recognised by the investor and analyst communities. The management track record to execute value creative M&A transactions and integrate companies is seen continuously as a fundamental asset of the Group and a differentiator versus its peers.

d. Euronext was upgraded to a BBB+ rating by S&P, returning to the rating it used to have before the acquisition of Borsa Italiana, an illustration of the strong deleveraging pattern of the company.

e. Euronext maintains the optionality for future transformational transactions which could enable Euronext to increase the pace of its organic growth and further diversify its revenue mix.

- Deploy the 2023 Group ESG roadmap and deliver a detailed carbon footprint reduction plan in the context of the "Fit for the 1.5-degree" ambition.

Euronext's ESG efforts are focused on 5 impact areas: Our Environment, Our People, Our Society, Our Markets and Our Partners. In 2023, Euronext accelerated its actions in all these impact areas towards more sustainable capital markets with significant successes and raised its ambition level, publishing ambitious SBTi commitments as planned. Initiatives were taken both at business level - through the development of new ESG products and services - and at company level - taking concrete actions to reduce its environmental impact and improve its social and governance approach.

a. Our Environment

In 2023 Euronext continued to successfully work towards its carbon reduction roadmap as set by its near term targets validated beginning of 2023 by Science Based Targets initiative (SBTi), known as the most demanding standard for climate ambitions, to align the group's carbon footprint with the Paris agreement. The Euronext climate target published in 2022 include reduction of Scope 1 and Scope 2 emissions by 73.5% in 2030 compared to 2020, and reduction of Scope 3 travel emissions by at least 46.2% in 2030 compared to 2019. A dedicated governance was put in place to implement Euronext's Carbon Reduction Project (SBTi targets) and keep track of the progress made. Furthermore, Euronext disclosed a first version of its climate transition plan in 2023, a vital tool to demonstrate to capital markets and stakeholders that the organisation is committed to achieving a 1.5-degree pathway, and that its business model will remain relevant (i.e., profitable) in a net-zero carbon economy.

b. Our People

In 2023, Euronext prioritized a culture of diversity and inclusion through the establishment of the Euronext Diversity & Inclusion network, supporting diverse recruitment and local D&I events. Additionally, Euronext Women network aims to foster women empowerment and equal career opportunities. Training on ESG topics remained a priority, with the introduction of the Digital Fresk workshop focusing on environmental issues in the digital sector. Monthly ESG Business Knowledge sessions highlighted key stakes and initiatives aligned with Euronext's strategic roadmap 'Fit for 1.5°'.

c. Our Society

In 2023 Euronext launched the Euronext Foundation to foster its support to local sustainable communities and projects deployed across Europe in the fields of financial literacy, diversity and inclusion, and marine resources. Additionally, the Blue Challenge and coastal clean-up pan-European initiatives came to maturity, becoming well identified and structured group projects gathering Euronext volunteers from all geographies and business units.

d. Our Markets

In 2023, Euronext business teams expanded their ESG products and services offering and consolidated Euronext's position as a market leader on ESG indices. Euronext expanded its ESG indices franchise by launching a set of thematic indices. In addition, Euronext became in 2023 the first stock exchange to make ESG data of its issuers available in a standardized format on its website, with the launch of "My ESG Profile". Finally, in 2023 Euronext became officially world leader for ESG Bonds listing globally, in terms of number of green bonds, number of issuers and raised assets.

e. Our partners

In 2023 Euronext has been proactive in its engagement with the ESG financial ecosystem. On top of its former commitments as a founding member of the Sustainable Trading initiative, an official partner of the United Nations Sustainable Stock Exchange Initiative (SSE), a signatory of the PRI, Chair of the FESE Sustainable Finance Working Group and advisor to the Executive Committee of ICMA Green bond principles, Euronext in 2023 also signed the Women's Empowerment Principles and organised the Euronext Sustainability Week. Euronext has also supported the Climate Governance Initiative by partnering with Chapter Zero France.

In 2023, Euronext continued improving its ESG rating scores. Euronext teams have been actively working to align the Euronext disclosures, including ESG policies and statements, website, and upcoming URD, to the requirements of ESG rating agencies.

In accordance with the Corporate Sustainability Reporting Directive (CSRD) Delegated Act, Euronext successfully launched the CSRD project by conducting a double materiality assessment as required by the directive and by analysing the missing ESG data points to be disclosed starting in 2025 over the year 2024.

More details of Euronext ESG strategy and initiatives are described in Chapter 3 of the Universal Registration Document.

3. Strategic qualitative targets and objectives focusing on execution of Euronext strategy

The individual targets of the Group Chief Executive Officer and the measurement of the Supervisory Board were the following for 2023:

a. Reinforce operational excellence within the company, including achievement of operations KPIs: Euronext continued to invest in the operational resilience and stability of its service to customers, showcasing strong discipline on incident management and investments in incident prevention through an enhanced platform monitoring tool. Euronext strengthened the best practices of service management at Euronext Securities and Euronext Clearing to improve the discipline of management of operations and technology. Euronext reinforced its cyber resilience through a year-long investment in cybersecurity and the strengthening of Euronext processes.

b. Implement the "Growth for Impact 2024" strategic plan to deliver on the ambition to build the leading European market infrastructure. The plan set ambitious revenue and EBITDA 2024 targets, combining organic growth, alongside transformational projects following the Borsa Italiana Group acquisition, such as the migration of the Core Data Centre to a green facility in Italy and the expansion of Euronext clearing activities in Europe. The plan also includes significant ESG commitments. In 2023 Euronext delivered (i) a major milestone with the migration of Borsa Italiana's cash markets to Optiq® unifying Euronext markets for equities, ETFs, warrants and retail fixed income into a single liquidity pool through a single order book and enabling significant revenue synergies above €10 million, (ii) the completion of phase 2 of the migration of Euronext main datacentre from Basildon to Bergamo reinforcing Euronext strategic autonomy towards third parties, generating further synergies, and creating opportunities for the future development of connectivity-related services, (iii) completion of Borsa Italiana integration, with €74 million annual run-rate EBITDA synergies already delivered. Last but not least, Euronext published its "Fit for 1.5" ESG commitment externally, with a detailed roadmap prepared internally, and an acceleration on all ESG dimensions.

c. Strengthen the succession plan and the management team in line with the new profile of the company and attract talents, including to foster diversity and inclusion: Euronext has continued to take initiatives to create bonds among the employees of various locations. On top of the regular town halls, and the senior leadership team meetings, the Operating Committee has been transformed into an enlarged Executive Committee. The Executive Committee now gathers the leaders of business lines and IT, Operations, Control and Support Functions, as well as key managers who have a critical cross-disciplinary role within the organisation to strengthen the cohesion and communication of the top management of the Group. In 2023, Euronext continued to recruit top talents, thanks to the high attractiveness of Euronext on the job market.

d. Strengthen relations with all stakeholders, including reference shareholders, regulators, and Italian ecosystem, in particular to enhance the deployment of the Capital Markets Union in Europe: Euronext continued to engage actively with shareholders, regulators and clients all over Europe with a culture of trust and transparency , allowing for the expansion of the existing local clearing house, CC&G, into a pan-European, multi-asset CCP connected to all international clearing members.

e. Initiate the deployment of a "Corporate purpose": Euronext has strengthened the implementation of its corporate purpose "Shaping capital markets for future generations", involving the Euronext teams and including it in all its internal and external communications. In July 2023 Euronext launched a company wide detailed employee survey, with 1,736 respondents and a 85% participation rate. An independent provider surveyed Euronext employees on engagement, with a score of 82, and Diversity, Equity and Inclusion, with a score of 81. Euronext is particularly proud that 87% of its employees believe in the purpose of Euronext and understand how their work contribute to it.

Following assessment of the 2023 KPIs and milestones by the Supervisory Board, overall performance for Strategic qualitative targets and objectives focusing on execution of Euronext strategy criteria were assessed as over performed with a pay out between target and maximum level.

The overall performance assessment at 109% with the application of the performance multiplier will result in a STI pay-out of 143% of the AFS for the Group Chief Executive Officer.

KPI achievement and % pay-out for the members of the Managing Board:

Other members of the Managing Board have dedicated individual quantitative or strategic targets. Performance is assessed for each of them on an individual basis by the Supervisory Board upon the recommendation of the Chief Executive Officer.

Name	Position	Performance criteria achievement	Performance multiplier impact	Annual target as % of AFS	Maximum pay-out as % of AFS	Pay-out as % of AFS
Stephane Boujnah	Group Chief Executive Officer and Chairman of the Managing Board	109 %	143 %	100%	150%	143 %
Manuel Bento	COO	120 %	150 %	70%	105%	105 %
Fabrizio Testa	CEO of Borsa Italiana	111 %	150 %	70%	105%	105 %
Delphine d'Amarzit	CEO of Euronext Paris	106 %	128 %	70%	105%	90 %
Daryl Byrne	CEO of Euronext Dublin	101 %	106 %	70%	105%	74 %

Isabel Ucha	CEO of Euronext Lisbon	104 %	121 %	50%	70%	61 %
Simone Huis in't Veld	CEO of Euronext Amsterdam	103 %	116 %	70%	105%	81 %
Benoît van den Hove	CEO of Euronext Brussels	100 %	100 %	50%	70%	50 %
Øivind Amundsen	CEO of Oslo Børs	104 %	121 %	70%	105%	85 %

Performance conditions for the 2024 Short Term Incentive:

In 2024 the performance criteria, and weights, for the individual Managing Board members' Short Term Incentives will be based on:

	Weights of performance criteria in 2024 (in % of STI)				
	Financial targets		Strategic quantitative targets at Group or Business Line level		Strategic qualitative targets at individual level
Position	Revenue	Operational costs	Strategic execution	ESG	
Group Chief Executive Officer	25%	25%	20%	10%	20%
Other members of the Managing Board	25%	25%	20%	10%	20%

The performance criteria, and weights, for the Group Chief Executive Officer's Short Term Incentive set by the Supervisory Board for 2024 will continue to include a majority of financial targets and strategic quantitative targets, and a minority of qualitative targets, aligned with the Remuneration Policy, as described in the scorecard hereafter:

Description	Objective	Individual target and KPI	Weight
Financial targets and objectives for Euronext	Revenue	Underlying revenue target for Euronext full calendar year 2024	25%
	Operational Costs	Comparable underlying operating costs excluding D&A budget for Euronext full calendar year 2024	25%
Strategic quantitative targets and objectives focusing on execution of Euronext strategy	Integration and Growth strategy	Deliver phase 2 of the Euronext Clearing expansion plan	20%
		Deliver the Optiq® migration plan and complete phase 3 implementation	
		Deliver cost synergies for recently acquired companies as planned for 2024	
		Deploy M&A strategy and secure smooth execution of any possible deal	
	ESG initiatives	Deploy the 2024 Group ESG roadmap and deliver a detailed carbon footprint reduction plan in the context of the "Fit for the 1.5 - degree" ambition	10%
Strategic qualitative targets and objectives focusing on execution of Euronext strategy	Individual objectives with a discretionary weight based on complexity and impact.	Strategic Plan	20%
		Operational excellence	
		Succession plan and talent development	
		Stakeholder engagement	
Total of target percentages			**100%**

4.4.3.3 Long Term Incentive (LTI)

Members of the Managing Board are eligible for Long Term Incentive awards (LTI), which help to align the interests of the members of the Managing Board with those of its long term (or prospective) shareholders and which provide an incentive for longer term commitment and retention of the members of the Managing Board.

The main features of the LTI arrangements are the following:

- equity awards will be made in the form of performance shares (Performance Shares) with a three-year cliff vesting schedule (Performance Share Plan);
- An additional two-year lock-up for the Group Chief Executive Officer;
- the provisional and conditional target grant of LTI will be a percentage of Annual Fixed Salary;
- at vesting date the actual grant will be determined taking into consideration the performance of Euronext against the criterion of TSR for 50% of the performance shares granted and the absolute EBITDA[21] performance for 50% of the performance shares granted;

[21] As defined in section *5.2 - Other Financial information*

- participants are not entitled to dividends during the vesting period.

An important objective of the LTI is to provide a retention incentive to the Managing Board members to continue their employment relationship with Euronext and to focus on the creation of sustainable shareholder value.

As a reminder, the on-target Long Term Incentive (LTI) component as a percentage of the Annual Fixed Salary (AFS) for the members of the Managing Board remains as follows:

Position	Annual LTI as % of AFS
Group Chief Executive Officer	150%
Other members of the Managing Board	50% - 75%

4.4.3.3.1 CEO share ownership restrictions

Since 2021 and in order to be aligned with Dutch Corporate Governance Code recommendations and to strengthen the alignment of the Group Chief Executive Officer's exposure to Euronext development with the shareholders' exposure, the Supervisory Board has introduced an additional two-year lock-up for the Group Chief Executive Officer, resulting in a total five-year period from the date of grant and increased motivation for sustainable performance.

4.4.3.3.2 Granted Shares

In 2023, LTI Performance Shares were granted in line with the Remuneration Policy. The actual number of shares to be vested in 2026, after the three-year cliff vesting schedule, will depend on the following two performance measures:

- **Total Shareholder Return (TSR)** (50% weighting): The TSR performance will be based on an absolute difference between the Total Shareholders Return Index of Euronext and Total Shareholders Return Index of the STOXX Europe 600 Financial Services Index (Index) during the vesting period.

  The Supervisory Board established the minimum TSR performance level at the average Index. Therefore, at vesting date, if the Euronext TSR performance is at par with Index performance (the threshold), 100% of performance shares assessed against the TSR criterion will vest. Below this threshold no performance shares will vest against the TSR criterion. Over-performance whereby a 20% outperformance of the Index is met, will lead to a maximum of 200% of performance shares vesting (maximum). This level of outperformance reflects the absolute cap of performance shares to vest at vesting date against the TSR criterion. Linear extrapolation between performance bands is applied.

Total Shareholder Return (TSR)

Measurement of performance against Index	% of performance shares assessed against the TSR criterion
+20% of target or higher (maximum)	200%
At par with index (threshold)	100%
Below threshold	0%

- **Absolute Earnings Before Interest, Tax, Depreciation and Amortisation** (EBITDA[22]) (50% weighting): The EBITDA performance will be based on the ratio between (i) the actual cumulative EBITDA of the Company for the three-year period, as reported in the audited financial statement of the Company, and (ii) a cumulative target EBITDA for the same period, based on a target yearly EBITDA growth rate ("y") as approved by the Remuneration Committee. The multiplier of the shares granted in year N+1 (e.g. grant year), will be computed at the end of the three-year period (i.e. N+3), based on the ratio (i)/(ii).
  At a 0.9 ratio, 50% of performance shares assessed against the EBITDA criterion will vest at vesting date (threshold). Below this threshold no performance shares will vest against the EBITDA criterion. Over performance whereby a 1.1 ratio is met will lead to a maximum of 200% of performance shares assessed against the EBITDA criterion vesting (maximum). This level of outperformance reflects the absolute cap of performance shares to vest at vesting date against the EBITDA criterion. An intermediate stage whereby a ratio of 1 is met will lead to 100% of performance shares assessed against the criterion of EBITDA to vest at vesting date. Linear extrapolation between performance bands is applied.

[22] As defined in section 5.2 - *Other Financial information*

Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA)	
Measurement of performance against the ratio of actual accumulated EBITDA (i) to the targeted EBITDA (ii) for the same period	**% of performance shares assessed against the EBITDA criterion**
Ratio (i)/(ii) is at 1.1 or above (maximum)	200%
Ratio (i)/(ii) is equal to 1 (intermediate stage)	100%
Ratio (i)/(ii) is equal to 0.9 (threshold)	50%
Below threshold	0%

4.4.3.3.3 Specific grant in 2024

During several meetings in 2023, the members of the Remuneration Committee identified specific contributions to the delivery of the integration plan of Borsa Italiana and some specific senior management retention risks, and explored various ways to address them. Considering that in exceptional circumstances, within the Remuneration Policy, the Supervisory Board may grant exceptional remunerations when necessary to serve the long-term interest and sustainability of the company, the Remuneration Committee decided to address these challenges proactively. Following these discussions, upon proposal of the Remuneration Committee, the Supervisory Board decided to grant a special one-off Integration LTI for the Group Chief Executive Officer and for the Chief Operating Officer, in order to recognise specific integration milestones, to reinforce retention, and to support the next phase of growth of Euronext.

The Group Chief Executive Officer and the Chief Operating Officer were granted the equivalent of 100% of their Annual Fixed Salary in February 2024. This Special one-off Integration LTI grant will be subject to the same rules as the regular 2024 LTI, in particular in terms of vesting, multiplier criteria, and other conditions.

4.4.3.3.4 Vested Shares

The performance conditions from the previous Remuneration Policy were the following:

EURONEXT PERFORMANCE CONDITIONS (for each part of the performance conditions)		Vesting % of the number of shares
Total Shareholder Return (TSR)	Earnings Before Interest, Tax,Depreciation and Amortisation (EBITDA)[23]	
+20% or higher	Ratio i/ii is at 1.1 or higher	Increase of 100%
At target to +20%	Ratio i/ii is between 1 and 1.1	Increase on linear basis from original grant up to and including 100% increase
At target	Ratio i/ii is equal to 1	Original granted number
At target to -20%	Ratio i/ii is between 1 and 0.9	Decrease on linear basis from original grant to lapse of 50% of the shares
Lower than -20%	Ratio i/ii is below 0.9	Lapse of 100% of the shares

After the three-year vesting period, the final performance of Euronext over this period on both criteria TSR and EBITDA determines the total number of shares to be vested.

As a reminder, as part of the previous Remuneration Policy, LTI Performance Share Plan ("PSP") awards vesting depends on the performance of the following two performance measures weighted equally:

1. Total Shareholder Return ("TSR") (50% weighting): The TSR performance of Euronext is measured over a three-year period on an absolute difference between the Total Shareholders Return Index of Euronext and Total Shareholders Return Index of the STOXX Europe 600 Financial Services index during the vesting period. The Total Shareholder Return is defined as the relative performance between the average of the daily TSR over Q4 of the year preceding the year of the vesting date and the average of the daily TSR over Q4 of the year preceding the grant date. An overall underperformance in reference to the benchmark index will lead to a discount on the conditional LTI at vesting date whereby a 20% negative deviation leads to a 50% reduction of conditionally granted LTI shares at vesting date. Below -20% the reduction will be 100% of the conditionally granted LTI shares, subject to 50% weighing. Over performance will lead to a rise whereby a 20% outperformance of the index will lead to an increase of 100% in conditionally granted LTI shares at vesting date. This level of outperformance reflects the absolute cap of the LTI allotment.
2. Earnings Before Interest, Tax, Depreciation and Amortisation and Exceptional Items (EBITDA) (50% weighting): the EBITDA performance will be based on the ratio between (i) the actual cumulated EBITDA of the Company for the three year period, as reported in the audited financial statement of the Company, and (ii) a target cumulated EBITDA of the same period, based on a target yearly EBITDA growth rate ("y") as approved by the Remuneration Committee.

[23] As defined in section *5.2 - Other Financial information*

Shares vested in 2023

After the three-year vesting period, the final performance of Euronext over the 2020-2022 period on both criteria TSR and EBITDA has determined the total number of shares to be vested at 148.1% of the initial grant.

Based on the financial targets set by the Supervisory Board, the performance measurement for the award made in 2020 that vested in 2023 was:

1. performance of Euronext TSR criterion (50%): Euronext TSR index has underperformed the STOXX 600 Financial Services Gross Return Index by 1.5% resulting in a decrease of -3.8% of the number of shares linked to the TSR criteria (i.e. from 50% to 48.1%) in line with the Remuneration Policy.

The average EURO STOXX 600 Financial Services TSR Index increased by 12.4% between Q4 2019 and Q4 2022. The average Euronext TSR index increased by 10.9% during the same period, leading to an underperformance of -1.5%;

2. EBITDA[24] performance criterion (50%): over the review period, based on actual figures 2020, 2021 and 2022, the ratio of the cumulative actual EBITDA to the cumulative target EBITDA (the multiplier) was equal to 1.61 resulting in 100% increase in the number of shares linked to the EBITDA criteria (i.e. from 50% to 100%) in line with the Remuneration Policy.

The actual cumulated EBITDA for the three-year period 2020-2022 was €2,135 million vs a targeted cumulated EBITDA of €1,322 million as approved by the Supervisory Board for the same period, resulting in a ratio of 1.61.

Shares to be vested in 2024

After the three-year vesting period, the final performance of Euronext over the 2021-2023 period on both criteria TSR and EBITDA has determined the total number of shares to be vested at 100% of the initial grant.

Based on the financial targets set by the Supervisory Board, the performance measurement for the award made in 2021 that will vest in 2024 is:

1. performance of Euronext TSR criterion (50%): Euronext TSR index has underperformed the STOXX 600 Financial Services Gross Return Index by -31.0% resulting in a lapse of 100% of the number of shares linked to the TSR criteria (i.e. from 50% to 0%) in line with the Remuneration Policy.

The average EURO STOXX 600 Financial Services TSR Index increased by 23.3% between Q4 2020 and Q4 2023. The average Euronext TSR index decreased by -7.7% during the same period, leading to an underperformance of -31.0%;

2. EBITDA[25] performance criterion (50%): over the review period, based on actual figures 2021, 2022 and 2023, the ratio of the cumulative actual EBITDA to the cumulative target EBITDA (the multiplier) was equal to 1.44 resulting in 100% increase in the number of shares linked to the EBITDA criteria (i.e. from 50% to 100%) in line with the Remuneration Policy.

The actual cumulated EBITDA for the three-year period 2021-2023 was €2,479 million vs a targeted cumulated EBITDA of €1,721 million as approved by the Supervisory Board for the same period, resulting in a ratio of 1.44.

Details of the Long Term Incentive per Managing Board member can be seen in section 4.4.4 - Remuneration of Managing Board Members for 2023 and previous years. 2024 vesting details will be reported in 2024 Universal Registration Document, after confirmed vesting of the shares.

4.4.3.4 Group Chief Executive Officer share ownership obligations

In order to further emphasize the alignment of interests of the Group Chief Executive Officer with those of shareholders, the Supervisory Board set a requirement in 2020 to retain a certain number of shares irrespective of the date of vesting. Accordingly, the Group Chief Executive Officer will keep a number of Euronext shares representing an amount equivalent to 2 times his Annual Fixed Salary, as long as he remains Group Chief Executive Officer of Euronext.

This will be assessed every year, based on the average closing price of the Euronext shares on the last 20 trading days of the year.

Euronext shares owned by the Group Chief Executive Officer

As of 1 March 2024, **the Group Chief Executive Officer owns 75,658 ordinary shares in Euronext N.V.**. This total number of shares results from:

1. Personal acquisition with personal resources of 2,565 shares in 2016;
2. Vesting of 10,060 shares in 2019, net of withheld shares for tax payment, in relation to the LTI performance shares granted in 2016;
3. Vesting of 11,693 shares in 2020, net of withheld shares for tax payment, in relation to the LTI performance shares granted in 2017;
4. Vesting of 16,170 shares in 2021, net of withheld shares for tax payment, in relation to the LTI performance shares granted in 2018.
5. Vesting of 12,367 shares in 2022, net of withheld shares for tax payment, in relation to the LTI performance shares granted in 2019.
6. Vesting of 22,803 shares in 2023,without any shares withheld for tax payment, in relation to the LTI performance shares granted in 2020. From 2020 onward, taxes on shares vested are paid at selling date and not anymore withheld at vesting

The Group Chief Executive Officer has not sold any shares in Euronext N.V since he joined the company on 16 November 2015.

Using the average closing price of the Euronext share on the last 20 trading days of 2023 at €77.97, the shares owned by the Group Chief Executive Officer are valued at €5,899,054.26, which is more than two times his annual fixed salary.

[24] As defined in section 5.2 - Other Financial Information

[25] As defined in section 5.2 - Other Financial Information

4.4.3.5 Pension Schemes and Fringe Benefits

Due to the nature and structure of the Company, the members of the Managing Board are eligible for local benefits and pension arrangements. Pension consists of various state pension and additional local supplementary pension schemes in place depending on market practice in the countries where Euronext operates. Local members of the Managing Board have access to local supplementary pension schemes when available, in line with conditions offered to other employees locally.

With respect to pension arrangements, the Supervisory Board will regularly benchmark against the pension arrangements of comparable companies, in comparable markets, to ensure conformity with market practice.

Although it is common practice in comparable companies, the Group Chief Executive Officer does not benefit from any pension nor retirement arrangement of any sort funded by Euronext and more generally the members of the Managing Board do not benefit from any specific pension benefits compared to all other Euronext employees.

Please see in the below table details on individual pension local schemes in place.

	Type of supplementary pension scheme
Stéphane Boujnah	None
Delphine d'Amarzit	None
Manuel Bento	None
Fabrizio Testa	All employee Defined Contribution scheme
Daryl Byrne	All employee Defined Contribution scheme
Isabel Ucha	All employee Defined Contribution scheme
Benoît van den Hove	All employee Defined Contribution scheme
Øivind Amundsen	All employee Defined Contribution scheme/age related contribution
Simone Huis in 't Veld	All employee Defined Contribution scheme/age related contribution

See details of the pension contribution amount per members of the Managing Board in section 4.4.4.- *Remuneration of Managing Board Members for 2023 and previous years* for post-employment benefits.

4.4.4 Remuneration of Managing Board Members for 2023 and previous years

Five-year Remuneration Overview

The remuneration for 2023 and previous years, is presented in the table below.

The actual remuneration expensed for the members of the Managing Board, for the year 2023 amounted to €12,641,898. This amount includes a pro rata compensation related to Manuel Jose Fernandes Bento and Benoît van den Hove who joined the Managing Board respectively in May 2023 and July 2023, Vincent van Dessel who retired in November 2023 and Chris Topple who left the Group in October 2023 before the roll out of the new business organisation. The overall amount includes the termination payment for Chris Topple, aligned with his employment conditions.

The total remuneration consists of (i) an aggregate Annual Fixed Salary, (ii) the aggregate Short Term Incentive compensation based on the achievements against objective measurable criterion and (iii) the aggregate Long Term Incentive compensation recognised in accordance with IFRS 2 and (iv) an amount to be contributed to post-employment benefits. The table also presents the fixed to variable remuneration ratio.

The pay-for-performance philosophy and long-term value creation is, amongst others, realised by the pay mix, with more than two-thirds of the Group Chief Executive Officer total package in variable pay. A significant part of the pay package is conditional upon the achievement of long term performance targets, with long term variable pay representing almost half of the pay package. Such balance is considered to support the Company's strategy and the long term sustainable interests of the Company and all its stakeholders including its shareholders.

Managing Board remuneration

Name	Title	Currency	Year	Annual Fixed Salary (1)	STI	LTI based on face value at target (2)	Post-employment benefits	% fixed	% variable
Stéphane Boujnah	Chief Executive Officer and Chairman of the Managing Board	EUR	2019	825,000	1,155,000	725,000	–	30 %	70 %
		EUR	2020	825,000	1,237,500	1,237,500	–	25 %	75 %
		EUR	2021	825,000	1,237,500	1,650,000	–	22 %	78 %
		EUR	2022	825,000	1,237,500	1,237,500	–	25 %	75 %
		EUR	2023	1,000,000	1,425,000	1,500,000	–	25 %	75 %
Manuel Bento (3)	COO	EUR	2023	380,000	400,000	285,000	–	36 %	64 %
Fabrizio Testa	CEO of Borsa Italiana	EUR	2022	360,000	378,000	270,000	12,600	36 %	64 %
		EUR	2023	360,000	378,000	270,000	25,802	36 %	64 %
Daryl Byrne	CEO of Euronext Dublin	EUR	2019	270,000	135,000	202,500	32,400	44 %	56 %
		EUR	2020	270,000	190,000	202,500	32,400	41 %	59 %
		EUR	2021	270,000	216,000	202,500	32,400	39 %	61 %
		EUR	2022	270,000	220,000	202,500	32,400	39 %	61 %
		EUR	2023	270,000	200,000	202,500	32,400	40 %	60 %
Isabel Ucha	CEO of Euronext Lisbon	EUR	2019	230,000	115,000	115,000	21,645	50 %	50 %
		EUR	2020	230,000	140,000	115,000	34,500	47 %	53 %
		EUR	2021	230,000	150,000	115,000	34,500	46 %	54 %
		EUR	2022	230,000	160,000	115,000	34,500	46 %	54 %
		EUR	2023	230,000	140,000	115,000	34,500	47 %	53 %
Simone Huis in 't Veld	CEO of Euronext Amsterdam	EUR	2019	270,000	135,000		4,458	67 %	33 %
		EUR	2020	270,000	175,000	202,500	10,937	42 %	58 %
		EUR	2021	270,000	216,000	202,500	23,938	39 %	61 %
		EUR	2022	270,000	220,000	202,500	25,547	39 %	61 %
		EUR	2023	270,000	220,000	202,500	23,115	39 %	61 %
Øivind Amundsen	CEO of Oslo Børs	NOK	2020	2,700,000	1,890,000	1,350,000	73,114	45 %	55 %
		NOK	2021	2,700,000	2,160,000	1,350,000	115,443	43 %	57 %
		NOK	2022	2,700,000	2,295,000	1,350,000	120,953	43 %	57 %
		NOK	2023	2,700,000	2,295,000	1,350,000	128,702	43 %	57 %
Delphine d'Amarzit	CEO of Euronext Paris	EUR	2021	300,000	240,000	225,000	–	39 %	61 %
		EUR	2022	300,000	270,000	225,000	–	38 %	62 %
		EUR	2023	300,000	270,000	225,000	–	38 %	62 %
Benoît van den Hove (4)	CEO of Euronext Brussels	EUR	2023	200,000	100,000	40,000	6,396	59 %	41 %

(1) Annual Fixed Salaries presented in the table above are annualised fixed salaries effective as at 31/12. The fixed benefits included in Note 57 of the Financial Statements disclose the fixed salaries paid during the year and costs of benefits in kind, such as company car and health care insurance, if applicable, prorated to align with the period of the Managing Board mandate.

(2) LTI value is presented upon the amount granted according the Remuneration Policy. LTI based on IFRS standard 2 "Shared-based payments" value can be seen in Note 36 of the Financial Statements.

(3) acting as Managing Board Member from 17 May 2023.

(4) acting as Managing Board Member from 1 July 2023.

The Company has not granted any loans, advanced payments or guarantees to the members of the Managing Board.

There is no termination clause in case of change of control.

The potential severance payment in the case of termination of contract is 24 months of fixed salary. The limitation to twelve months of fixed salary as provided in the Dutch Corporate Governance Code has been balanced against the French AFEP-MEDEF Corporate Governance Code recommendations, which provide for a maximum termination indemnity of 24 months' compensation, fixed and variable remuneration. The termination indemnity has been limited to twice the Annual Fixed Salary, which is in line with the relevant best practices in the various jurisdictions in which Euronext is active.

Five year Company Performance Overview

Company performance	2019	2020	2021	2022(1)	2023(1)
Financial metrics					
Share price (31/12) (EUR)(2)	66.32	82.3	91.25	69.16	78.65
Underlying revenue (EUR million)(1)	679.1	884.3	1298.7	1467.8	1474.7
EBITDA (EUR million)	399.4	520.0	752.8	861.6	864.7
Non-financial metrics					
Countries	17	19	18	18	18
Headcount (31/12)	1086	1455	2126	2218	2,315
Average number of FTEs during the financial year	966	1231	1897	2122	2,266
Average annual remuneration of the employees(3)	161	163	149	143	145

(1) Starting in 2022 Financials, underlying values

(2) Adjusted to account for rights issue as necessary (last rights issue took place in May 2021)

(3) Determined by dividing the total wage costs in the financial year (as included in the Note 9 of the financial statements) by the average number of FTEs during the financial year. Excluding the Group CEO.

Pay Ratio including social charges

Euronext takes into account the internal pay ratios when formulating the Remuneration Policy. In light of transparency and clarity, Euronext applied in previous years a methodology using total cash, including Annual Fixed Salary and Short Term Incentive as disclosed in previous years Remuneration Reports.

The Dutch Corporate Governance code in its latest release provided more details on the calculation and now require Dutch listed companies to assess the CEO pay ratio between (i) the total annual remuneration of the CEO including social charges and (ii) the average annual remuneration of the employees of the company and the group companies whose financial data the company consolidates.

The definition and new methodology provided by the Dutch Corporate Governance code is the following:

a. the total annual remuneration of the CEO includes all remuneration components such as fixed remuneration, variable remuneration in cash (bonus), the share-based part of the remuneration, social security contributions, pension, expense allowance, etc., as included in the consolidated financial statements[1];

b. the average annual remuneration of the employees is determined by dividing the total wage costs in the financial year as included in the consolidated financial statements[2] by the average number of FTEs during the financial year; and

c. the value of the share-based remuneration is determined at the time of assignment, in line with the applicable rules under the applied reporting requirements.

The Group Chief Executive Officer Pay Ratios for the last five years with the new methodology as proposed by the Dutch Corporate Governance code are presented below:

	2019	2020	2021	2022	2023
Group Chief Executive Officer Pay Ratio	24.5	28.1	34.6	35.8	36.8

[1] Note 9 to the financial statements
[2] Note 9 to the financial statements

Long Term Incentive in Performance Shares Overview

in number of shares	Plan	Year of granting	Outstanding as at 1 Jan. 2023	Granted in calendar year	Forfeited in calendar year	Additional performance shares vested in 2023	Vested in calendar year	Outstanding as at 31 Dec. 2023
Stephane Boujnah	LTI	2019			In 2022, 24,922 shares vested related to the 2019 LTI plan.			
	LTI	2020	15,397			7,406	22,803	0
	LTI	2021	19,275					19,275
	LTI	2022	15,684					15,684
	LTI	2023		22,522				22,522
Chris Topple	LTI	2019			In 2022, 9,444 shares vested related to the 2019 LTI plan.			
	LTI	2020	3,768			1,812	5,580	0
	LTI	2021	3,663					3,663
	LTI	2022	4,034		4,034			0
	LTI	2023		4,669	4,669			0
Manuel Bento	LTI	2019			In 2022, 2,748 shares vested related to the 2019 LTI plan.			
	LTI	2020	1,244			598	1,842	0
	LTI	2021	1,401					1,401
	LTI	2022	1,520					1,520
	LTI	2023		4,279				4,279
Fabrizio Testa	LTI	2021	2,926					2,926
	LTI	2022	3,422					3,422
	LTI	2023		4,054				4,054
Daryl Byrne	LTI	2019			In 2022, 6,958 shares vested related to the 2019 LTI plan.			
	LTI	2020	2,520			1,212	3,732	0
	LTI	2021	2,365					2,365
	LTI	2022	2,566					2,566
	LTI	2023		3,040				3,040
Delphine d'Amarzit	LTI	2021	2,628					2,628
	LTI	2022	2,851					2,851
	LTI	2023		3,378				3,378
Simone Huis in 't Veld	LTI	2020	2,520			1,212	3,732	–
	LTI	2021	2,365					2,365
	LTI	2022	2,566					2,566
	LTI	2023		3,040				3,040
Isabel Ucha	LTI	2019			In 2022, 3,952 shares vested related to the 2019 LTI plan.			
	LTI	2020	1,431			688	2,119	–
	LTI	2021	1,343					1,343
	LTI	2022	1,457					1,457
	LTI	2023		1,726				1,726
Øvind Amundsen	LTI	2020	1,531			736	2,267	–
	LTI	2021	1,576					1,576
	LTI	2022	1,667					1,667
	LTI	2023		1,723				1,723
Benoît van den Hove	LTI	2019						
	LTI	2020	498			240	738	–
	LTI	2021	467					467
	LTI	2022	506					506
	LTI	2023		600				600

Vincent van Dessel	LTI	2019			In 2022, 4,838 shares vested related to the 2019 LTI plan.			
	LTI	2020	1,785			859	2,644	–
	LTI	2021	1,692					1,692
	LTI	2022	1,909					1,909
	LTI	2023		2,513				2,513
			108,577	**51,544**	**8,703**	**14,763**	**45,457**	**120,724**

4.4.5 Remuneration of Supervisory Board Members

Supervisory Board Remuneration Policy

The Remuneration Policy of the Supervisory Board was approved in the May 2021 Annual General Meeting, with a 95.54% percentage of favourable votes.

The principles of the Supervisory Board Remuneration Policy are to compensate Supervisory Board members for the time dedicated to oversee Euronext in line with responsibilities required by the Civil Code, Dutch Corporate Governance Code, the Rules of Procedure of the Supervisory Board and the Articles of Association.

The Remuneration Policy structure comprise a fixed fee and a variable amount per meeting. The Supervisory Board Remuneration Policy is aimed at ensuring a balanced, sustainable and competitive remuneration package supporting the long term strategy of Euronext and intends to compensate Supervisory Board members for the time dedicated to oversee Euronext in line with responsibilities required by the Dutch Civil Code, Dutch Corporate Governance Code, the Rules of Procedure of the Supervisory Board and the Articles of Association.

Given the nature of the Supervisory Board's responsibilities, remuneration is not linked to Company performance. Supervisory Board members are not granted equity-based compensation, in line with the Dutch Corporate Governance Code.

The fee structure for the members of the Supervisory Board is the following:

Role	Fixed amount	Variable amount (per physical meeting)
Chair of the Supervisory Board	€ 185,000	€ 3,500
Vice-Chair of the Supervisory Board	€ 95,000	€ 2,500
Member of the Supervisory Board	€ 50,000	€ 2,500
Chair of the Audit Committee	€ 30,000	-
Member of the Audit Committee	€ 9,000	-
Chair of the Risk Committee	€ 30,000	-
Member of the Risk Committee	€ 9,000	-
Chair of the Remuneration Committee	€ 20,000	-
Member of the Remuneration Committee	€ 9,000	-
Chair of the Governance & Nomination Committee	€ 20,000	-
Member of the Governance & Nomination Committee	€ 9,000	-

2023 Remuneration

In line with the Supervisory Board Remuneration Policy, gross amounts paid to members of the Supervisory Board in 2023 are disclosed below:

Group Supervisory Board (in '000€)	2019	2020	2021 (a)	2022	2023
Piero Novelli			213	253	249
Dick Sluimers	129	183	198	177	164
Manuel Ferreira da Silva	87	90	82	98	96
Jim Gollan	85	95	32		
Kerstin Günther	81	30			
Luc Keuleneer	81	84	27		
Padraic O'Connor	84	90	90	98	96
Nathalie Rachou	18	94	91	109	104
Franck Silvent	81	84	27		
Morten Thorsrud	17	84	93	117	114
Ramon Fernandez	37				
Alessandra Ferone			53	91	96
Diana Chan			64	116	114

Olivier Sichel	41	75	78
Rika Coppens	53	113	91

(a) The Remuneration Policy of the Supervisory Board has been implemented only for part of 2021, following the approval of the AGM in May 2021.

Members of the Supervisory Board, also received remuneration in relation to their positions in the Supervisory Board of Euronext's subsidiaries: Dick Sluimers and Rika Coppens for their position at Euronext Amsterdam, and Rika Coppens for her position at Euronext Brussels. These remunerations are disclosed in the figures as illustrated below.

Local Boards (in '000€)	**2019**	**2020**	**2021**	**2022**	**2023**
Dick Sluimers	15	15	15	15	15
Rika Coppens				18	30

Euronext does not issue options or share plans or other incentive plans to members of the Supervisory Board. Euronext has not granted any loans to members of the Supervisory Board. There are no service contracts which provide for benefits upon termination of employment with members of the Supervisory Board.

Appointment and dismissal

The composition of the Supervisory Board has not changed in 2023.


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5 SELECTED HISTORICAL CONSOLIDATED FINANCIAL INFORMATION AND OTHER FINANCIAL INFORMATION DR

In accordance with Article 19 of Regulation (EU) 2017/1129, the following information is incorporated by reference in the Universal Registration Document:

For Financial Year 2022

Required disclosures in the report of the Managing Board appearing in the Statement of the Managing Board, the Consolidated Financial Statements are presented on pages 221-312 and the corresponding auditor's report is presented on page 316 of the 2022 Universal Registration Document filed with the Autoriteit Financiële Markten on 30 March 2023 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2023-08/EUR_2022_URD_MEL%20FINALE_AUG.pdf

For Financial Year 2021

Required disclosures in the report of the Managing Board appearing in the Statement of the Managing Board, the Consolidated Financial Statements are presented on pages 213-298 and the corresponding auditor's report is presented on page 299 of the 2021 Universal Registration Document filed with the Autoriteit Financiële Markten on 31 March 2021 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2022-04/2021%20URD%20-%20ENX%20-%20PDF_1.pdf

5.1 Selected Historical Consolidated Financial Information

The selected consolidated financial information set out below is derived from the audited Consolidated Financial Statements for the financial years ended 31 December 2023, 2022 and 2021 and should be read in conjunction with, and is qualified by reference to, those Consolidated Financial Statements.

Selected Consolidated Income Statement Data

In thousands of euros	Year ended 31 December 2023	31 December 2022	31 December 2021
Revenue			
Listing	220,642	218,380	189,689
Trading revenue	490,008	514,125	465,265
of which			
▪ Cash trading	265,439	301,714	293,684
▪ Derivatives trading	54,168	58,380	52,458
▪ Fixed income trading	107,425	92,951	65,783
▪ FX trading	25,556	28,406	23,479
▪ Power trading	37,420	32,674	29,861
Investor Services	11,375	9,596	8,894
Advanced data services	224,774	212,053	183,607
Post-trade	370,183	364,519	320,570
of which			
▪ Clearing	121,283	121,393	101,376
▪ Custody & Settlement and other	248,900	243,126	219,194
Euronext Technology Solutions & Other revenue	109,894	100,101	85,498
Net treasury income/(loss) through CCP business	46,660	(4,913)	35,432
Other income	1,393	1,530	3,455
Transitional income / (loss)	(222)	3,419	6,245
TOTAL REVENUE AND INCOME	**1,474,707**	**1,418,810**	**1,298,655**
Salaries and employee benefits	(332,416)	(307,017)	(287,073)
Depreciation and amortisation	(170,131)	(160,191)	(134,572)
Other operational expenses	(355,923)	(326,344)	(297,719)
OPERATING PROFIT	**616,237**	**625,258**	**579,291**
Finance costs	(35,714)	(37,078)	(40,704)
Finance income (a)	30,526	5,806	1,479
Other net financing result (a)	5,208	(691)	4,833
Results from equity investments	23,500	9,842	25,712
Gain on sale of subsidiaries	(206)	2,274	2,681
Gain on sale of associates	53,028	–	–
Share of net profit from associates and joint ventures accounted for using the equity method, and impairments thereof	6,533	8,834	7,441
PROFIT BEFORE INCOME TAX	**699,112**	**614,245**	**580,733**
Income tax expense	(162,697)	(163,605)	(158,644)
PROFIT FOR THE YEAR	**536,415**	**450,640**	**422,089**
PROFIT ATTRIBUTABLE TO:			
■ Owners of the parent	513,567	437,827	413,344
■ Non-controlling interest	22,848	12,813	8,745

(a) *As from 2023, the Group presents finance income separately on the face of the income statement, following increased income from interest calculated using the effective interest method. The Group re-presented the comparative periods accordingly by reclassifying €5.8 million in 2022 and €1.5 million in 2021 from 'Other net financing results' that was originally reported at €5.1 million in 2022 and at €6.3 million in 2021.*

Selected Consolidated Balance Sheet Data

In thousands of euros	As at 31 December 2023	As at 31 December 2022	As at 31 December 2021
ASSETS			
Non-current assets			
Property, plant and equipment	114,373	109,389	97,580
Right-of-use assets	55,739	42,290	66,168
Goodwill and other intangible assets	6,108,152	6,205,826	6,215,844
Deferred tax assets	31,258	18,917	37,489
Investments in associates and joint ventures	1,329	72,009	69,237
Financial assets at fair value through other comprehensive income	262,655	278,219	258,068
Financial assets at amortised cost	3,452	2,312	2,902
Other non-current assets	1,088	1,374	1,317
Total non-current assets	**6,578,046**	**6,730,336**	**6,748,605**
Current assets			
Trade and other receivables	303,515	318,087	394,986
Other current assets	30,128	27,585	21,573
Income tax receivables	58,563	54,931	9,965
Derivative financial instruments	—	—	11,913
CCP clearing business assets	183,715,218	166,842,539	137,750,884
Other current financial assets	103,053	162,740	157,590
Cash and cash equivalents	1,448,788	1,001,082	804,361
Total current assets	**185,659,265**	**168,406,964**	**139,151,272**
Assets from disposal groups held for sale	—	—	6,436
Total assets	**192,237,311**	**175,137,300**	**145,906,313**
EQUITY AND LIABILITIES			
Equity			
Issued capital	171,370	171,370	171,370
Share premium	2,432,426	2,432,426	2,432,426
Reserve own shares	(242,117)	(32,836)	(42,778)
Retained earnings	1,543,458	1,265,765	1,022,921
Other reserves	40,554	77,242	63,647
Shareholders' equity	**3,945,691**	**3,913,967**	**3,647,586**
Non-controlling interests	139,655	126,339	123,114
Total equity	**4,085,346**	**4,040,306**	**3,770,700**
Non-current liabilities			
Borrowings	3,031,629	3,027,161	3,044,391
Lease liabilities	37,314	21,648	50,691
Deferred tax liabilities	531,895	552,574	592,431
Post-employment benefits	22,677	19,631	32,123
Contract liabilities	60,029	63,785	70,276
Provisions	7,295	7,049	8,847
Total non-current liabilities	**3,690,839**	**3,691,848**	**3,798,759**
Current liabilities			
Borrowings	17,286	17,370	17,359
Lease liabilities	22,159	28,466	20,993
Derivative financial instruments	34	19	—
CCP clearing business liabilities	183,832,245	166,858,684	137,732,403
Current income tax liabilities	89,120	28,463	42,068
Trade and other payables	415,843	396,287	439,856
Contract liabilities	79,270	75,198	80,546
Provisions	5,169	659	2,308
Total current liabilities	**184,461,126**	**167,405,146**	**138,335,533**
Liabilities from disposal groups held for sale	—	—	1,321
Total equity and liabilities	**192,237,311**	**175,137,300**	**145,906,313**

Selected Statement of Cash Flows Data

In thousands of euros	Year ended 31 December 2023	31 December 2022	31 December 2021
Net cash generated by operating activities	826,073	616,486	543,706
Net cash provided by/(used in) investing activities (b)	155,392	(122,585)	(4,210,509)
Net cash (used in)/provided by financing activities (b)	(519,700)	(282,368)	3,834,087
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**461,765**	**211,533**	**167,284**
Cash and cash equivalents – Beginning of period	1,001,082	809,409	629,469
Non-cash exchange (losses)/gains on cash and cash equivalents	(14,059)	(19,860)	12,656
CASH AND CASH EQUIVALENTS – END OF PERIOD (a)	**1,448,788**	**1,001,082**	**809,409**

(a) Includes €5.0 million of cash and cash equivalents classified as held for sale for the year ended 31 December 2021.

(b) As from 2023, the Group presents 'interest received' as part of cash flows from investing activities, whereas in previous periods this item was presented as part of cash flows from financing activities. The Group re-presented the comparative periods accordingly by reclassifying €5.9 million in 2022 and €5.0 million in 2021 from 'Net cash (used in)/provided by financing activities' to 'Net cash provided by/(used in) investing activities'.

5.2 Other Financial Information

Non-IFRS financial measures

In presenting and discussing the Group's financial position, ('underlying') operating results and ('underlying') net results throughout this Universal Registration Document, management uses certain Alternative performance measures not defined by IFRS and that have not been audited or reviewed. These Alternative performance measures (APMs) should not be viewed in isolation as alternatives to the equivalent IFRS measures and should be used as supplementary information in conjunction with the most directly comparable IFRS measures. Alternative performance measures do not have standardised meaning under IFRS and therefore may not be comparable to similar measures presented by other companies. Euronext believes that these measures provide valuable supplemental information to the company's management, investors and other stakeholders to evaluate the company's performance.

The Group presents the line items of its consolidated income statement before any 'non-underlying' items, as this highlights more clearly trends in the Group's business and results in more reliable and relevant information of the Group's ongoing sustainable financial performance.

The table below summarises the various APMs used throughout this Universal Registration Document, as well as the Group's rationale and purpose to use a specific APM.

Alternative Performance Measure	Definition	Rationale / purpose of use
Adjusted net income	Profit attributable to the owners of the Parent adjusted for any non-underlying items and tax related to those items.	Adjusted net income is used by the Group to provide to investors a better understanding of the true profitability of the Group for the applicable period.
Adjusted EPS	The adjusted net income of the Group divided by the total weighted average number of shares outstanding for the period	Adjusted EPS is used by the Group to provide to investors a better understanding of the true profitability per share of the Group for the applicable period.
Free cash flow	Net cash generated by operating activities minus capital expenditures	Free cash flow represents the cash generating capability of the Group to pay dividends, repay providers of capital, or carry out acquisitions.
Capital expenditures	Purchase of property, plant and equipment plus purchase of intangible assets, including investments in software developed in-house	Capital expenditures indicate the Group's appetite to invest in existing and new fixed assets to maintain or grow the business.

Non-underlying items	Items of income and expense that are material by their size and/or that are infrequent and unusual by their nature or incidence are not considered to be incurred in the normal course of business. These items are disclosed in Chapter 8, Note 3, section U of the URD.	Non-underlying items are presented separately in the Consolidated Statement of Profit or Loss, as defined in section 8.1 of the URD in order to improve the understanding of the operating performance of the Group.
Adjusted operating profit	Total revenues and income minus salaries and employee benefits, minus depreciation and amortisation minus other operating expenses, adjusted for any non-underlying items.	Adjusted operating profit is used by the Group to measure its profit generated from its core business functions.
Adjusted depreciation and amortisation	Depreciation and amortisation, adjusted for any non-underlying items.	Adjusted depreciation and amortisation is used by the Group to measure its depreciation and amortisation generated from its core business functions.
Adjusted total revenue and income	Total revenue and income, adjusted for any non-underlying items.	Adjusted total revenue and income is used by the Group to measure its total revenue and income generated from its core business functions.
EBITDA	Operating profit before depreciation and amortisation.	EBITDA is used by the Group to measure its operating performance.
Adjusted EBITDA	Adjusted operating profit before adjusted depreciation and amortisation.	Adjusted EBITDA is used by the Group to measure its operating performance, as management believes that this measurement is most relevant in evaluating the operating results of the Group. This measure is included in the internal management reports that are reviewed by the CODM.
EBITDA margin	EBITDA (as defined above), divided by total revenue and income.	EBITDA margin is used to show the ratio between the EBITDA and the revenue and income.
Adjusted EBITDA margin	Adjusted EBITDA (as defined above), divided by adjusted total revenue and income.	Adjusted EBITDA margin is used to show the ratio between the Adjusted EBITDA and the revenue and income.
EBITDA to Net operating cash flow	Net cash generated by operating activities, divided by EBITDA (as defined above).	This ratio, also called cash conversion ratio, is used to assess the efficiency of the Group to turn the EBITDA into cash.
Net debt to EBITDA ratio	The aggregated non-current and current borrowings of the Group less cash and cash equivalents of the Group, divided by EBITDA (as defined above)	This ratio is used as a proxy to assess the Group's solvency (i.e. its ability to face its financial commitments in the long run).

The figures used in the reconciliation tables below have been derived from the Consolidated Financial Statements as provided in section 8 of this Universal Registration Document.

Reconciliation of Adjusted Total revenue and income, Adjusted Depreciation and amortisation and Adjusted Operating Profit

	Year ended		
In thousands of euros	31 December 2023	31 December 2022	31 December 2021
Total revenue and income	1,474,707	1,418,810	1,298,655
Non-underlying items included in total revenue and income	–	(48,951)	–
Adjusted Total revenue and income [(a)]	**1,474,707**	**1,467,761**	**1,298,655**
Depreciation and amortisation	(170,131)	(160,191)	(134,572)
Non-underlying items included in depreciation and amortisation	(95,916)	(91,362)	(73,180)
Adjusted Depreciation and amortisation [(a)]	**(74,215)**	**(68,829)**	**(61,392)**
Operating profit	**616,237**	**625,258**	**579,291**
Non-underlying items included in total revenues and income	–	(48,951)	–
Non-underlying items included in salaries and employee benefits	(12,931)	(5,958)	(11,273)
Non-underlying items included in depreciation and amortisation	(95,916)	(91,362)	(73,180)
Non-underlying items included in other operational expenses	(65,367)	(21,259)	(45,891)
Non-underlying items included in operating profit	**(174,214)**	**(167,530)**	**(130,344)**
Adjusted Operating profit [(a)]	**790,451**	**792,788**	**709,635**

(a) Adjusted Operating profit, Adjusted Depreciation and amortisation and Adjusted Total revenue and income are non-IFRS measures and should not be considered as an alternative to, or more meaningful than, and should be read in conjunction with Operating profit, Total revenue and income, Salaries and employee benefits, Depreciation and amortisation and Other operational expenses.

Reconciliation of EBITDA, Adjusted EBITDA, EBITDA margin, Adjusted EBITDA margin, EBITDA to Net operating cash flow and Net debt to EBITDA ratio

	Year ended		
In thousands of euros (except for percentages and ratios)	31 December 2023	31 December 2022	31 December 2021
Operating profit	616,237	625,258	579,291
Depreciation and amortisation	(170,131)	(160,191)	(134,572)
EBITDA [(a)]	**786,368**	**785,449**	**713,863**
Total revenue and income	1,474,707	1,418,810	1,298,655
EBITDA margin [(a)]	**53.3 %**	**55.4 %**	**55.0 %**
Adjusted Operating profit	790,451	792,788	709,635
Adjusted Depreciation and amortisation	(74,215)	(68,829)	(61,392)
Adjusted EBITDA [(a)]	**864,666**	**861,617**	**771,027**
Adjusted Total revenue and income	1,474,707	1,467,761	1,298,655
Adjusted EBITDA margin [(a)]	**58.6 %**	**58.7 %**	**59.4 %**
Net cash generated by operating activities	826,073	616,486	543,706
EBITDA to Net operating cash flow [(a)]	**105.0 %**	**78.5 %**	**76.2 %**
Non-current Borrowings	3,031,629	3,027,161	3,044,391
Current Borrowings	17,286	17,370	17,359
Less: Cash and cash equivalents	(1,448,788)	(1,001,082)	(804,361)
Net debt	**1,600,127**	**2,043,449**	**2,257,389**
Net debt to EBITDA ratio [(a)]	**2.03**	**2.60**	**3.16**

(a) EBITDA, Adjusted EBITDA, EBITDA margin, Adjusted EBITDA margin, EBITDA to Net operating cash flow and Net debt to EBITDA ratio are non-IFRS measures and should not be considered as an alternative to, or more meaningful than, and should be read in conjunction with Operating profit, Depreciation and amortisation, Total revenue and income, Net cash generated by operating activities, Non-current Borrowings, Current Borrowings and Cash and cash equivalents.

Reconciliation of Free Cash Flow and Capital Expenditures

	Year ended		
In thousands of euros	31 December 2023	31 December 2022	31 December 2021
Net cash generated by operating activities	**826,073**	**616,486**	**543,706**
Purchase of property, plant and equipment	(27,703)	(31,867)	(33,367)
Purchase of intangible assets (excluding intangible assets recognised on acquisition of subsidiaries)	(75,333)	(67,650)	(34,223)
Capital Expenditures [(a)]	**(103,036)**	**(99,517)**	**(67,590)**
Free Cash Flow [(a)]	**723,037**	**516,969**	**476,116**

(a) *Free Cash Flow and Capital Expenditures are non-IFRS measures and should not be considered as an alternative to, or more meaningful than, and should be read in conjunction with, Net cash generated by operating activities.*

Reconciliation of Adjusted Net Income and Adjusted EPS

	Year Ended		
In millions of euros, unless stated otherwise	31 December 2023	31 December 2022	31 December 2021
Profit attributable to the owners of the Parent	513.6	437.8	413.3
EPS (Basic Earnings per Share) (€ per share)	**4.84**	**4.10**	**4.30**
Adjustments for non-underlying items included in:			
Total revenue and income	–	(49.0)	–
Depreciation and amortisation (D&A)	(95.9)	(91.4)	(73.2)
Operating expenses excluding D&A	(78.3)	(27.2)	(57.2)
Finance cost	–	–	(9.9)
(Loss)/gain on disposal of subsidiaries	(0.2)	2.3	2.7
Gain on sale of associates	53.0	–	–
Impairment of investments in associates and joint ventures	–	(1.5)	(4.3)
Non-controlling interests	4.1	4.6	0.9
Tax related to non-underlying items	46.2	44.7	28.8
Adjusted Net Income [(a)]	**584.7**	**555.3**	**525.5**
Adjusted EPS (€ per share) [(a)]	**5.51**	**5.21**	**5.47**

(a) *Adjusted Net Income and Adjusted EPS are non-IFRS measures and should not be considered as an alternative to, or more meaningful than, and should be read in conjunction with respectively, Profit attributable to the owners of the Parent and Basic Earnings per Share.*

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6

6 GENERAL DESCRIPTION OF THE COMPANY AND ITS SHARE CAPITAL DR

6.1 Legal information on the company

6.1.1 General

Euronext is a public company with limited liability (*naamloze vennootschap*) incorporated under the laws of the Netherlands and is domiciled in the Netherlands. The Company was incorporated in the Netherlands on 15 March 2014.

Euronext's statutory seat (*statutaire zetel*) is in Amsterdam, the Netherlands, and its registered office and principal place of business is at Beursplein 5, 1012 JW Amsterdam, the Netherlands.

The Company is registered with the trade register of the Chamber of Commerce for Amsterdam, the Netherlands, under number 60234520, and the telephone number is +31 (0)20-7214444. Euronext's LEI is 724500QJ4QSZ3H9QU415 and its corporate website is https://www.euronext.com/en.

Other than the sections of the 2021 and 2022 Universal Registration Document that are explicitly incorporated by reference in this Universal Registration Document, the contents of Euronext's website, or of websites accessible from hyperlinks on that website, do not form part of, and are not incorporated by reference into, this Universal Registration Document.

6.1.2 Corporate Objects

Euronext's corporate objects, as set out in Article 3 of the Articles of Association, are to participate and to manage other enterprises and companies of which the objects are to set up, develop, hold and operate, directly or indirectly, one or more regulated and other markets or other facilities with regard to the listing of, the trading in, the post-trade processing of transactions in, and related services and process in, securities and derivatives, as well as to manage and finance subsidiaries, to enter into joint ventures with other enterprises and other companies engaged in one or more of the activities referred to above; to acquire, operate and dispose of industrial and intellectual property rights as well as real property; to provide security for the debts of the Company, its subsidiaries or any other legal person and to undertake all that is connected to the foregoing or in furtherance thereof.

6.2 Share capital

6.2.1 Authorised and Issued Share Capital

Under the Articles of Association, Euronext's authorised share capital amounts to €200,000,001.60 and is divided into 125,000,000 Ordinary Shares, each with a nominal value of €1.60 and one priority share with a nominal value of €1.60. All of Euronext's shares have been or will be created under Dutch law.

Throughout 2023, Euronext's issued share capital amounted to €171,370,070.40 and was divided into 107,106,294 Ordinary Shares. As of 31 December 2023, Euronext held 3,440,126 shares in its own shares. The Priority Share is currently not outstanding. All shares that are issued at the date of this Universal Registration Document are fully paid up.

As of 31 December 2022, Euronext's issued share capital amounted to €171,370,070.40 and was divided into 107,106,294 Ordinary Shares.

All shares carry the same voting rights, with the exception of shares that are held by the Company or its subsidiaries, which are not entitled to be voted upon. There are no convertible securities, exchangeable securities or securities with warrants in Euronext. All of the Ordinary Shares represent capital in Euronext. No share or loan capital of any member of the Euronext group is under option or agreed, conditionally or unconditionally, to be put under option.

Between 31 July 2023 and 4 January 2024, a €200 million share repurchase programme ("the Programme") was completed. The Programme was implemented in accordance with the authorisation given to the Managing Board of the Company at the 2023 Annual General Meeting on 17 May 2023 to acquire ordinary shares in the share capital of the Company on behalf of the Company to a limit of 10.0% of the share capital of the Company. Over the duration of the programme, 2,870,787 shares, or approximately 2.7% of Euronext's share capital as of 31 December 2023, were repurchased at an average price of €69.67 per share.

The purpose of the Programme was to reduce the share capital of Euronext and the Programme was executed by a financial intermediary in compliance with applicable rules and regulations, including the Market Abuse Regulation (EU) No 596/2014 and the Commission Delegated Regulation (EU) 2016/1052.

Euronext is subject to the provisions of the Dutch Financial Supervision Act and the Articles of Association with regard to the issue of shares following admission. The shares are in registered form and are only available in the form of an entry in Euronext's shareholders' register and not in certificated form.

6.2.2 Issue of Shares

Under its Articles of Association Euronext may issue shares, or grant rights to subscribe for shares, only pursuant to a resolution of the General Meeting upon proposal of the Supervisory Board or upon proposal of the Managing Board, which proposal has been approved by the Supervisory Board.

Euronext's Articles of Association provide that the General Meeting may designate the authority to issue shares or grant rights to subscribe for shares, to the Managing Board upon proposal of the Supervisory Board on a proposal of the Managing Board, which proposal has been approved by the Supervisory Board. Pursuant to the Dutch Civil Code and Euronext's Articles of Association, the period of designation may not exceed five years. Such designation may be renewed by a resolution of the General Meeting for a subsequent period of up to five years each time. Unless the resolution determines otherwise, the designation is irrevocable. At the designation, the number of shares which may be issued by the Managing Board must be determined.

On 17 May 2023, the General Meeting designated the Managing Board as per 17 May 2023 for a period of eighteen months or until the date on which the meeting again extends the designation, if earlier, as the competent body to, subject to the approval of the Supervisory Board, issue ordinary shares and to grant rights to subscribe for ordinary shares up to a total of 10% of the currently issued ordinary share capital.

As set out in the IPO prospectus of 10 June 2014, Euronext has an agreement with its Reference Shareholders to give reasonable prior notice if it uses this authority for share issuances in case of a merger or acquisition transaction. By supplemental letter agreement dated 29 April 2021 Euronext has, in addition, undertaken towards its Reference Shareholders that it will not use this authority for any share issuances, if and to the extent pursuant to such issuance the joint shareholding of the Reference Shareholders in Euronext N.V. would dilute to below 18.18%.

6.2.3 Pre-Emption Rights

Dutch company law and Euronext's Articles of Association in most cases give shareholders pre-emption rights to subscribe on a *pro rata* basis for any issue of new shares or upon a grant of rights to subscribe for shares. Exceptions to these pre-emption rights include the issue of shares and the grant of rights to subscribe for shares (i) to Euronext's employees, (ii) in return for non-cash consideration, or (iii) the issue of shares to persons exercising a previously granted right to subscribe for shares.

A shareholder may exercise pre-emption rights during a period of two weeks from the date of the announcement of the issue or grant. The General Meeting or the Managing Board, if so designated by the General Meeting, may restrict the right or exclude shareholder pre-emption rights. A resolution by the General Meeting to designate the authority to exclude or limit pre-emption rights to the Managing Board requires a majority of at least two-thirds of the votes cast if less than 50% of Euronext's issued share capital is represented and can only be taken upon proposal of the Supervisory Board or upon proposal of the Managing Board, which proposal has been approved by the Supervisory Board. If the General Meeting has not designated this authority to the Managing Board, the General Meeting may itself vote to limit or exclude pre-emption rights and will also require a majority of at least two-thirds of the votes cast, if less than 50% of Euronext's issued share capital is represented at the General Meeting.

On 17 May 2023, the General Meeting designated the Managing Board as per 17 May 2023 for a period of eighteen months or until the date on which the meeting again extends the designation, if earlier, as the competent body to, subject to the approval of the Supervisory Board, restrict or exclude the pre-emptive rights of shareholders pertaining to (the right to subscribe for) ordinary shares upon any issuance of ordinary shares (as referred to in Item 10a of the agenda of the meeting).

The Company has an agreement with its Reference shareholders (see section *6.4.1 - Reference Shareholders*) to give reasonable prior notice if Euronext uses this authority for share issuances in case of a merger or acquisition transaction.

6.2.4 Acquisition of Shares in Euronext's Capital

Euronext may acquire fully paid shares at any time for no consideration (*om niet*), or, subject to the following provisions of Dutch law and its Articles of Association, Euronext may acquire fully paid shares for consideration, namely if (i) its shareholders' equity, less the payment required to make the acquisition, does not fall below the sum of paid-in and called-up share capital and any statutory reserves, (ii) Euronext and its subsidiaries would thereafter not hold shares or hold a pledge over Euronext shares with an aggregate nominal value exceeding 50% of its issued share capital, and (iii) the Managing Board has been authorised by the General Meeting, with the prior approval of the Supervisory Board.

Authorisation from the General Meeting to acquire Euronext shares must specify the number and class of shares that may be acquired, the manner in which shares may be acquired and the price range within which shares may be acquired. Such authorisation will be valid for no more than eighteen months. Any shares Euronext holds may not be voted or counted for voting quorum purposes.

On 17 May 2023, the General Meeting designated the Managing Board as per 17 May 2023 for a period of eighteen months or until the date on which the meeting again extends the authorisation, if earlier, to, subject to the approval of the Supervisory Board, have the Company acquire ordinary shares in the share capital of the Company through purchase on a stock exchange or otherwise. The authorisation is given for the purchase of up to 10% of the issued ordinary shares at the time of the purchase, for a purchase price between (a) the par value of the ordinary shares at the time of the purchase and (b) the average closing price of the ordinary shares on Euronext Paris, Euronext Amsterdam, Euronext Brussels and Euronext Lisbon, during the five trading days preceding the day of purchase within a margin of 10% of that purchase price. Under the Facilities Agreement (see section *7.1.11 - Facilities Agreement*), Euronext's ability to acquire its shares is restricted, subject to certain exceptions.

6.2.5 Reduction of Share Capital

Under Euronext's Articles of Association, upon a proposal from the Supervisory Board, or upon proposal of the Managing Board, which has been approved by the Supervisory Board, the General Meeting may resolve to reduce Euronext's issued and outstanding share capital by cancelling its shares, or by amending Euronext's Articles of Association to reduce the nominal value of its shares. The decision to reduce Euronext's share capital requires a majority of at least two-thirds of the votes cast if less than 50% of Euronext's issued share capital is present or represented at the General Meeting.

The General Meeting will be requested during the 2024 Annual General Meeting on 15 May 2024 to authorise the Managing Board of the Company to confirm the cancellation by way of withdrawal of the 2,870,787 shares that were purchased under the share repurchase programme mentioned in section *6.2.1 - Authorised and Issued Share Capital*. If approved, the resolution of the Managing Board will be deposited at the trade register and announced in a national newspaper for a period of 2 months following the announcement.

6.3 Shareholder Structure

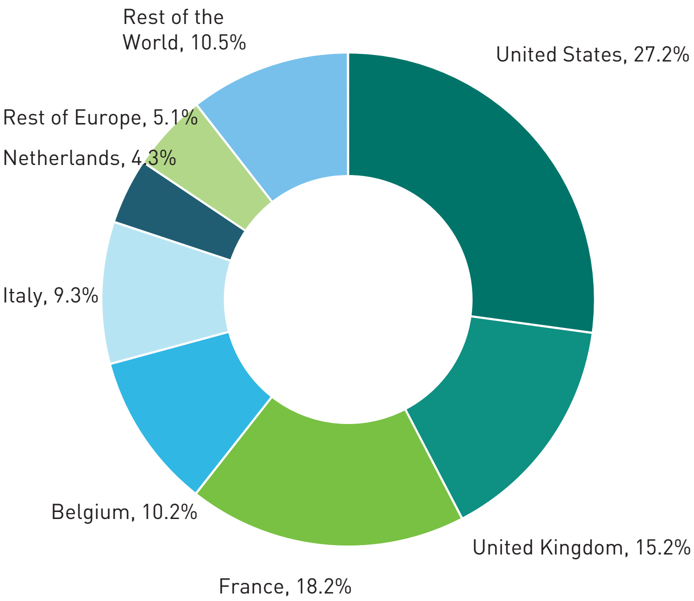
The shareholding structure as of 31 December 2023 was as follows

Shareholder	Number of shares	% of capital
Reference shareholders (a)	25,501,046	23.81%
Treasury Shares	3,440,126	3.21%
of which shares repurchased under the share repurchase programme	*2,870,632*	*2.68%*
Employees	123,015	0.11%
Free float	78,042,107	72.86%
TOTAL	**107,106,294**	**100.00%**

(a) Only includes the shares held within the Reference Shareholders Agreement

(b) Treasury shares include shares acquired as part of the share repurchase programme, which will be cancelled

Geographic breakdown of the shareholders as of 31 December 2023



6.4 Share classes and Major Shareholders

6.4.1 Reference Shareholders

Prior to the IPO, on 27 May 2014, a group of institutional investors (collectively, the "Reference Shareholders", and each a "Reference Shareholder") purchased an aggregate of 33.36% of the issued and outstanding Ordinary Shares from ICE, the selling shareholder at the IPO, at €19.20 or a 4% discount to the offer price (€20.00).

The initial group of Reference shareholders was comprised of Novo Banco, BNP Paribas S.A., BNP Paribas Fortis S.A./N.V., ABN AMRO Bank N.V. through its subsidiary ABN AMRO

Participaties Fund I B.V., ASR Levensverzekering N.V. (a company of the ASR Nederland group), Caisse des Dépôts et Consignations, Bpifrance Participations, Euroclear S.A./N.V., Société Fédérale de Participations et d'Investissement/ Federale Participatie- en Investeringsmaatschappij, Société Générale and Banco BPI Pension Fund represented by BPI Vida e Pensões – Companhia de Seguros, S.A.

On 3 June 2014, the initial Reference Shareholders entered into an agreement (the "Reference Shareholders Agreement") in relation to their shareholdings in Euronext N.V.. Subsequently, a first Reference Shareholders extension agreement was executed on 17 June 2017 and a second Reference Shareholders Agreement on 20 June 2019 (the initial Reference Shareholders Agreement, the first extension and the second extension collectively also referred to as the "Reference Shareholders Agreement"). The Reference Shareholders Agreement provided that it and all restrictions and requirements thereunder would terminate on 20 June 2021 unless extended by written agreement.

As such, on 29 April 2021, as part of the completion of the acquisition of the Borsa Italiana Group, CDP Equity and Intesa SanPaolo acceded to the Reference Shareholders Agreement by entering into the extension and amendment agreement with the Reference Shareholders (the "Extension Agreement"), and accordingly the letter agreement between Euronext and the Reference Shareholders was amended. One party left the group of Reference Shareholders. The Reference Shareholders Agreement, as extended and amended by the Extension Agreement, will terminate three years from completion, thus on 29 April 2024.

As at 31 December 2023, the Reference Shareholders are:

Name of reference shareholder	Number of shares	Individual shareholding (% of capital)
Caisse des Dépôts et Consignations	7,840,000	7.32%
CDP Equity	7,840,000	7.32%
Euroclear S.A./N.V.	4,284,252	4.00%
Société Fédérale de Participations et d'Investissement/ Federale Participatie- en Investeringsmaatschappij	3,391,200	3.17%
Intesa SanPaolo	1,606,594	1.50%
ABN AMRO Bank N.V. through its subsidiary ABN AMRO Participaties Fund I B.V.	539,000	0.50%
TOTAL SHAREHOLDING (a)	**25,501,046**	**23.81%**

(a) Only includes the shares held within the Reference Shareholders Agreement

Changes in reference shareholders ownership post 31 December 2023

On 8 March 2024, an announcement was published confirming that Société Fédérale de Participations et d'Investissement, Caisse des Dépôts et Consignations and CDP Equity agreed with Euroclear S.A./N.V. to acquire from Euroclear S.A/N.V respectively 2,142,126, 535,531 and 535,531 shares in the share capital of Euronext N.V., representing respectively 2.0%, 0.5% and 0.5% of the share capital of the Company.

Share Transfer Restriction

Under the Reference Shareholders Agreement, as amended on 29 April 2021, each of the Reference Shareholders has agreed not to sell or otherwise transfer or dispose of any of the Ordinary Shares such Reference Shareholder holds pursuant to the Share Purchase Agreement for a period of three years commencing on 29 April 2021(the "Restricted Period"). This transfer restriction does not apply to transfers to: (1) affiliates of a Reference Shareholder, provided that the transferee agrees to be bound by this transfer restriction and the other terms and conditions of the Reference Shareholders Agreement and shall accede to the Reference Shareholders Agreement; (2) another Reference Shareholder, provided that the Ordinary Shares transferred will continue to be subject to the transfer restriction and the other terms and conditions of the Reference Shareholders Agreement as if originally held by the acquiring Reference Shareholder; and (3) a third party with the unanimous consent in writing of the Reference Shareholders (subject to the consent of the relevant regulator(s)), such consent not to be unreasonably withheld and provided the third party shall accede to the Reference Shareholders Agreement, and further provided that no mandatory bid obligation is triggered by such transfer). In the event of transfers to an affiliate of a Reference Shareholder, such affiliate must re-transfer the relevant Ordinary Shares to the initial Reference Shareholder prior to ceasing to be an affiliate of such Reference Shareholder. In the event of proposed transfers to another Reference Shareholder, the other Reference Shareholders will have a right of first refusal pro rata to their respective holdings. In addition, repo and securities lending transactions may be excluded from this restriction on the basis of guidelines to be agreed.

In addition, notwithstanding this share transfer restriction:

- ABN AMRO Bank N.V. and Intesa SanPaolo may each elect to leave the Reference Shareholders Agreement and other ancillary agreements during a 30-day period commencing on the date that is two years after the commencement of the Restricted Period by giving written notice to the other parties to the Reference Shareholders Agreement, provided that the remaining Reference Shareholders shall have a right to acquire all restricted Ordinary Shares held by the departing Reference Shareholder, pro rata to their respective holdings. Each of the remaining Reference Shareholders may also elect to appoint a third-party purchaser to acquire such restricted Ordinary Shares in accordance with these provisions. Any restricted Ordinary Shares not taken up by the remaining Reference Shareholders shall cease to be subject to these transfer restrictions. Such a departing Reference Shareholder may also elect to diminish the extent of its restricted Ordinary Shares after such two years. In that case, the same procedure will apply for the part of the interest the departing Reference Shareholder wants to exit; and

- where an Emergency Event[3] occurs in respect of any of the Reference Shareholders or any of its affiliates, the departing Reference Shareholder may elect to leave the Reference Shareholders Agreement and other ancillary agreements by giving written notice to the other parties to the Reference Shareholders Agreement, provided that the remaining Reference Shareholders shall have a right to acquire all restricted Ordinary Shares held by the departing Reference Shareholder, pro rata to their respective holdings. Each of the remaining Reference Shareholders may also elect to appoint a third party purchaser to acquire such restricted Ordinary Shares in accordance with these provisions. Any restricted Ordinary Shares not taken up by the remaining Reference Shareholders shall cease to be subject to these transfer restrictions. A departing Reference Shareholder may also elect to diminish the extent of its restricted Ordinary Shares in case of an Emergency Event. In that case, the same procedure will apply for the part of the interest the departing Reference Shareholder wants to exit.

Moreover, pursuant to the Reference Shareholders Agreement: (1) each Reference Shareholder has such number of votes equal to the aggregate number of restricted Ordinary Shares held by the Reference Shareholder and its affiliates. The restriction in the Reference Shareholders Agreement that no Reference Shareholder shall at any time have one-third or more of the votes within the Committee of Representatives of the Reference Shareholders regardless of the number of Ordinary Shares held will be removed; and (2) any resolution having a potential impact on the Company's strategy and/or on the principles of the federal model and the business of the stock exchanges operated by the Combined Group will, in addition to the existing matters, require a qualified majority of two thirds of the votes cast.

The Reference Shareholders Agreement, as extended and amended, will terminate three years from completion of the Transaction.

Further Restrictions

Each of the Reference shareholders has agreed not to enter into any transaction or do anything, and not to permit its affiliates to enter into any transaction or do anything, if such transaction or action would result in the Reference shareholders or any of them becoming obligated or being forced to make a mandatory bid (verplicht openbaar bod) for the Ordinary Shares within the meaning of section 5:70 of the Dutch Wet op het financieel toezicht (Financial Supervision Act) implementing Article 5 of Directive 2004/25/EC.

Supervisory Board Representation

The Reference shareholders, acting jointly, have the right to propose one third of the Supervisory Board members. Members of the Supervisory Board appointed upon nomination by the Reference shareholders are referred to as "Reference shareholder directors". The Supervisory Board undertakes to nominate the person proposed by the Reference shareholders to the shareholders meeting of Euronext, absent its objection to such nomination on the grounds of the nominee reasonably not meeting the suitability and integrity criteria under applicable Dutch law and subject to any applicable regulatory assessments, approvals and requirements.

Reference shareholder directors are appointed by the General Meeting for four year terms. Should the Reference Shareholders Agreement terminate prior to the end of such term, the term shall end on the day following the next General Meeting of Euronext N.V.

Committee of Representatives

Each Reference shareholder has appointed one representative and one alternate duly authorised to represent and act for and in the name of the relevant Reference shareholder and any and all of its affiliates for all purposes of the Reference shareholders Agreement, who shall be the contact person vis-à-vis the other Reference shareholders and the Company. The representatives of all Reference shareholders constitute the Committee of Representatives which decides on all matters requiring a joint decision of the Reference shareholders. The decisions of the Committee of Representatives shall be binding upon all Reference shareholders.

Voting

Other than as indicated below, the decisions of the Committee of Representatives are adopted by absolute majority of the votes cast. A qualified majority of two thirds of the votes cast is required as indicated below. Each Reference shareholder has a number of votes equal to the aggregate number of Ordinary Shares held by it and its affiliates, provided that no Reference shareholder shall have over one-third of the votes of the Committee of Representatives regardless of the number of Ordinary Shares it holds.

Whenever the Reference Shareholders Agreement requires joint decision making of the Reference shareholders in the General Meeting, each Reference shareholder will exercise and will cause any of its affiliates to exercise, its voting rights in such shareholders' Meeting in accordance with the decision of the Committee of Representatives on the relevant subject.

The Reference shareholders agree to vote in accordance with the decision of the Committee of Representatives on any proposed shareholders' resolutions.

The following resolutions require a qualified majority of two thirds of the votes cast:

- any issuance of Ordinary Shares by the Company or rights to acquire Ordinary Shares (and exclusion or limitation or pre-emption rights, as the case may be);
- any decrease in the share capital of the Company;
- any authorisation for the Company to acquire its own shares;
- any issuance of securities other than Ordinary Shares, to the extent these give exposure to Ordinary Shares, including but not limited to hybrids and covered bonds;

[3] an Emergency Event is a material action taken in respect of a member of the group of the departing Reference Shareholder as contemplated by the Bank Recovery and Resolution Directive or other similar action in respect of a member of the group of the departing Reference Shareholder.

- any proposal to appoint, suspend or remove any member of the Supervisory Board (including but not limited to any Reference shareholders director);
- any going private transaction or other change of control of the Company;
- any major identity transforming transactions requiring shareholders' approval pursuant to section 2:107a of the Dutch Civil Code;
- any other major acquisitions or disposals not requiring approval under section 2:107a of the Dutch Civil Code;
- any amendment of the Articles of Association of the Company; and
- any proposal for legal merger, demerger, conversion or dissolution of the Company.

For the following resolutions, the adoption is by absolute majority of the votes cast:

- any proposal to appoint, suspend or remove any member of the Managing Board;
- adoption of the annual Financial Statements of the Company;
- discharge of the members of the Managing Board and the Supervisory Board; and
- any dividend or other distribution to shareholders.

Termination

The Reference Shareholders Agreement and all restrictions and requirements thereunder or pursuant thereto shall terminate upon the earlier of (i) expiry of the Restricted Period (as defined in the 'Transaction' section below), unless extended by written agreement signed by all Reference shareholders, subject to any regulatory declarations of no objection or regulatory approvals, (ii) the Company entering into bankruptcy or being granted a (provisional) suspension of payment, and (iii) at any time after the Restricted Period, the aggregate shareholding of the Reference shareholders becoming less than 21% of the issued share capital of the Company unless increased to at least 21% again within 30 days after such event. The Reference Shareholders Agreement terminated on 21 June 2021.

Letter Agreement

In addition to the Reference Shareholders Agreement as amended and extended as set forth above, Euronext N.V. and the Reference Shareholders have entered into an agreement governing their relationship (the "Letter Agreement"). The initial Letter Agreement is dated 4 June 2014 and was supplemented on 25 March 2015 and amended and extended on 13 June 2017, and subsequently amended and extended on 17 June 2019. Simultaneously with the Extension Agreement, the Letter Agreement was amended on 29 April 2021 and extended in the context of the Transaction as defined below. The main purpose of the Letter Agreement is to enhance and reinforce the regular dialogue between Euronext and the Reference Shareholders, addressing (i) the right of the Reference Shareholders to retain one third of the Supervisory Board seats, (ii) the use by Euronext of the delegated authorities for the issuance / repurchase of shares, with the possible exclusion or restriction of pre-emption rights, (iii) the process of communication between Euronext and the Reference Shareholders, which includes periodical meetings on topics including strategy, governance and financing structure; and (iv) the involvement of the Reference shareholders in the selection procedure in case of any vacancies for the CEO, the COO or Supervisory Board positions.

6.4.2 Major Shareholdings

On top of the Reference Shareholders who jointly own 23.81%[4] and whose individual holdings are disclosed above and according to the AFM any substantial holding, gross long and gross short positions in issuing institutions and shares with special controlling rights have to be notified. The duty to notify applies to legal entities as well as natural persons.

An issuing institution is: a public limited company (*naamloze vennootschap*) incorporated under Dutch law whose (depositary receipts for) shares are admitted to trading on a regulated market in the Netherlands or in another Member State of the European Union or an EEA State, or a legal entity incorporated under the law of a state that is not an European Union Member State and whose (depositary receipts for) shares are admitted to trading on a regulated market in the Netherlands.

As soon as the substantial holding, gross long or or gross short position equals or exceeds 3% of the issued capital, the holder should report this. Subsequently, it should notify the AFM again when its substantial holding, gross long or gross short position consequently reaches, exceeds or falls below a threshold. This can be caused by the acquisition or disposal of shares by the shareholder or because the issued capital of the issuing institution is increased or decreased. Thresholds are: 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%.

The AFM notifies the Company of such disclosures and includes them in a register, which is published on the AFM's website. Furthermore, an obligation to disclose (net) short positions is set out in the EU Regulation on Short Selling.

In 2023 and from 1 January 2024 until the publication of this Universal Registration Document, the following crossings of thresholds were declared:

[4] *Only including share held within the Reference Shareholder Agreement*

Date	Shareholder having crossed the threshold	Crossing of threshold in capital and voting right	Type	No of shares declared	% of voting rights at date of declaration
28/01/2023	Amundi Asset Management	3 %	Increase	3,321,249	3.11 %
22/02/2023	BlackRock Inc.	3 %	Increase	3,675,507	4.20 %
03/01/2023	Amundi Asset Management	3 %	Decrease	3,057,126	2.85 %
03/06/2023	Amundi Asset Management	3 %	Increase	3,216,516	3.00 %
23/03/2023	Amundi Asset Management	3 %	Decrease	3,321,249	2.82 %
13/04/2023	Amundi Asset Management	3 %	Increase	3,276,581	3.06 %
05/08/2023	Black Rock Inc.	3 %	Decrease	3,467,826	3.99 %
05/09/2023	Black Rock Inc.	3 %	Increase	3,532,663	4.05 %
22/05/2023	Black Rock Inc.	3 %	Decrease	3,426,434	3.97 %
26/05/2023	BlackRock Inc.	3 %	Increase	3,488,687	4.03 %
06/07/2023	BlackRock Inc.	3 %	Increase	3,509,641	4.07 %
06/09/2023	BlackRock Inc.	3 %	Increase	3,549,332	4.11 %
13/06/2023	BlackRock Inc.	3 %	Decrease	3,496,263	4.06 %
08/07/2023	BlackRock Inc.	3 %	Decrease	3,463,159	4.02 %
08/08/2023	BlackRock Inc.	3 %	Increase	3,520,812	4.08 %
17/08/2023	BlackRock Inc.	3 %	Decrease	3,477,367	4.02 %
18/08/2023	BlackRock Inc.	3 %	Increase	3,536,578	4.07 %
16/10/2023	BlackRock Inc.	3 %	Decrease	3,425,648	3.96 %
24/10/2023	Capital Research and Management Company	5 %	Increase	4,323,169	4.97 %
13/11/2023	BlackRock Inc.	3 %	Decrease	3,384,783	3.91 %
16/11/2023	BlackRock Inc.	3 %	Increase	3,386,705	3.91 %
17/11/2023	BlackRock Inc.	3 %	Increase	3,387,379	3.91 %
07/03/2024	Société Fédérale de Participations et d'Investissement (SFPI)	5 %	Increase	5,533,326	24.16 %
07/03/2024	Euroclear SA/NV	3 %	Decrease	1,444,755	24.16 %

None of Euronext's shareholders hold 10% or more in the capital of the Company.

As of the date of publication of the 2023 Universal Registration Document, the only shareholders owning more than 3% (excluding the Reference Shareholders that jointly own 23.81%) and declaring it to the AFM are listed below:

Shareholder having crossed the threshold	Nb of shares	% of voting rights at date of declaration
Massachusetts Financial Services Company	5,385,551	6.55 %
Capital Research and Management Company	4,323,169	4.97 %
BlackRock Inc.	3,387,379	3.91 %
Amundi Asset Management	3,276,581	3.06 %

6.5 General Meeting of Shareholders and Voting Rights

The Annual General Meeting must be held within six months after the end of each financial year. An Extraordinary General Meeting may be convened, whenever Euronext's interests so require, by the Managing Board or the Supervisory Board. Shareholders representing alone or in aggregate at least one-tenth of Euronext's issued and outstanding share capital may, pursuant to the Dutch Civil Code, request that a General Meeting be convened. Within three months of it becoming apparent to the Managing Board that Euronext's equity has decreased to an amount equal to or lower than one-half of the paid-in and called-up capital, a General Meeting will be held to discuss any requisite measures.

Euronext will give notice of each General Meeting by publication on its website and in any other manner that Euronext may be required to follow in order to comply with and the applicable requirements of regulations pursuant to the listing of its shares on Euronext Amsterdam, Euronext Brussels, Euronext Lisbon and Euronext Paris. The notice convening any General Meeting must include, among other items, an agenda indicating the place and date of the meeting, the items for discussion and voting, the proceedings for registration including the registration date, as well as any proposals for the agenda. Pursuant to Dutch law, shareholders holding at least 3% of Euronext's issued and outstanding share capital have a right to request the Managing Board and the Supervisory Board to include items on the agenda of the General Meeting. The Managing Board and the Supervisory Board must agree to these requests, provided that (i) the request was made in writing and motivated, and (ii) the request was received by the Chair of the Managing Board or the Chair of the Supervisory Board at least sixty days prior to the date of the General Meeting.

The Managing Board must give notice of a General Meeting, by at least such number of days prior to the day of the meeting as required by Dutch law, which is currently forty-two days.

Each shareholder (as well as other persons with voting rights or meeting rights) may attend the General Meeting, to address the General Meeting and, in so far as they have such right, to exercise voting rights *pro rata* to its shareholding, either in person or by proxy. Shareholders may exercise these rights, if they are the holders of shares on the registration date which is currently the 28th day before the day of the meeting, and they or their proxy have notified Euronext of their intention to attend the meeting in writing at the address and by the date specified in the notice of the meeting.

The Managing Board may decide that persons entitled to attend General Meetings and vote there may, within a period prior to the General Meeting to be set by the Managing Board, which period cannot start prior to the registration date, cast their vote electronically or by post in a manner to be decided by the Managing Board. Votes cast in accordance with the previous sentence are equal to votes cast at the meeting.

Each shareholder may cast one vote for each Ordinary Share held. Members of the Managing Board and the Supervisory Board may attend a General Meeting in which they have an advisory role. The voting rights attached to shares are suspended as long as such shares are held by Euronext. The rights of the holders of Ordinary Shares that were offered and sold in the Offering rank *pari passu* with each other and with all other holders of the Ordinary Shares, including the Reference shareholders, with respect to voting rights and distributions. Euronext has no intention of changing the rights of shareholders.

Resolutions of the General Meeting are taken by an absolute majority, except where Dutch law or Euronext's Articles of Association provide for a qualified majority or unanimity.

One General Meeting was held in 2023.

The Annual General Meeting was held on 17 May 2023. In this meeting decisions were taken to adopt the 2022 Financial Statements, to declare a dividend of €2.22 per ordinary share, to discharge the members of the Managing Board and Supervisory Board in respect of their duties performed during the year 2022, to re-appoint Nathalie Rachou and Morten Thorsrud to the Supervisory Board, to re-appoint Stéphane Boujnah, Daryl Byrne, Chris Topple and Isabel Ucha to the Managing Board, to appoint Manuel Bento and Benoît van den Hove to the Managing Board, to appoint Ernst & Young Accountants LLP[5] as the Company's external auditors, and to designate the Managing Board as the competent body to 1) issue ordinary shares, 2) to restrict or exclude the pre-emptive rights of shareholders and 3) to acquire ordinary shares in the share capital of the Company on behalf of the Company.

6.6 Anti-Takeovers Provisions

Euronext currently does not have any anti-takeover provisions.

6.7 Obligations of Shareholders and Members of the Managing Board to Disclose Holdings

Shareholders may be subject to notification obligations under the Dutch Financial Supervision Act. Pursuant to chapter 5.3 of the Dutch Financial Supervision Act, any person who, directly or indirectly, acquires or disposes of an actual or potential capital interest and/or voting rights in the Company must immediately give written notice to the AFM of such acquisition or disposal by means of a standard form if, as a result of such acquisition or disposal, the percentage of capital interest and/or voting rights held by such person reaches, exceeds or falls below the following thresholds: 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%. In addition, any person whose capital interest or voting rights reaches, exceeds or falls below a threshold due to a change in Euronext's outstanding share capital, or in votes that can be cast on the shares as notified to the AFM by the Company, should notify the AFM no later than the fourth trading day after the AFM has published Euronext's notification of the change in its outstanding share capital.

Each person holding an interest in Euronext's share capital or voting rights of 3% or more at the time of admission of Euronext's shares to trading must immediately notify the AFM. Furthermore, every holder of 3% or more of the Company's share capital or voting rights whose interest at 31 December at midnight differs from a previous notification to the AFM must notify the AFM within four weeks.

For the purpose of calculating the percentage of capital interest or voting rights, the following interests must be taken into account: (i) shares and/or voting rights directly held (or acquired or disposed of) by any person, (ii) shares and/or

[5] Whose principal place of business is at Boompjes 258, 3011 XZ Rotterdam, the Netherlands. Ernst & Young Accountants LLP is registered at the Chamber of Commerce of Rotterdam in the Netherlands under number 24432944. The office address of the independent auditor of Ernst & Young Accountants LLP that signed the independent auditor's report is Cross Towers, Antonio Vivaldistraat 150, 1083 HP Amsterdam, the Netherlands. The auditor signing the independent auditor's reports on behalf of Ernst & Young Accountants LLP is a member of the Royal Netherlands Institute of Chartered Accountants (Koninklijke Nederlandse Beroepsorganisatie van Accountants).

voting rights held (or acquired or disposed of) by such person's subsidiaries or by a third party for such person's account or by a third party with whom such person has concluded an oral or written voting agreement, (iii) voting rights acquired pursuant to an agreement providing for a temporary transfer of voting rights in consideration for a payment, and (iv) shares and/or voting rights which such person, or any controlled entity or third party referred to above, may acquire pursuant to any option or other right to acquire shares and/or the attached voting rights.

Special rules apply to the attribution of shares and/or voting rights that are part of the property of a partnership or other form of joint ownership. A holder of a pledge or right of usufruct in respect of shares can also be subject to notification obligations, if such person has, or can acquire, the right to vote on the shares. The acquisition of (conditional) voting rights by a pledgee or beneficial owner may also trigger notification obligations as if the pledgee or beneficial owner were the legal holder of the shares and/or voting rights. Under the Dutch Financial Supervision Act, Euronext was required to file a report with the AFM promptly after the date of listing its shares setting out its issued and outstanding share capital and voting rights. Thereafter, Euronext is required to notify the AFM promptly of any change of 1% or more in its issued and outstanding share capital or voting rights since the previous notification. The AFM must be notified of other changes in Euronext's issued and outstanding share capital or voting rights within eight days after the end of the quarter in which the change occurred. The AFM will publish all Euronext's notifications of its issued and outstanding share capital and voting rights in a public register. If a person's capital interest and/or voting rights reach, exceed or fall below the above-mentioned thresholds as a result of a change in Euronext's issued and outstanding share capital or voting rights, such person is required to make a notification not later than on the fourth trading day after the AFM has published Euronext's notification as described above.

Furthermore, each member of the Managing Board, the Supervisory Board and certain other persons who, *inter alia*, have (co-)managerial responsibilities in respect of the Company, as well as certain persons closely associated with any such members or other persons, must immediately give written notice to the AFM by means of a standard form of all shares and voting rights in Euronext held by him or her at the time of admission of Euronext's shares to listing and thereafter of any change in his or her holding of shares and voting rights in Euronext.

6.8 Short Positions

Each person holding a net short position amounting to 0.2% or more of the issued share capital of a Dutch listed company must report it to the AFM. Each subsequent increase of this position by 0.1% above 0.2% will also have to be reported. Each net short position equal to 0.5% of the issued share capital of a Dutch-listed company and any subsequent increase of that position by 0.1% will be made public *via* the AFM short selling register. To calculate whether a natural person or legal person has a net short position, their short positions and long positions must be set off. A short transaction in a share can only be contracted if a reasonable case can be made that the shares sold can actually be delivered, which requires confirmation of a third party that the shares have been located. There is also an obligation to notify the AFM of gross short positions. The notification thresholds are the same as apply in respect of the notification of actual or potential capital interests in the capital and/or voting rights, as described above.

The AFM keeps a public register of all notification made pursuant to these disclosure obligations and publishes any notification received. In 2023, no short position was declared to the AFM.

6.9 Market Abuse Regime

The Market Abuse Regulation (Regulation (EU) nr. 596/2014 (the "MAR") and related Commission Implementing Regulations and Delegated Regulations, provide for specific rules that intend to prevent market abuse, such as the prohibitions on insider trading, divulging inside information and tipping, and market manipulation (the "European Union Market Abuse Rules"). Euronext is subject to the European Union Market Abuse Rules and non-compliance with these rules may lead to criminal fines, administrative fines, imprisonment or other sanctions.

The European Union Market Abuse Rules on market manipulation may restrict Euronext's ability to buy back its shares. In certain circumstances, investors in Euronext can also be subject to the European Union Market Abuse Rules. Pursuant to Article 19 of the MAR (Managers' transactions), members of the Managing Board, Supervisory Board and any senior executive who has regular access to inside information relating directly or indirectly to Euronext and has the power to take managerial decisions affecting the future developments and business prospects of Euronext, (persons discharging managerial responsibilities (PDMR'S); in case of Euronext Supervisory Board, Managing Board and permanent invitees to Managing Board meetings), must notify the AFM of every transaction conducted on their own account relating to the shares or debt instruments of Euronext or to derivatives or other financial instruments linked thereto.

In addition, certain persons closely associated with members of Euronext's Managing Board or any of the other persons as described above and designated by the MAR PDMR'S must also notify the AFM of every transaction conducted on their own account relating to the shares or debt instruments of Euronext or to derivatives or other financial instruments linked thereto. The MAR determines the following categories of persons: (i) the spouse or any partner considered by national law as equivalent to the spouse, (ii) dependent children, (iii) other relatives who have shared the same household for at least one year at the relevant transaction date and (iv) a legal person, trust or partnership, the managerial responsibilities of which are discharged by a person discharging managerial responsibilities or by a person referred to in point (i), (ii) or (iii), which is directly or indirectly controlled by such a person, which is set up for the benefit of such a person, or the economic interests of which are substantially equivalent to those of such a person. These notifications must be made no later than on the third business day following the transaction date and by means of a standard form. The notification may be postponed until the moment that the value of the transactions performed for the PDMR that person's own account, or transactions carried out by the persons closely associated with that person, reaches or exceeds an amount of €5,000 in the calendar year in question.

The AFM keeps a public register of all notifications under art. 19 of the MAR. Third parties can request to be notified automatically by e-mail of changes to the public register. Pursuant to the MAR, Euronext will maintain a list of its insiders. In addition, to further ensure compliance with MAR, Euronext has adopted an internal policy relating to the possession of and transactions by members of its PDMR'S and employees in Euronext shares or in financial instruments of which the value is (co)determined by the value of the shares. Euronext N.V. Insider Trading Policy has been published on its website on https://www.euronext.com/en/investors/corporate-governance.

6.10 Transparency Directive

After the admission to listing of its shares on Euronext Amsterdam, Euronext Brussels and Euronext Paris on 20 June 2014, and on Euronext Lisbon on 17 September 2014, Euronext became a listed public limited liability company *(naamloze Vennootschap)* incorporated and existing under the laws of the Netherlands. The Netherlands is Euronext's home member state for the purposes of the Transparency Directive (Directive 2004/109/EC as most recently amended by Directive 2013/50/EU) as a consequence of which it is subject to the Dutch Financial Supervision Act in respect of certain on-going transparency and disclosure obligations upon admission to listing and trading of its shares on Euronext Amsterdam, Euronext Brussels, Euronext Lisbon and Euronext Paris.

6.11 Dutch Financial Reporting Supervision Act

The Dutch Financial Reporting Supervision Act *(Wet toezicht financiële verslaggeving)* (the "FRSA") applies to financial years starting from 1 January 2006. On the basis of the FRSA, the AFM supervises the application of financial reporting standards by, among others, companies whose corporate seat is in the Netherlands and whose securities are listed on a Dutch Regulated Market or foreign stock exchange. Pursuant to the FRSA, the AFM has an independent right to (i) request an explanation from Euronext regarding its application of the applicable financial reporting standards and (ii) recommend to Euronext the making available of further explanations. If Euronext does not comply with such a request or recommendation, the AFM may request that the Enterprise Chamber order Euronext to (i) make available further explanations as recommended by the AFM, (ii) provide an explanation of the way it has applied the applicable financial reporting standards to its financial reports or (iii) prepare Euronext's financial reports in accordance with the Enterprise Chamber's instructions.

This Universal Registration Document also concerns the annual financial reporting within the meaning of 5:25c(2) of the Dutch Financial Supervision Act. The sections 1, 2, 3, 5, 6 and 7, as well as sections 4.1 and 4.2 concern the directors' report within the meaning of 2:391 of the Dutch Civil Code, the statement of the Managing Board has been included in section 4.2.1 and the Financial Statements in section 8.

6.12 Dividends and Other Distributions

Euronext may make distributions to its shareholders only insofar as its shareholders' equity exceeds the sum of the paid-in and called-up share capital plus the reserves as required to be maintained by Dutch law or by its Articles of Association. Under Euronext's Articles of Association, the Managing Board decides which part of any profit will be reserved.

At the time of its IPO in 2014, Euronext's dividend policy was established to achieve a dividend pay-out ratio of approximately 50% of net income, upon the approval of the Annual General Meeting, and as long as the Company is in position to pay this dividend while meeting all its various duties and obligations.

In October 2019, Euronext released its new strategic plan 'Let's Grow Together 2022' and established a dividend policy over the duration of the plan consisting of distributing 50 % of the reported net income, upon the approval of the Annual General Meeting, and as long as the Company is in position to pay this dividend while meeting all its various duties and obligation.

In November 2021, Euronext released its new strategic plan 'Growth for Impact 2024' and reiterated that the Group dividend policy would remain unchanged over the duration of the plan until 2024, consisting of distributing 50% of the reported net income, upon the approval of the Annual General Meeting, and as long as the Company is in position to pay this dividend while meeting all its various duties and obligation.

Following the early repayment of its previous term loan facility on 23 March 2017 (see section 7.1.11 - Facilities *Agreement)*, and under the conditions of the new bank loan facility in which the Group entered on 18 July 2017, Euronext is no longer restricted to distributions, share repurchases or share redemptions. Repurchase of shares for the needs of the Employee Offering and employee shareholding and management incentive programs that Euronext may implement from time to time, which may be offered for free or at a discount and repurchase of shares in accordance with liquidity or market making programmes are not restricted within the Facilities Agreement.

Euronext may make a distribution of dividends to its shareholders only after the adoption of Euronext's statutory annual accounts demonstrating that such distribution is legally permitted. The profit, as this appears from the adopted annual accounts, shall be at the free disposal of the General Meeting, provided that the General Meeting may only resolve on any reservation of the profits or the distribution of any profits pursuant to and in accordance with a proposal thereto of the Supervisory Board or a proposal of the Managing Board, which has been approved by the Supervisory Board. Resolutions of the General Meeting with regard to a distribution at the expense of the reserves shall require the approval of the Managing Board and the Supervisory Board.

The Managing Board is permitted to resolve to make interim distributions to Euronext shareholders, subject to approval of the Supervisory Board. The General Meeting may also resolve to make interim distributions to Euronext shareholders, pursuant to and in accordance with a proposal thereto by the Managing Board, which has been approved by the Supervisory Board.

The Managing Board may decide that, subject to approval of the Supervisory Board, a distribution on shares shall not be made in cash or not entirely made in cash but other than in cash, including but not limited in the form of shares in the Company or decide that shareholders shall be given the option to receive a distribution either in cash or other than in cash. The Managing Board shall, subject to approval of the Supervisory Board, determine the conditions under which such option can be given to Euronext's shareholders.

Shareholders are entitled to share the profit *pro rata* to their shareholding. Claims to dividends and other distributions not made within five years from the date that such dividends or distributions became payable will lapse, and any such amounts will be considered to have been forfeited to Euronext *(verjaring)*.

For the previous years, the following amounts of dividend per share were paid:

Financial year	Dividend per share
For the year 2014	€0.84
For the year 2015	€1.24
For the year 2016	€1.42
For the year 2017	€1.73
For the year 2018	€1.54
For the year 2019	€1.59
For the year 2020	€1.47
For the year 2021	€1.93
For the year 2022	€2.22

6.13 2024 Financial Calendar

Financial release	Date
First Quarter 2024 Results	14 May 2024
Annual General Meeting	15 May 2024
Second Quarter and First Half 2024 Results	25 July 2024
Third Quarter 2024 Results	7 November 2024

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7 OPERATING AND FINANCIAL REVIEW DR

The following review relates to Euronext historical financial condition and results of operations for the years ended 31 December 2023, 2022 and 2021. This "Operating and Financial Review" is based on the audited Financial Statements for the years ended 31 December 2023, 2022 and 2021, which are included or incorporated by reference in this Registration Document and should be read in conjunction with "General description of the Company" and "Financial Statements". Prospective investors should read the entire Universal Registration Document and not just rely on the information set out below. All financial information included in this "Operating and Financial Review" has been extracted from the audited Consolidated Financial Statements.

The following discussion of Euronext results of operations and financial condition contains forward-looking statements. Euronext actual results could differ materially from those that are discussed in these forward-looking statements. Factors that could cause or contribute to such differences include those discussed below and elsewhere in this Registration Document, particularly under "Risk Factors".

7.1 Overview

Euronext is a pan-European exchange group, offering a diverse range of products and services and combining transparent and efficient equity, fixed income securities and derivatives markets in Amsterdam, Bergen, Brussels, Dublin, Lisbon, Milan, Oslo and Paris. Euronext businesses comprise: listing, cash trading, derivatives trading, fixed income trading, spot FX trading, power trading, investor services, advanced data services, post-trade and technologies & other.

Euronext management reviews the performance of the business, and makes decisions on allocation of resources, only on a company-wide basis. Therefore, Euronext has one reportable segment.

Euronext has been operating as an independent, publicly traded company since 20 June 2014. Prior to June 2014, Euronext's businesses were part of ICE as a result of ICE's acquisition of NYSE Euronext on 13 November 2013.

7.1.1 Definitions

The following defined terms are used in this Operating and Financial Review:

"Legacy Euronext" means the historical operations of the former Euronext N.V. (existing prior to 15 March 2014) and its subsidiaries, including LIFFE.

Segments are reported in a manner consistent with how the business is operated and reviewed by the chief operating decision maker (CODM), who is responsible for allocating resources and assessing performance of the operating segments. The chief operating decision maker of the Group is the Extended Managing Board, comprising the Managing Board and permanent attendees of Senior Management. The organisation of the Group reflects the high level of mutualisation of resources across geographies and product lines. Operating results are monitored on a group-wide basis and, accordingly, the Group represents one operating segment and one reportable segment. Operating results reported to the Extended Managing Board are prepared on a measurement basis consistent with the reported Consolidated Statement of Profit or Loss.

In presenting and discussing the Group's financial position, operating results and net results, management uses certain Alternative performance measures not defined by IFRS. These Alternative performance measures (APMs) should not be viewed in isolation as alternatives to the equivalent IFRS measures and should be used as supplementary information in conjunction with the most directly comparable IFRS measures. Alternative performance measures do not have standardised meaning under IFRS and therefore may not be comparable to similar measures presented by other companies. Euronext believes that these measures provide valuable supplemental information to the company's management, investors and other stakeholders to evaluate the company's performance.

Reference is made to Section 5.2 - *Other Financial Information* for more details on the APMs used by the Group.

7.1.2 Establishment of Euronext as an Independent, Publicly Traded Company

The legal entities of the Group have been owned by Euronext N.V. since the date that the internal reorganisation was finalised in March 2014. The Consolidated Financial Statements as of and for financial years ended 31 December 2023, 2022 and 2021 have been prepared as described further in Note 3 to the Consolidated Financial Statements (see "Financial Statements"). All transactions and balances between subsidiaries have been eliminated on consolidation.

7.1.3 Sources of Revenues

In accordance with Article 19 of Regulation (EU) 2017/1129, the following information is incorporated by reference in the Universal Registration Document:

For Financial Year 2022

The description of the sources of revenues of the Company for the financial year 2022, presented on pages 178 to 181 of the 2022 Universal Registration Document filed with the Autoriteit Financiële Markten on 30 March 2023 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2023-08/EUR_2022_URD_MEL%20FINALE_AUG.pdf

For Financial Year 2021

The description of the sources of revenues of the Company for the financial year 2021, presented on pages 171 to 174 of the 2021 Universal Registration Document filed with the Autoriteit Financiële Markten on 31 March 2022 and available at:

https://www.euronext.com/sites/default/files/financial-event-doc/2022-04/2021%20URD%20-%20ENX%20-%20PDF_1.pdf

Listing and Corporate Services

Admission fees comprise fees paid by companies to list and admit to trading equity and debt securities on Euronext markets. Corporate activity and other fees primarily consist of fees charged for centralising securities in connection with new listings and tender offers, they also include delisting fees. In addition, companies whose securities are listed or admitted to trading on Euronext markets pay annual fees.

Other than for Euronext Dublin, Euronext Milan and Oslo Børs which have separate fee schedules, Euronext has adopted a common set of admission and annual fees for the Euronext and Euronext Growth™ markets. Companies having equity securities listed or admitted to trading on Euronext or Euronext Growth™ markets are subject to the following types of fees:

- initial admission fee charged based on the market capitalisation at first admission and calculated on a cumulative scale with decreasing rates and capped;
- subsequent admission fees charged based on the amount of capital raised and calculated on a cumulative scale with decreasing rates and capped; this also applies for other corporate events related fees;
- annual fees based on a variable decreasing percentage of the number of outstanding securities and a fixed fee based on the issuer's market capitalisation a beyond a defined threshold. The annual fee is capped.

Companies having equity securities listed or admitted to trading on Oslo Børs, Euronext Expand or Euronext Growth are subject to the following types of fees:

- Initial admission fee based on a fixed fee and market capitalisation at first admission capped at minimum and maximum fee depending on type of listing process;
- subsequent admission fees charged based on the amount of capital raised and calculated on a cumulative scale and capped; other corporate events related fees are generally fixed fees;
- annual fees based on market capitalisation and capped at minimum and maximum fee

Oslo Børs is the Norwegian takeover authority and charges a fixed fee and market capitalisation up to a maximum amount for the inspection of offer documents. Further fees related to inspection of offer documents may also apply.

Euronext Dublin has debt fee schedules for its regulated market and its Global Exchange Market based on the method of issuance (under a programme or as a standalone issuance). For other Euronext markets, admission fees for debt securities, issued both on a stand-alone basis or under a note program, are based on the maturity and principal amount admitted to trading, and, in respect of long-term debt (maturity over one year), number of years to maturity. Euronext offers lower admission fees for issuers that access the debt capital markets frequently and for issuers qualifying as SMEs.

Oslo Børs has debt fee schedules for both its regulated market and its Nordic ABM. Annual fee for listing and registration for debt securities are based on the registered capital admitted to trading. Prices are the same for stand-alone basis or under a note program. The prices are the same for both markets with a minimum and maximum fee.

Oslo Børs has a registration fee based on the type and the security of the bond. For municipal bonds listed on Oslo Børs and for bonds listed on Nordic ABM there will also be an inspection fee. The inspection fee is based on the type of the bond. For new issuers there will also be charged an additional inspection fee for the description of the issuer or the issuer's business activities.

Euronext offers centralisation services for orders in connection with a public offer, a public tender offer or a sales facility, in respect of securities admitted or to be admitted to any Euronext markets whether regulated or not.

A common set of admission and annual fees apply to ETPs. Issuers of ETPs listed and/or admitted to trading on Euronext markets are subject to the following types of fees:

- for warrants & certificates traded *via* the Hybrid (aka Request For Execution) market model, issuers are invoiced listing fees based on the average size of their products range (grouped in packages). There are several fee reductions available for which issuers can qualify in order to reduce their listing fees. A one-time admission fee is charged to issuers of structured notes or warrants and certificates not traded *via* the Hybrid market model, as well as a market access fee per instrument;
- Listings of ETFs, exchange traded vehicles and exchange traded notes are charged both an initial one-off admission fee, as well as an annual fee based on the Assets under Management ('AuM'). Annual fees are charged on a semi-annual basis for listings in Borsa Italiana and on an annual basis for all other Euronext markets. The annual fee schedules also exhibit various other features, such

as a sliding cost table based on number of products listed, caps and floors as well as discounts. Additional fees are charged for mergers of existing instruments.

- For Oslo Børs, warrants, Structured products are charged admission fees and a periodic (monthly or quarterly) fee per ISIN. Periodic fees are subject to rebates based on the total number of products listed by the same issuer during that calendar year. The aggregate monthly and quarterly fees for Warrants, Structured Products has a combined annual cap.

Corporate Services:

Euronext Corporate Services offers innovative solutions and tailor-made advisory services articulated around the five following pillars : Governance (iBabs), Compliance (ComplyLog), Communication (Company Webcast), and Investor Relations (Advisory and IR Solutions), and Corporate training (Academy).

A major part of these Corporate Services products are software as a services (SaaS) solutions generating recurring revenues through annual subscriptions. In addition, Euronext Corporate Services also generate revenues on renewable advisory mandates or on one-off missions and events.

ELITE

ELITE is the Euronext SMEs ecosystem to support private companies by connecting them to skills, network and capital to drive their sustainable growth in the long-term, allowing them to access private and public capital markets.

The ELITE business model is based on 2 line of businesses.

- Membership, is based on annual fees received by
  - private companies that are allowed to access an international network and proprietary learning and mentoring methodology. Companies commit to stay at least 2 years (Initial Period), but all of them can remain as member of the ecosystem also after this period always paying an annual fee (Post Initial Period).
  - partners to obtain services of learning, business development, visibility and co-marketing.
- Capital Services: the revenues of ELITE in this stream are generated in the form of fees paid by clients for the introduction – normally originated by financial institutions on the buy side. A second income stream comes from introducing companies to financial advisors part of the network on possible funding options, in this case ELITE collects an introduction fee as a fixed percentage of the advisor's mandate, if such advisor closes a mandate with the introduced company.

Cash, Derivatives, Fixed Income and FX Trading

Revenues from Euronext cash trading and derivatives trading businesses consist mainly of transaction-based fees for executing trades on Euronext cash markets and derivatives markets. These transaction fees are charged per executed order and based on value traded in cash equities and are charged per lot in derivatives. Trading volume in equity products is primarily driven by price volatility in equity markets and indices. The level of trading activity for all products is also influenced by market conditions and other factors.

Derivatives trading revenues received from transactions conducted on Euronext markets are variable, based on the volume and value of traded contracts, and recognised when executed. The principal types of derivative contracts traded are equity and index products and agricultural commodities products.

Revenues from MTS' Cash and Repo Fixed Income trading businesses consist of membership and transaction-based fees. Transaction fees for MTS Cash are charged per €m of notional executed, whereas MTS Repo transaction fees are charged based on the term adjusted notional amount.

Spot FX trading revenues primarily consist of transaction-based fees for executing trades. These transaction fees are charged per executed order and based on value traded. Port fees and market data fees are additional FX trading revenues.

Power Trading

Revenues from power trading consist of a fixed annual membership fee for customers to be able to participate in the Nord Pool day- ahead and intraday markets, plus variable trading and settlement fees. Variable trading and settlement fees are charged based on volume traded on Nord Pool markets. Trading volumes in the power markets are mainly driven by growing electricity consumption, introduction of more renewable energy and increased volumes in the short-term continuous Intraday market. Variable fees also include "gross trading" consisting of integrated producers submitting both production and consumption, which carries a reduced fee.

Investor Services

Investor services primarily encompass the activity of Commcise, offering cloud-based investment research evaluation, commission management and accounting solutions and whose revenue model is primarily based on recurring software licence fees. Commcise also works alongside Euronext Market Services, a US broker dealer, to deliver a client service companion to its software. Under this model, the broker dealer earns commissions on equity trades related to bundled trading.

Advanced Data Services

The Group charges data vendors and end users, taking data *via* a direct feed, on a per-user basis for the access to its real-time data and Enterprise licences are charged for non-display use, including advanced analytic products, and access to historic and reference data products. The Group also collects periodic licence fees from vendors for the right to distribute the Group data to third parties. These fees are recognised on a monthly basis as services are rendered. The Group charges an index licence fee to trading desks, investment banks and asset managers for the creations of Structured Products (SP), Exchange Traded Products (ETPs) and exchange traded funds (ETFs) on Euronext owned (trademark) indices. The Group also collects fees for third party index calculations, iNAV calculation and partnerships stakes. The fees are recognised to the applicable period of the products.

Additional revenue comes from the provision by Nord Pool of data services.

Post Trade

Custody and Settlement

Euronext runs Euronext Securities, a leading CSD business in Europe comprising four CSDs in Copenhagen, Milan, Oslo and Porto.

The largest revenue driver for Euronext Securities are assets under custody (AUC). AUC are made by financial securities issued in Euronext Securities (Issuer CSD) and financial securities issued outside but kept in custody in Euronext Securities (Investor CSD). AUC is calculated based on market value for equities, funds and structured products, and nominal value for fixed income. Euronext Securities revenues from AUC are equal to the value of AUC multiplied by a unit price expressed in basis points (bps). For a given client, unit price decreases with AUC.

The second largest revenue driver for Euronext Securities are settlement volumes. Euronext Securities revenues from settlement volumes are equal to the number of settlement instructions multiplied by a unit price expressed in euros or in the relevant currency (Danish krone, etc.). Like for AUC, customers benefit from decreasing unit prices.

The rest of revenues is driven by a multiplicity of other factors, including number of securities (ISINs), corporate actions (dividends), number of retail accounts (in Oslo and Copenhagen), subscription fees, etc.

Clearing (including net treasury income through CCP business)

Euronext Clearing

Since the acquisition of Borsa Italiana, Euronext is the owner of the Italian CCP, CC&G, renamed Euronext Clearing in November 2021. A CCP receives fees from the clearing of the transactions executed on Trading Venues and from treasury incomes generated by the placement of collateral posted by Clearing members.

The main revenue drivers on fees are therefore: (i) the number of transactions and lots cleared by the CCP for cash bonds, cash equity (incl. ETF clearing) and derivatives; (ii) the notional of repo cleared; (iii) the number of clearing members connected to the CCP; and (iv) the amount (value) of securities posted as collateral. The main revenue drivers on net treasury incomes are: (i) the volatility on the market which has impact on the amount of margins posted at the CCP; and (ii) the spread applied on the cash collateral (i.e. the difference between the yield paid by the CCP to clearing members; and (ii) the yield generated by the CCP with central bank deposits).

LCH SA

Euronext also receives a share of clearing income based on treasury services resulting from placement of collateral (spread between remuneration served to clearing members on their collateral posted to the CCP and the remuneration resulting from the placement of this collateral, mostly kept at Central Bank) and the number of cleared derivatives trades cleared through LCH SA, in exchange for which Euronext pays LCH SA a fixed fee plus a variable fee based on derivatives trading volume.

Euronext Technology Solutions & Other

Euronext Technology Solutions

Euronext Technology Solutions comprises of Euronext's commercial Technology Solutions and services business, and former Borsa Italiana businesses, including Gatelab, and Integrated Technology Services "X2M'. Revenues include:

Licence fees, professional services fees, software deployment fees, for managed IT services (Software as a Service), for connectivity and infrastructure hosting services including colocation services provided to financial institutions from the Euronext Core Data Centre facility in Bergamo, Italy.

Regulatory services provided to investment firms under Euronext's licence as an Authorized Publication Authority (APA) and Authorized Reporting Mechanism (ARM) within the EU and UK. Fees are charged monthly to investment firm's according to the number of reports submitted to the service. Euronext Technology Solutions have decided to exit the regulatory reporting business by December 31st, 2023.

Fees for software customisation and deployment services are recognised either on a time and materials basis or under the percentage completion method, depending upon the nature of the contract with the client. The percentage of completion is calculated based on the number of person-days incurred to date as a percentage of the total estimated number of person-days to complete the work. Licence fees, maintenance fees, setup fees and annual support fees are recognised pro-rata over the life of the service contract. Connectivity and infrastructure hosting fees are recognised pro-rata over the life of the client commitment.

Other

Other revenue primarily accounts for Nord Pool solutions and services not directly linked to power trading activities.

Nord Pool revenues also stem from transaction shipping services, as Nord Pool provides technical solutions for power interconnectors, enabling their participation in European power market coupling arrangements.

As part of the integrated European market coupling projects SDAC (Single Day-Ahead Coupling) and SIDC (Single Intraday Coupling), Nord Pool participates in a regulatory framework and a cost recovery regime. These projects yield cost recovery from Transmission System Operators and National Regulators to varying degrees, which is recognised as operating income.

Additional revenue comes from the provision by Nord Pool of compliance services, consultancy and training.

Transitional income

Transitional income primarily consists of income from services provided by Borsa Italiana Group to London Stock Exchange Group (LSEG) to facilitate the transition of ownership following the acquisition of Borsa Italiana Group.

A Transitional Service Agreement ("TSA") was established, providing for temporary services rendered to or received from LSEG. Each individual service is priced separately, generally on a fixed fee basis, based on actual usage or mutually agreed service level. The agreement was established on arm's length basis.

Services rendered to LSEG primarily include technology and various ancillary services. All such services are transitional and, accordingly, the related income is not expected to be recurring beyond fiscal year 2023.

7.1.4 Components of Expenses

Euronext's operating expenses include salaries and employee benefits, depreciation and amortisation, and other operational expenses, which include systems and communications, professional services, accommodation and other expenses.

Salaries and Employee Benefits

Salaries and employee benefits expenses include employee salaries, incentive compensation (including stock-based compensation) and related benefits expenses, including pension and medical charges.

Depreciation and Amortisation

Depreciation and amortisation expenses consist of costs from depreciating fixed assets (including computer hardware and capitalised software) and amortising intangible assets over their estimated useful lives.

Systems and Communications

Systems and communications expenses include costs for development, operation and maintenance of trading, regulatory and administrative systems; investments in system capacity, reliability and security; and cost of network connectivity between customers and data centres, as well as connectivity to various other market centres. Systems and communications expenses also include fees paid to third-party providers of networks and information technology resources, including fees for consulting, research and development services, software rental costs and licences, hardware rental and related fees paid to third-party maintenance providers.

Professional Services

Professional services expenses include consulting charges related to various technological and operational initiatives as well as legal and audit fees.

Accommodation

Accommodation expenses include costs of leasing the properties used by the Group, as well as utilities, maintenance and security costs to maintain the properties used by the Group.

Other Expenses

Other expenses include marketing, taxes, insurance, travel, professional membership fees and other expenses. A Transitional Service Agreement ("TSA") was established for services rendered to or received from LSEG to facilitate the transition of ownership following the acquisition of Borsa Italiana Group. Each individual service is priced separately, generally on a fixed fee basis, based on actual usage or mutually agreed service level. The agreement was established on arm's length basis. Expenses for services received from LSEG under this agreement are recognised in other operational expenses (see section *8 - Note 11*). These services will be phased out after the migration of Borsa Italiana Group to Euronext trading platform Optiq® is completed in 2024.

7.1.5 Key Factors Affecting Businesses and Results of Operations

The economic and business environment in which Euronext operates directly affects Euronext's results of operations. The results have been and will continue to be affected by many factors, including the factors set out below. Euronext continues to focus its strategy to broaden and diversify its revenue streams, as well as on its company-wide expense reduction initiatives in order to mitigate these uncertainties.

Trading Activity

A large proportion of Euronext's business is transaction-based. For the year ended 31 December 2023, Euronext derived 33% of its revenue from its cash trading, derivatives, fixed income, spot FX and power trading businesses. Accordingly, fluctuations in the trading volumes directly affect Euronext revenues. During any period, the level of trading activity in Euronext markets is significantly influenced by factors such as general market conditions, market volatility, competition, regulatory changes, capital maintenance requirements, market share and the pace of industry consolidation.

A reduction in trading activity could make Euronext markets less attractive to market participants as a source of liquidity, which in turn could further discourage existing and potential market participants and thus accelerate a decline in the level of trading activity in these markets. Because Euronext's cost structure is largely fixed, if the trading volumes and the resulting transaction fee revenues decline, Euronext may not be able to adjust its cost structure to counteract the associated decline in revenues, which would adversely affect its net income. Euronext's largely fixed cost structure also provides operational leverage, such that an increase in its trading volumes and the resulting transaction fee revenues would have a positive effect on its margins.

Targeted Operating Optimisation

From its origination, Euronext has identified various ways to streamline its processes and enhance its operational efficiency.

As part of its "Let's grow together 2022" strategic plan, Euronext aimed at pursuing operating efficiency while maintaining a best-in-class cost discipline and investing in operational excellence. Infrastructure optimisation: Euronext made continuous efforts to improve its asset utilisation during this strategic plan. Together with a rationalisation of the number of sites and the set-up of Euronext's IT team in Porto, it continued its effort to reinforce the culture of efficiency.

Under its current "Growth for Impact 2024" strategic plan introduced in November 2021, Euronext aims at maintaining its capital expenses at a level representing 3% to 5% of total revenue and aims at achieving €115 million pre-tax run-rate synergies as part of the Borsa Italiana Group acquisition by 2024, thanks to the European expansion of Euronext clearing and the migration of its Core Data Centre. Implementation costs of €150 million are estimated for the achievement of this synergies target.

Non-recurring costs incurred to realise the efficiencies described above (i.e. integration cost, double run cost and restructuring cost) amounted to €78.3 million in 2023 (2022: €27.2 million). These expenses are disclosed in Note 12 of the Consolidated Financial Statements.

Since the first quarter in 2022, Euronext publishes underlying recurring costs, and non-recurring costs. Euronext removed the "Exceptional Items" line from its financial statements. Consequently, costs previously reported as exceptional items have from Q1 2022 been included into their respective lines within Euronext operating expenses as non-recurring items.

The €150 million of implementation costs related to the deployment of the 'Growth for Impact 2024' strategic plan targets are therefore considered as non-recurring items and are withdrawn from underlying costs.

Derivatives Clearing Agreement

On 14 October 2013, Euronext entered into the Derivatives Clearing Agreement with LCH SA in respect of the clearing of trades on its continental Europe derivatives markets. Under the terms of the Derivatives Clearing Agreement, effective starting 1 April 2014, Euronext has agreed with LCH SA to share revenues. Euronext receives a share of clearing income based on treasury services and the number of derivatives trades cleared through LCH SA, in exchange for which Euronext pays LCH SA a fixed fee plus a variable fee based on derivatives trading volume.

The term of the existing Derivatives Clearing Agreement was through 31 December 2018. On November 2017, Euronext announced the signing of the renewal of its agreement with LCH SA on the continued provision of derivatives and commodities clearing services for a period of 10 years.

On 16 January 2023, a termination notice was sent to LCH SA, after Euronext local boards had decided to terminate the Derivatives Clearing Agreement. The Group recognised a payable for the termination fees and migration fees (including indexation) indicated in the agreement of approximately €36.6 million. The amount was recognised as a non-underlying expense and will be due in January 2024.

For the year ended 31 December 2021, those clearing revenues were €71.5 million and the associated expense was €33.7 million. For the year ended 31 December 2022, these revenues were €75.8 million and the associated expense was €35.6 million. For the year ended 31 December 2023, these revenues are €71.8 million and the associated expense is €34.5 million.

Rights Issue

On 29 April 2021, following the announcement of the completion of the acquisition of the Borsa Italiana Group and of a €600 million reserved capital increase by way of a private placement to CDP Equity and Intesa Sanpaolo, Euronext launched a rights offer to its existing shareholders (the "Offer").

Euronext offered 30,506,294 shares in the Offer (the "Offer Shares") at the issue price of €59.65 per Offer Share (the "Issue Price"), on the basis of 2 Offer Shares for every 5 existing ordinary shares. Shareholders on Euronext's shareholder register were granted transferable subscription entitlements (the "Rights") in the Offer, which will entitle Shareholders that qualify as eligible persons to subscribe for Offer Shares.

Settlement and delivery of the Offer Shares and commencement of trading on Euronext Amsterdam took place on 14 May 2021.

The Offer was underwritten with a syndicate of banks (the "Underwriters). The Underwriters were obliged, subject to the satisfaction of conditions contained in and on the terms of the underwriting agreement for the Offer entered into between the Group and the Underwriters on 29 April 2021 (the Underwriting Agreement), subscribe and, at the Issue Price, pay for, any Underwritten Shares.

Total proceeds of the Rights issue amounted to €1,820 million, which resulted in an increase in Shareholders' equity. The Rights issue included €23.3 million of directly attributable costs, net of income tax, that were deducted from Shareholders' equity.

Facilities Agreements and Bonds

Revolving Credit Facility

On 29 April 2021, a new revolving credit facility agreement (RCF) of €600.0 million came into effect that was entered into on 6 November 2020 conditional to the closing of the acquisition of the Borsa Italiana Group. The new RCF replaced the Group's previous "Facility" and allows the Group to apply all amounts borrowed by it towards (i) general corporate and/or working capital purposes of the Group, (ii) satisfaction of the consideration payable for an acquisition and/or (iii) the payment of fees, costs and expense incurred in relation to an acquisition. The new revolving credit facility has a maturity of 5 years plus a two-year extension possibility and bears an interest rate of EURIBOR plus a margin dependent on rating.

On 12 October 2022, the Group executed its two-year extension option to the RCF of €600.0 million. The RCF has a remaining maturity of 4 years (November 2027) and bears an interest rate of EURIBOR plus a margin dependent on rating. The revolving facility has not been drawn and is not drawn as per 31 December 2023.

Bridge Loan Facility

On 7 October 2020, Euronext entered into a €4,400 million bridge loan facility agreement with a group of banks to pre-finance the acquisition of the Borsa Italiana Group. The initial maturity date of this facility was 11 September 2021, which could be extended at the option of the issuer for two additional periods of six months each. The bridge loan facility bore an interest rate of EURIBOR plus an initial margin of 0.45%, that increased as the closing date of the acquisition moved further in time.

On 29 April 2021, the Group drew down an amount of €3,690 million from the facility to finance the acquisition of the Borsa Italiana Group. In May 2021, the Group repaid €3,610 million of the amount drawn from the facility by using the proceeds of the Bonds issue and Rights issue. The remainder of €80.0 million was repaid at the end of 2021.

Bonds

To partially repay the drawdown of the bridge loan facility, the Group issued €1,800 million of new debt in the debt capital markets with long-term maturities ("Bonds Issue"). On 7 May 2021, Euronext successfully priced a three-tranche senior bond offering representing a total amount of €1,800 million. As of 17 May 2021, the bonds were admitted to trading on the regulated market of Euronext Dublin and were rated BBB by S&P. As well as on other electronic trading platforms, the 5, 10 and 20-year bonds are available for trading on the MTS BondVision and MTS BondsPro venues, which are now part of the Euronext product suite following the acquisition of Borsa Italiana Group. The bonds were settled through VP Securities, Euronext's Danish CSD. The offering allows Euronext to extend its maturity profile and further diversify its debt investor base.

The main features of the issue were as follows:

- Senior Unsecured Note #3: €600 million Bond, maturing on 17 May 2026, with an annual coupon of 0.125%;
- Senior Unsecured Note #4: €600 million Bond, maturing on 17 May 2031, with an annual coupon of 0.750%;
- Senior Unsecured Note #5: €600 million Bond, maturing on 17 May 2041, with an annual coupon of 1.500%.

The Bonds Issue included €18.6 million of directly attributable costs, which are subsequently accounted for under the Effective Interest Rate method.

Reference is made to section *7.1.11 - Facilities Agreements and Bonds* for more details on the Facilities and the Bonds.

Acquisitions and disposals of subsidiaries and businesses

The following acquisitions of businesses and disposals of subsidiaries were made in 2023:

- **Disposal of stake in LCH SA**

On 6 July 2023, the Group sold its 11.1% stake in LCH SA. The proceeds of the disposal amounted to €111.0 million, whereas the combined net assets disposed of amounted to €69.4 million. This resulted in a €41.6 million result from the disposal.

- **Disposal of stake in Tokeny**

On 1 December 2023, the Group disposed its 19% stake in Tokeny. The proceeds from this disposal amounted to €11.4 million. As the value of this stake had previously been written down to zero, this sale generated a €11.4 million capital gain.

The following acquisitions of businesses and disposals of subsidiaries were made in 2022:

- **Acquisition of Spafid Issuer Services Business**

On 1 April 2022, the Group acquired the Issuer Services Business of Spafid S.p.A., which operates as an investment advisory firm and is a fully owned subsidiary of Mediobanca S.p.A. The purchase consideration for this business acquisition amounted to €12.0 million. The acquisition is an important step to further develop local added-value services to issuers, and to deliver on Euronext Securities' ambition to converge issuers services across all its locations.

- **Acquisition of Nexi Technology Businesses**

On 1 December 2022, the Group acquired the technology businesses of Nexi S.p.A., an Italian bank specialised in payment systems, currently powering MTS and Euronext Securities Milan. The purchase price for this business acquisition approximates €57 million (on a debt free, cash free basis). With this acquisition, the Group internalises the core trading platform of MTS and its largest IT contract. It enables Euronext to become more agile and efficient by fully owning the technology powering MTS and Euronext Securities Milan.

- **Disposal of subsidiary Finance Web Working S.A.S.**

In 2022, the Group sold its 60% majority interest in subsidiary Finance Web Working S.A.S. ("Euronext Funds360") to FE Fundinfo, a global provider of data and tools management for the funds industry. The proceeds from the sale amounted to €0.8 million (net of cash). Including allocated goodwill, the loss from disposal of this subsidiary was €0.8 million.

- **Disposal of subsidiary MTS Markets International Inc.**

In 2022, MTS S.p.A. sold its interest in subsidiary MTS Markets International Inc. (which was classified as a disposal group held for sale) to Tradition America Holdings Inc., a subsidiary of Compagnie Financière Tradition SA, an interdealer broker in over-the-counter financial and commodity related products. The proceeds from the sale amounted to €7.8 million. The net assets disposed of amounted to €4.7 million, which resulted in a gain on disposal of €3.1 million.

The following acquisitions and disposals of subsidiaries were made in 2021:

- **Acquisition of London Stock Exchange Group Holdings Italia S.p.A. ("Borsa Italiana Group")**

On 29 April 2021, the Group completed the acquisition of the Borsa Italiana Group for a final consideration of €4,447 million, following the satisfaction of all condition precedents. The Borsa Italiana Group is the integrated Italian market infrastructure, with operations diversified across regulated markets, fixed income trading, central counterparty clearing, operator of the Italian national Central Securities Depository and other business lines.

- **Acquisition of additional interest by exercise of call option for remaining shares in iBabs B.V.**

On 3 March 2021, the Group exercised its call option to acquire the remaining 40% of the shares in iBabs, increasing the Group's ownership to 100%. Cash consideration of €55.6 million was paid to the non-controlling shareholders.

- **Acquisition of additional interest by exercise of call option for remaining shares in Commcise Software Ltd.**

On 30 September 2021, the Group exercised its call option to acquire the remaining 21% of the shares in Commcise Software Ltd., increasing the Group's ownership to 100%. Cash consideration of €12.7 million was paid to the non-controlling shareholders.

- **Disposal of Centevo AB and Oslo Market Solutions AS**

In 2021, the Group disposed its interests in subsidiaries Centevo AB and Oslo Market Solutions AS. The combined proceeds from these disposals amounted to €5.9 million (net of cash), whereas the combined net assets disposed of amounted to €3.2 million (net of cash). This resulted in a combined result from disposal of €2.7 million.

Investments in Associates and Joint Ventures

- **LiquidShare S.A.**

On 10 July 2017 the Group, together with six other leading financial institutions, incorporated LiquidShare S.A., a fintech joint venture with the objective to improve SME's access to capital markets and improving the transparency and security of post-trading operations using blockchain technology. The Group shares joint control with the other founders and has an interest of 16.23% in LiquidShare (2020 and 2019: 16.23%). In 2019, the Group made a capital contribution of €1.0 million in LiquidShare S.A. The value of this investment was €1.7 million as per 31 December 2021.

Following indications of a deteriorated future cash flow situation and Board decision to propose to the Shareholders meeting to liquidate the entity, the investment in joint venture LiquidShare was impaired by €1.5 million to zero value by mid 2022. As per 31 December 2023, the entity was in the process of being liquidated and was ultimately liquidated in January 2024.

- **LCH SA**

In the second half of 2017, the Group announced its intentions to swap its 2.31% stake in LCH Group for a 11.1% stake in LCH SA, subject to regulatory approvals and other customary conditions. The transaction was finalised on 29 December 2017 and strengthened the long-standing relationship between Euronext and LCH SA. Euronext remained on the Board of LCH SA following completion of the share swap. Euronext also nominated one representative to LCH SA Audit Committee and continued to be represented at LCH SA Risk Committee. A new Consultative Committee dedicated to Euronext derivatives business was created. The parties have agreed that Euronext has certain minority protection rights connected with its shareholding in LCH SA.

As the Group concluded it had significant influence, the 11.1% stake in LCH SA amounting to €58.0 million was recognised in investments in associates and joint ventures as per 31 December 2017. As per 31 December 2022 the investment amounted to €70.6 million (31 December 2021: €66.8 million).

Following the notification of the early termination of the Derivatives Clearing Agreement, LCH Group has exercised its option to buy back Euronext's 11.1% stake in LCH SA in July 2023. As a result, the investment in LCH SA was derecognised and Euronext incurred a capital gain of €41.6 million.

- **Investment in Tokeny Solutions**

On 28 June 2019, the Group acquired a 23.5% stake in Tokeny Solutions, a tokenisation platform that provides users end-to-end solutions to issue, manage and transfer tokenised securities on public blockchain. The consideration of the investment amounted to €5.0 million. The Group recognised the acquired interest as an investment in associate. As per 30 June 2021, following indications of a deteriorated future cash flow situation, the investment in associate Tokeny Solutions was impaired by €4.3 million to zero value (31 December 2022: no changes to this value). On 1 December 2023, Euronext disposed its stake in Tokeny Solutions. As a result, the investment in Tokeny Solutions was derecognised and Euronext incurred a capital gain of €11.4 million.

- **Investment in Advanced Technology Solutions SpA (ATS)**

On 1 December 2022, the Group acquired a 30.0% stake in Advanced Technology Solutions SpA. (ATS), which line of business includes designing, developing, and producing prepackaged computer software, at consideration of €0.7 million. The value of this investment was €0.7 million as per 31 December 2023 (2022: €0.7 million).

Equity Investments

- **Euroclear SA/NV (Euroclear) Investment**

On 30 April 2014, ICE contributed to the Group a 2.75% ownership interest into Euroclear, an unlisted company involved in the settlement of securities transaction and related banking services. Due to share buy-backs by Euroclear in 2015 and 2017 the direct investment in Euroclear increased from 2.75% to 3.34% as per 31 December 2017. In 2018, the Group increased its interest in Euroclear from 3.34% to 3.53%, which was due to the acquisition of the Irish Stock Exchange Plc., that holds an 0.19% ownership interest in Euroclear. The Group also holds an 1.53% indirect investment in Euroclear, through its 9.60% ownership interest in Sicovam Holding SA.

The Group established a standardised multi-criteria approach valuation for financial institutions based on the Gordon Growth Model valuation technique as its primary valuation method and the regression valuation technique (P/BV and ROE) and trading multiples as control methods. In addition, the Group considers the most recent transactions observed, for the determination of fair value in addition to its primary valuation technique. The Group applies a weighted approach taking into account an illiquidity discount accounting for the limited number of transactions.

In 2023, the high interest rates environment led to a sharp increase of net interest earnings at Euroclear, which is predominantly driven by interests linked to frozen assets as a result of Russian sanctions and countermeasures.

The European Commission is contemplating various options to use the profits generated by sanctioned amounts held by financial institutions, including Euroclear, for the financing of Ukraine's reconstruction.

Since considerable uncertainties persist, Euroclear considers it necessary to separate the estimated sanction-related earnings from the 'underlying' financial results when assessing the company's performance and resources.

For this reason, the Group used the 'underlying' financial results published by Euroclear (i.e. excluding Russian-sanctions related assets/earnings), as an input for its primary valuation technique.

In 2023, this valuation method resulted in a total valuation of Euroclear SA/NV of €5.3 billion (2022: €5.0 billion and 2021: €4.2 billion) and to an increase in fair value of the Group's direct- and indirect investments of €11.7 million (2022:€42.0 million and 2021 €3.2 million). This revaluation was recorded in Other Comprehensive Income.

As per 31 December 2023, following the above, the fair value of the investment in Euroclear was measured at €187.6 million (31 December 2022: €175.9 million and 31 December 2021: €148.3 million) and the fair value of the investment in Sicovam Holding SA was measured at €73.5 million (31 December 2022: €73.5 million and 31 December 2021: €59.1 million).

Other factors

- **Partial disposal of debt investment portfolio at Euronext Clearing**

In July 2022, Euronext Clearing reduced its investment portfolio with the aim of strengthening and preserving its available regulatory capital and aligning the investment strategy to the current level of market volatility and uncertainty.

As a result, Euronext Clearing disposed of its portfolio maturing after 1 May 2023 and decided to retain its short-term investment portfolio maturing through April 2023 and hold these to maturity. The Group recycled the related revaluation loss of €48.9 million from Other Comprehensive Income to non-underlying net treasury income.

Reference is made to section *7.1.14 - Liquidity risk of CCP clearing business and Credit risk of CCP clearing business* for more details on the balances of the portfolio.

- **Migration of Euronext Data Centre from Basildon (UK) to Bergamo (Italy)**

On 6 June 2022, the Group completed the first part of the migration of its core data centre from Basildon (UK) to Bergamo (Italy). The core data centre migration was executed in order to pave the way for the migration of the Borsa Italiana equity and derivatives markets onto Euronext Optiq® trading technology by 2023/2024.

As a result, the right of use asset related to the Basildon data centre was partially depreciated in acceleration.

- **Termination of Interest Rate Swap agreements**

On 3 May 2022, the Group terminated its interest rate swap agreements which were formally designated and qualified as fair value hedges of Senior Unsecured Note #1. On termination, the Group cash settled the swap agreements that had a carrying amount of €8.9 million and the hedge relationship was discontinued.

As from the moment of discontinuation of the fair value hedge, the accumulated fair value adjustments of Senior Unsecured Note #1 will be amortised to profit or loss based on a recalculated Effective Interest Rate over the remaining term of the Senior Unsecured Note #1.

As per 31 December 2023, the accumulated fair value adjustments amounted to a negative €3.3 million (2022: €5.9 million).

- **COVID-19**

In 2020, the global pandemic from the COVID-19 outbreak caused disruption to financial markets and normal patterns of business activity across the world, including the markets in which the Group operates.

The Group was able to ensure smooth and efficient running of critical functions and processes. Euronext markets remained open, servicing a highly volatile trading environment, positively impacting the Group's trading revenues in 2020.

The effects of the COVID-19 outbreak did not lead to the Group making use of any financial support from governments in the form of reliefs or grants and did not lead to a negative impact on the Group's liquidity position or to an impairment of goodwill. The COVID-19 pandemic has had no adverse impact on the Group in 2021 and 2022.

- **Share repurchase programme**

On 27 July 2023, the Group announced a share repurchase programme (the 'Programme') for an amount of €200 million. The Programme was implemented as follows:

- Purpose: the purpose of the Programme is to reduce the share capital of the Group. All shares repurchased as part of the Programme will be cancelled;
- Maximum amount allocated: €200 million;
- Duration: the targeted period for the Programme is from 31 July 2023 for a maximum duration of a year, to be implemented on Euronext Paris;
- Framework: Euronext aims to repurchase approximately 3.0% of its ordinary shares, as authorised by the General Meeting on 17 May 2023 to a limit of 10.0%.

Euronext entered into a non-discretionary arrangement with a financial intermediary to conduct the repurchase.

The Programme was executed in compliance with applicable rules and regulations, including the Market Abuse Regulation 596/2014 and the Commission Delegated Regulation (EU) 2016/1052, and based on the authority granted by the annual general meeting of shareholders on 17 May 2023.

On 3 January 2024, the Group completed the Programme.

7.1.6 Goodwill

Goodwill recorded includes the entire goodwill that arose from the acquisition of the Amsterdam and Brussels stock exchanges in 2000 and the Lisbon stock exchange in 2002. It also includes an allocation of the goodwill that arose from the acquisition of Atos Euronext Market Solutions (AEMS), Euronext's preferred IT service provider, in 2008. In 2017, additional goodwill was recorded in relation to the acquisitions of Company Webcast, iBabs and FastMatch. In 2018, additional goodwill was recorded in relation to the acquisitions of InsiderLog, the Irish Stock Exchange and Commcise. In 2019, additional goodwill was recorded in relation to the acquisitions of Oslo Børs VPS and Finance Web Working SAS (disposed in 2022). In 2020, additional goodwill was recorded in relation to the acquisitions of Nord Pool, Ticker Software, 3Sens and VP Securities. In 2021, additional goodwill was recorded in relation to the acquisition of the Borsa Italiana Group and its subsidiaries. In 2022, additional goodwill was recorded in relation to the acquisitions of Spafid Issuer Services Business and Nexi Technology Businesses. Goodwill is adjusted in case of disposal of business combinations.

7.1.7 Financial and trading position

Other than as described below, there has been no significant change in the financial performance of the group since the end of the last financial period for which financial information has been published (31 December 2023) to the date of the registration document:

- **Trading volumes from 1 January 2024 to 29 February 2024**

In January and February 2023, the average daily transaction value on the Euronext cash order book stood at €10,003 million, down -7.3% compared to the same period in 2023.

In January and February 2023, Euronext recorded 7 new equity listings raising €0.1 billion. In addition, €2.2 billion was raised in secondary equity issuances and €357.3 billion was raised in debt issuances.

The overall average daily volumes on Euronext derivatives stood at 611,915 contracts, -4.8% compared to the same period in 2023, and the open interest was 23,816,176, +1.7% compared to the end of February 2023.

The average daily volume on Euronext FX's spot foreign exchange market stood at $24,286 million in January and February 2024, +20.8% compared to the same period last year.

MTS Cash average daily volumes were up +60.2% to €34,518 million in January and February 2024, MTS Repo term adjusted average daily volume stood at €464,872 million, up +15.8% compared to the same period last year.

Euronext Clearing cleared 38,898,964 shares in January and February 2024, up +218.8% compared to January and February 2023. €5.1 billion of wholesale bonds were cleared in January and February 2024 (double counted), +14.7% compared to the same period in 2023. 2,574,262 retail bond retail contracts were cleared in January and February 2024 (double counted), +7.7% compared to January and February 2023. The number of derivatives contracts cleared was down -19.7% compared to January and February 2023, at 3,608,583 contracts (single counted).

Euronext Securities reported 23,205,639 settlement instructions in January and February 2024, up +2.1% compared to the same period last year. The total Assets Under Custody amount to €6.7 trillion end of February 2024, +5.7% compared to February 2023.

7.1.8 Results of Operations

YEAR ENDED 31 DECEMBER 2023 COMPARED TO THE YEARS ENDED 31 DECEMBER 2022 AND 31 DECEMBER 2021

The table below sets forth Euronext's results of operations for the years ended 31 December 2023, 2022 and 2021.

	Year ended		
In thousands of euros	**31 December 2023**	**31 December 2022**	**31 December 2021**
Revenue	1,426,876	1,418,774	1,253,523
Net treasury income through CCP Business	46,660	(4,913)	35,432
Other income	1,393	1,530	3,455
Transitional income/ (loss)	(222)	3,419	6,245
Total revenue and income	**1,474,707**	**1,418,810**	**1,298,655**
Salaries and employee benefits	(332,416)	(307,017)	(287,073)
Depreciation and amortisation	(170,131)	(160,191)	(134,572)
Other operational expenses	(355,923)	(326,344)	(297,719)
Operating profit	**616,237**	**625,258**	**579,291**
Finance costs	(35,714)	(37,078)	(40,704)
Finance income (a)	30,526	5,806	1,479
Other net financing result (a)	5,208	(691)	4,833
Results from equity investments	23,500	9,842	25,712
Gain on disposal of subsidiaries	(206)	2,274	2,681
Gain on sale of associates	53,028	–	–
Share of net profit/(loss) of associates and joint ventures accounted for using the equity method, and impairments thereof	6,533	8,834	7,441
Profit before income tax	**699,112**	**614,245**	**580,733**
Income tax expense	(162,697)	(163,605)	(158,644)
PROFIT FOR THE YEAR	**536,415**	**450,640**	**422,089**
Profit attributable to:			
■ Owners of the parent	513,567	437,827	413,344
■ Non-controlling interests	22,848	12,813	8,745

(a) As from 2023, the Group presents finance income separately on the face of the income statement, following increased income from interest calculated using the effective interest method. The Group re-presented the comparative periods accordingly by reclassifying €5.8 million in 2022 and €1.5 million in 2021 from 'Other net financing result' that was originally reported at €5.1 million in 2022 and €6.3 million in 2021.

Total revenue and income

Euronext's total revenue and income for the year ended 31 December 2023 was €1,474.7 million, an increase of €55.9 million compared to €1,418.8 million for the year ended 31 December 2022.

The table below sets forth Euronext's revenue and income for the years ended 31 December 2023, 2022 and 2021.

In thousands of euros	2023	2022	2021
Listing	220,642	218,380	189,689
Trading revenue	490,008	514,125	465,265
of which			
■ Cash trading	*265,439*	*301,714*	*293,684*
■ Derivatives trading	*54,168*	*58,380*	*52,458*
■ Fixed income trading	*107,425*	*92,951*	*65,783*
■ FX trading	*25,556*	*28,406*	*23,479*
■ Power trading	*37,420*	*32,674*	*29,861*
Investor Services	11,375	9,596	8,894
Advanced data services	224,774	212,053	183,607
Post-trade	370,183	364,519	320,570
of which			
■ Clearing	*121,283*	*121,393*	*101,376*
■ Custody & Settlement and other	*248,900*	*243,126*	*219,194*
Euronext Technology Solutions & other revenue	109,894	100,101	85,498
NTI through CCP business	46,660	(4,913)	35,432
Other income	1,393	1,530	3,455
Transitional income/loss	(222)	3,419	6,245
TOTAL REVENUE AND INCOME	**1,474,707**	**1,418,810**	**1,298,655**

The like-for-like measure in the operating results review below is used by the Group to improve comparability with the impact generated in the comparative period. It comprises the consolidated impact of the specific revenue or expense category for the year minus the impact of the specific revenue or expense category from newly acquired subsidiaries during the year.

Listing

For the year ended 31 December 2023:

Listing revenue was €220.6 million in 2023, an increase of +1.0% compared to 2022, primarily reflecting the strong performance of Corporate Services, more than offsetting the negative impact of the NOK depreciation.

Equity listing activity was strong in a challenging context with 64 new listings, ranking Euronext as the first listing venue in Europe in 2023. Equity listing revenue was solid at €105.1 million, primarily supported by revenue from higher annual fees revenue and several large follow-on transactions.

Euronext Corporate Services revenue grew +14.9% compared to 2022 to €45.4 million, resulting from the strong performance of its SaaS products more than offsetting lower webcast activities.

Debt listing activity was solid with revenue at €36.0 million, reflecting a better second half of 2023 with a more stable debt market and higher interest rate. Euronext maintained its world leading position in debt listing with 494 new ESG bonds listed over the year, an increase of over 20% from 2022. On a like-for-like basis at constant currencies, listing revenue increased by +3.2% compared to 2022.

For the year ended 31 December 2022[6]:

Listing revenue was €218.4 million in 2022, an increase of +15.1% compared to 2021, reflecting higher annual fees, the strong performance of Euronext Corporate Services and the positive impact of primary and secondary listing revenue recognition over time[7]. On a like-for-like basis at constant currencies, listing revenue increased by +6.6% compared to 2021.

Euronext's primary equity listing business sustained its leading position in Europe with 83 new listings in 2022, outperforming all European listing venues. This compares to 212 in 2021, which was a record year for new listings. Five of the top ten largest IPOs in Europe[8] in 2022 took place on Euronext, and international listings represented 21% of listing activity, demonstrating Euronext's attractiveness for companies in its core markets in Europe and beyond.

In 2022, Euronext's markets reported €3.8 billion raised in primary equity issues. This compares to a record 2021 with €26.0 billion raised on Euronext primary markets.

Euronext's secondary markets reported €28.5 billion raised in secondary equity issues in 2022, compared to €83.0 billion in 2021.

Euronext remained a leading exchange in Europe for ETF listings, with 478 new listings.
Euronext sustained its position as the leading listing venue for bonds worldwide in 2022[9], growing the number of bonds listed to more than 53,000 across all Euronext markets, despite persisting negative debt market conditions globally due to rising interest rates and concerns over economic growth. In 2022, €961.9 billion in debt was raised on Euronext markets, reflecting the current market conditions, and compared to €1.5 trillion raised in 2021.

In total, €994.1 billion in equity and debt was raised on Euronext's markets in 2022, which represents the second best year for equity and debt listing in Euronext's history after the €1.6 trillion raised in 2021.

Euronext Corporate Services reported a strong year in terms of revenue at €39.5 million in 2022, up +6.5% compared to 2021, resulting from a solid performance across the offering, despite a slowdown in webcast activities in a post-pandemic context.

6 Figures for money raised have been restated
7 Admission fees are recognized over a period of 3-5 years
8 In terms of money raised
9 According to the Federation of European Securities Exchanges (FESE)

For the year ended 31 December 2021:

Listing revenue was €189.7 million in 2021, an increase of +30.4% compared to 2020, driven by record equity and debt listing activities, and the dynamism of Euronext Corporate Services. On a like-for-like basis at constant currencies, listing revenue increased by +8.0% compared to 2020.

In 2021, Euronext reported an all-time record of 212 new equity listings. This performance confirmed Euronext's leadership as the leading European equity listing venue thanks to its attractive value proposition for issuers, from Europe and abroad. Euronext welcomed 18 large capitalisation listings in 2021, including international blue chip issuers such as Allfunds (Spain), CTP (Czech Republic), InPost (Poland), Majorel (Luxembourg) and Universal Music Group (US). In 2021, Euronext also recorded 22 SPAC listings, confirming its position as the leading European venue for SPAC listings, as well as 109 new Tech company listings, positioning Euronext as the leading venue for Tech issuers in Europe.

Secondary markets reported increased activity supported by large capitalisation deals, with €92.9 billion raised in secondary equity issues compared to €56.2 billion raised in 2020.

Euronext reinforced its position as the leading exchange in Europe for the listing of ETFs in 2021.

Euronext confirmed its leading position worldwide in debt listing, recording an all-time high in new debt listings in 2021. This performance results from the favourable market conditions across Euronext listing venues, continued traction of ESG bonds as well as the benefits from Borsa Italiana debt listing capabilities. In 2021, €1.5 trillion in debt was raised on Euronext markets, compared to €1.2 trillion in 2020.

In total, €1.6 trillion in equity and debt was raised on Euronext markets in 2021, compared to €1.3 trillion in 2020.

Euronext Corporate Services reported a strong performance, generating €37.1 million in revenue in 2021, up +14.6% compared to 2020, capitalising on supportive trends towards further digitalisation and on an enhanced offering in 2021.

Trading

Cash Trading

For the year ended 31 December 2023:

Cash trading revenue decreased by -12.0% to €265.4 million in 2023, reflecting the strong comparison base for cash trading in the first semester, partly offset by the positive impact of the migration of cash markets to Optiq® and efficient market share and revenue capture.

Over the year, Euronext's market share on cash equity trading averaged 65.1%, well above the indicated floor of at least 63%. Euronext average cash trading yield was 0.52 bps for the whole year, in line with the guidance despite the dilutive impact of Borsa Italiana's fee scheme prior to the Optiq® migration on 27 March 2023. Post migration of the Italian markets to Optiq®, the yield over the last 9 months of 2023 averaged 0.53bps, above the indicated floor.

On a like-for-like basis at constant currencies, cash trading revenue was down -12.0% in 2023 compared to 2022.

For the year ended 31 December 2022:

Cash trading revenue increased by +2.7% to € 301.7 million in 2022, reflecting the consolidation of the Borsa Italiana Group and strong volumes during the first semester of 2022, partially offset by lower volumes in the second half of 2022. Over 2022, Euronext recorded cash trading average daily volumes of €11.7 billion, stable compared to a record year 2021 at €11.8 billion. Euronext continued to be the provider of the best market quality, with a sustained above-average EBBO presence across the equity markets it operates[10].

Over the year, Euronext's market share on cash trading averaged 66.6%, with a clear uptick in market share since October 2022, thanks to intense commercial activity and enhanced fee schemes.

Over 2022, Euronext cash trading yield was 0.50bps, reflecting the dilutive impact of the Borsa Italiana fee grid before the migration to the Optiq® trading platform and higher transaction orders sizes on a reported basis. The largest single liquidity pool in Europe operated by Euronext will significantly change dimension with the migration of Italian cash markets to Euronext's state-of-the-art proprietary trading platform Optiq® in Q1 2023. This migration will benefit local and global trading members. Euronext expects to maintain for cash trading an average market share greater or equal to 63%, and revenue capture around 0.52bps following the migration of Borsa Italiana cash markets to Optiq®, considering current market conditions and orders size.

On a like-for-like basis at constant currencies, cash trading revenue was down -4.4% in 2022 compared to 2021.

For the year ended 31 December 2021[11]:

Cash trading revenue increased by +13.1% to €293.7 million in 2021 as a result of the consolidation of Borsa Italiana capital markets and efficient revenue capture in an environment of decreasing trading volumes after a very dynamic 2020 trading environment. Over 2021, Euronext cash markets reported average daily volumes of €11.8 billion supported by several volatility spikes, yet this was down -4.6%, on a pro forma basis, compared to a record year 2020.

Over 2021, Euronext cash trading yield averaged 0.53bps and the market share on cash trading averaged 71.0%[12].

On a like-for-like basis at constant currencies, cash trading revenue was down -1.6% in 2021 compared to a highly volatile year 2020.

Derivatives Trading

For the year ended 31 December 2023:

Derivatives trading revenue decreased by -7.2% to €54.2 million in 2023, as a result of the low volatility environment for equity derivatives, partly offset by the strong performance of the commodities franchise.

Euronext revenue capture on derivatives trading increased to €0.34 per lot in 2023, resulting from improved revenue capture across the offering and a positive mix impact.

On a like-for-like basis at constant currencies, derivatives trading revenue was down -7.0% in 2023 compared to 2022.

For the year ended 31 December 2022:

[10] Source of EBBO presence data: BMLL
[11] 2020 data used in 2021 are pro forma Borsa Italiana volumes
[12] Reported market share and yield for 8 months of consolidation of Borsa Italiana trading volumes

Derivatives trading revenue increased by +11.3% to €58.4 million in 2022, as a result of strong traction on the index derivatives franchise and improved product mix enhancing revenue capture.

During 2022, average daily volume on financial derivatives was 616,092 lots, down -5.3% from 2021, reflecting a strong comparison basis in a volatile 2021, including lower activity from equity finance clients.

Average daily volumes on commodity derivatives were at 79,318 lots in 2022, down -3.5% compared to 2021, reflecting a decrease in commodity futures trading compared to all-time high levels in 2021, partly offset by record activity on commodity options.

Euronext revenue capture on derivatives trading was €0.33 per lot in 2022, resulting from improved revenue capture across the offering.

On a like-for-like basis at constant currencies, derivatives trading revenue was up +2.6% in 2022 compared to 2021.

For the year ended 31 December 2021[8]:

Derivatives trading revenue increased by +6.6% to €52.5 million in 2021 as a result of the consolidation of Borsa Italiana Capital Markets, newly launched innovative products and of a record year for commodity derivatives trading.

In 2021, average daily volume on financial derivatives was 650,898 lots, down -8.3% from 2020 reflecting a low volatility environment for equity derivatives, while average daily volume on commodity derivatives was 82,219 lots, up +22.6% from 2020 reflecting successful expansion of the franchise.

Euronext revenue capture on derivatives trading was €0.29 per lot for 2021.

On a like-for-like basis at constant currencies, derivatives trading revenue was down -8.5% in 2021 compared to 2020.

Fixed income trading

For the year ended 31 December 2023**:**

Fixed income trading reported record revenue at €107.4 million in 2023, up +15.6% compared to 2022, reflecting a strong performance across the offering in a supportive economic environment. MTS reported an overall robust performance in markets dominated by increasing interest rates.

On a like-for-like basis at constant currencies, fixed income trading revenue was up +15.8% in 2023 compared to 2022.

For the year ended 31 December 2022:

Fixed income trading reported revenue was at €93.0 million in 2022, compared to €65.8 million in 2021, reflecting the consolidation of MTS, whose volumes reflected the change in macro-economic conditions in Europe with rising inflation, interest rates and uncertainties which favoured money markets.

MTS reported an overall robust performance in markets dominated by increasing interest rates. In 2022, MTS Cash reported €59.5 million of revenue and MTS Repo reported €21.6 million of revenue.

2022 recorded strong growth in Repo trading, with term-adjusted average daily volumes up +25.1% compared to 2021 to €353.7 billion. This compensated for lower MTS Cash average daily volumes, down -21.2% to €18.9 billion, compared to €24.0 billion in 2021.

On a like-for-like basis at constant currencies, fixed income trading revenue was down -8.9% in 2022 compared to 2021.

For the year ended 31 December 2021:

Fixed income trading reported revenue at €65.8 million in 2021, compared to €2.6 million in 2020 and €2.6 million in 2019, resulting from the consolidation of MTS. MTS Cash contributed €46.8 million of revenues, while MTS Repo reported €12.7 million for 2021. MTS reported significant growth in cash volumes driven by steady issuance as well as European bond buying programmes and a dynamic Italian market.

MTS Cash average daily volumes grew +71.8% versus 2020 to €24.0 billion in 2021. MTS Repo reported term adjusted average daily volumes down -18.2% to €282.7 billion with a renewed dynamic during the fourth quarter of 2021.

On a like-for-like basis at constant currencies, fixed income trading revenue (solely Euronext perimeter) was down -34.2% in 2021 compared to 2020.

FX Trading

For the year ended 31 December 2023:

FX trading revenues were at €25.6 million in 2023, down -10.0% compared to a record performance in 2022. This decrease reflects the lower volatility in the first three quarters of the year and negative FX impact.

On a like-for-like basis at constant currencies, FX trading revenue was down -7.8% in 2023 compared to 2022.

For the year ended 31 December 2022:

FX trading reported all-time record revenues at €28.4 million in 2022, up +21.0% from 2021. Euronext FX trading benefited from the positive momentum with heightened volatility, geographic expansion and product diversification.

Over 2022, average daily volumes of USD 22.5 billion were recorded, up +17.1% compared to 2021.

On a like-for-like basis at constant currencies, FX trading revenue was up +7.9% in 2022 compared to 2021.

For the year ended the 31 December 2021:

FX trading reported revenue at €23.5 million in 2021, down -10.9% from 2020, reflecting lower trading volumes as FX markets recorded lower volatility through the year. In 2021, US$19.2 billion average daily volumes were recorded, down -10.3% compared to 2020.

On a like-for-like basis at constant currencies, FX trading revenue was down -7.4% in 2021 compared to 2020.

Power Trading:

For the year ended 31 December 2023:

Power trading reported record revenue at €37.4 million in 2023, representing a strong growth of +14.5% compared to 2022, driven by a strong increase in intraday volumes and continued geographic expansion. This performance more than offsets the negative impact of the NOK.

On a like-for-like basis at constant currencies, power trading revenue was up +29.3% compared to 2022.

For the year ended 31 December 2022:

Power trading reported €32.7 million in revenue in 2022, representing a strong growth of +9.4% compared to 2021, driven by record volumes, totalling over 1,000TWh, and continued successful geographic expansion in Central and Western Europe, UK and Ireland. Over 2022, average daily day-ahead power traded was 2.75TWh, up +11.4% compared to 2021, and average daily intraday power traded was 0.10TWh, up +49.8% compared to 2021.

On a like-for-like basis at constant currencies, power trading revenue was up +8.9% compared to 2021.

For the year ended 31 December 2021:

Power trading reported €29.9 million in revenue in 2021, +9.3% compared to 2020 as lower trading volumes in the UK and Ireland as well as Central and Western Europe markets were offset by an enhanced revenue capture. In 2021, average daily day-ahead power traded was 2.47TWh, down -2.0% compared to 2020, and average daily intraday power traded was 0.07TWh, down -2.3% compared to 2020.

On a like-for-like basis at constant currencies, power trading revenue was down -0.3% compared to 2020.

Investor Services

For the year ended 31 December 2023:

Investor Services reported record revenue at €11.4 million revenue in 2023, representing a +18.5% increase compared to 2022, resulting from successful organic growth of the product portfolio.

On a like-for-like basis at constant currencies, Investor Services revenue was up +21.1% compared to 2022.

For the year ended 31 December 2022:

Investor Services reported €9.6 million revenue in 2022, representing a +7.9% increase compared to 2021, resulting from successful growth of the client base and successful key product launches.

On a like-for-like basis at constant currencies, Investor Services revenue was up +10.8% compared to 2021.

For the year ended 31 December 2021:

Investor Services revenue increased to €8.9 million in 2021, up +17.3% compared to 2020, resulting from successful commercial expansion and enhancement of the offering.

On a like-for-like basis at constant currencies, Investor Services revenue was up +26.9% compared to 2020.

Advanced Data Services

For the year ended 31 December 2023:

Advanced Data Services revenue grew to €224.8 million in 2023, up +6.0% from 2022, driven by the strong performance across the data products offering and solid demand for analytic products.

On a like-for-like basis at constant currencies, Advanced Data Services revenue was up +6.2% compared to 2022.

For the year ended 31 December 2022:

Advanced Data Services recorded revenue grew to €212.1 million in 2022, up +15.5% from 2021, driven by the consolidation of Borsa Italiana's data businesses, as well as a strong performance of the core data and advanced data solutions businesses. The Euronext's indices franchise posted a resilient performance in 2022, despite lower structured products activity following two years of intense volatility.

Euronext continued to expand its ESG Indices franchise in 2022 including with the successful launch of ESG versions of its national flagship indices, the AEX® ESG in the Netherlands and the OBX® ESG in Norway, reinforcing the existing offering that already included the CAC 40® ESG in France and the MIB® ESG in Italy.

On a like-for-like basis at constant currencies, Advanced Data Services revenue was up +5.4% compared to 2021.

For the year ended 31 December 2021:

Over 2021, Advanced Data Services revenue grew to €183.6 million, up +32.1% compared to the previous year as a result of the consolidation of Borsa Italiana Group data businesses, as well as solid market data activities, dynamic indices business with the launch of 20 new ESG indices and growing traction of data solutions activity.

On a like-for-like basis at constant currencies, Advanced Data Services revenue was up +4.1% compared to 2020.

Post Trade

Clearing

For the year ended 31 December 2023:

Clearing revenue was stable at €121.3 million in 2023, reflecting the positive impact of the Euronext Clearing European expansion for equities in November 2023 and dynamic bond clearing. This performance offsets softer equity and derivatives clearing volumes and lower treasury income received from LCH SA.

In 2023, Euronext Clearing revenue included €5.6 million from derivatives clearing, €16.6 million from equities clearing, and €13.6 million from bonds clearing.

On a like-for-like basis at constant currencies, clearing revenue was stable compared to 2022.

For the year ended 31 December 2022:

Clearing revenue grew by +19.7% to €121.4 million in 2022, reflecting the consolidation of Euronext Clearing and a volatile volume environment throughout the year. Non-volume related clearing revenue (including membership fees, treasury income received from LCH SA) accounted for €39.4 million of the total clearing revenue in Q4 2022.

Euronext Clearing activities reflected the general market dynamic over 2022, with a gradual decline in equity and derivatives clearing volumes offset by a steady increase in bond clearing volumes. In 2022, Euronext Clearing revenue included €6.5 million from derivatives clearing, €16.7 million from equities clearing, and €9.8 million from bonds clearing.

On a like-for-like basis at constant currencies, clearing revenue was up +3.8% compared to 2021.

For the year ended 31 December 2021:

Clearing revenue was up in 2021, at €101.4 million, +51.2% compared to 2020, as a result of the consolidation of Euronext Clearing (formerly CC&G) activities as well as higher clearing revenue supported by an increase in commodity derivatives cleared and higher treasury income received from LCH SA. Euronext Clearing's derivatives clearing for the full year amounted to €3.9 million, bonds clearing to €5.7 million, and equities clearing generated €11.6 million of revenues, for 8 months of consolidation of Euronext Clearing clearing activities.

On a like-for-like basis at constant currencies, clearing revenue was up +6.6% compared to 2020.

Net treasury income

For the year ended 31 December 2023:

Net treasury income was €46.7 million in 2023. As a reminder, 2022 net treasury income was impacted by the partial disposal of the Euronext Clearing investment portfolio, which resulted in a one-off, non-underlying pre-tax loss of €49.0 million in Q3 2022. This led to a reported net treasury income of -€4.9 million in 2022. Excluding the non-underlying one-off loss in 2022, net treasury income was up +6.0% in 2023 compared to 2022, reflecting the implementation of the new investment strategy for Euronext Clearing.

For the year ended 31 December 2022:

Net treasury income through the CCP business of Euronext Clearing amounted to a loss of €-4.9 million in 2022. Net treasury income through CCP clearing business is earned from instruments held at amortised cost or fair value as follows:

- A total €55.3 million gain was earned from financial assets and financial liabilities held at amortised cost (€28.6 million from interest income on liabilities held at amortised cost and €26.7 million on interest expenses on assets held at amortized cost).
- A net €11.3 million loss was incurred from assets held at fair value (€32.3 million income and €43.6 million expense.
- In addition, a revaluation loss of €48.9 million was incurred, following a one-off partial disposal of the debt investment portfolio held at Euronext Clearing. The Group recycled the related loss from Other Comprehensive Income to net treasury income.

For the year ended 31 December 2021:

Net treasury income through the CCP business of Euronext Clearing was €35.4 million in 2021 for 8 months of consolidation. Net treasury income through CCP clearing business is earned from instruments held at amortised cost or fair value as follows:

- A net €43.6 million was earned from financial assets and financial liabilities held at amortised cost (€93.1 million income and €49.5 million expense).
- A net €8.2 million loss was incurred from assets held at fair value (€30.1 million income and €38.3 million expense).

Settlement & Custody

For the year ended 31 December 2023:

Revenue from Custody, Settlement and other Post-Trade activities was at €248.9 million in 2023, up +2.4% compared to 2022, driven by growing assets under custody, improved revenue capture and continued expansion of the services business. This performance offset the negative impact of the NOK depreciation.

On a like-for-like basis at constant currencies, Custody, Settlement and other Post-Trade revenue was up +5.5% compared to 2022.

For the year ended 31 December 2022:

Revenue from Custody, Settlement and other Post-Trade activities was at €243.1 million in 2022, up +10.9% compared to 2021, driven by the consolidation of Euronext Securities Milan, a positively geared geographical mix and stable assets under custody, which offset lower settlement activity.

120,550,357 settlement instructions were processed in 2022 and assets under custody reached €6.3 trillion at the end of December 2022.

On a like-for-like basis at constant currencies, Custody, Settlement and other Post-Trade revenue was down -4.8% compared to 2021.

For the year ended 31 December 2021:

Revenue from Custody, Settlement and other Post Trade, including the activities of Euronext Securities (Copenhagen, Milan, Oslo, Porto), was €219.2 million in 2021, up +99.0% from 2020. This result from the consolidation of Euronext Securities Milan (from 29 April 2021) and of Euronext Securities Copenhagen (from 4 August 2020), as well as record activity across the CSDs with all-time high value of assets under custody, number of settlement instructions and number of retail accounts.

Over 2021, 136,171,006 of settlement instructions were processed by Euronext Securities CSDs, pro forma Euronext Securities Milan.

On a like-for-like basis at constant currencies, Custody, Settlement and other Post-trade revenue was up +12.1% compared to 2020.

Technology Solutions and Other revenue

For the year ended 31 December 2023:

Euronext Technologies and Other revenue increased to €109.9 million in 2023, up +9.8% from 2022, reflecting continued benefits from the internalisation of the colocation activity following the Core Data Centre migration to Bergamo.

On a like-for-like basis at constant currencies, Euronext Technologies and Other revenue was up +8.8% compared to 2022.

For the year ended 31 December 2022:

Euronext Technologies and Other revenue increased to €100.1 million in 2022, up +17.1% from 2021, resulting from the consolidation of Borsa Italiana Group technology activities, including Gatelab and X2M and additional revenue generated through colocation activity following the Euronext's Core Data Centre migration.

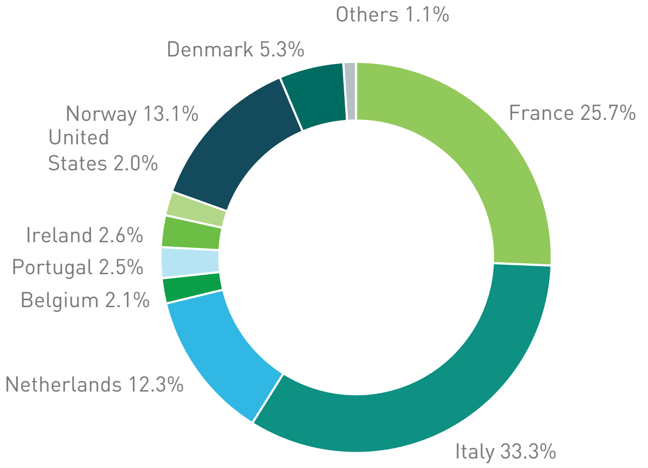
On a like-for-like basis at constant currencies, Euronext Technologies and Other revenue was up +3.3%. compared to 2021.

For the year ended 31 December 2021:

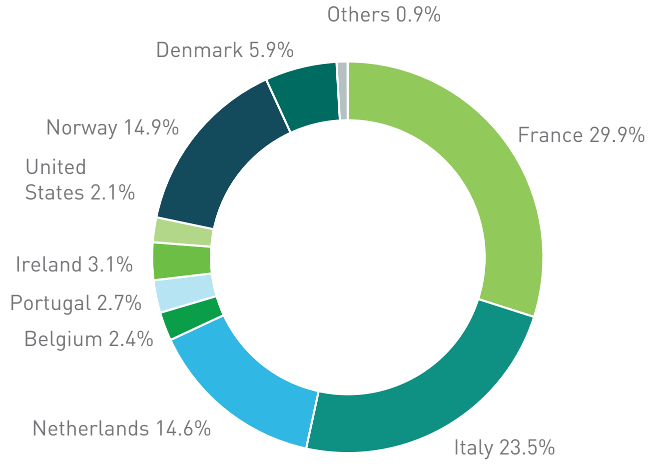
Euronext Technologies and Other revenue was €85.5 million in 2021, up +71.9% from 2020 as a result of the consolidation of Borsa Italiana Group technology businesses, including Gatelab and X2M as well as increased revenues from connectivity and colocation services.

On a like-for-like basis at constant currencies, Euronext Technologies and Other revenue was up +5.0% compared to 2020.

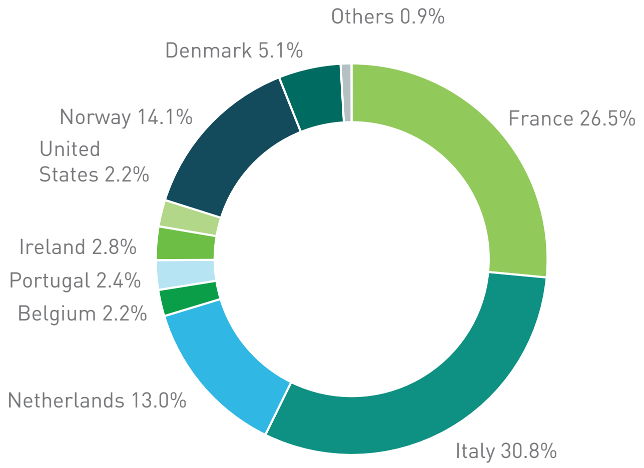
Euronext 2023 revenue by geography



Euronext 2021 revenue by geography



Euronext 2022 revenue by geography



Operating Expenses

in thousand of euros	2023	2022	2021
Salaries and employee benefits	(332,416)	(307,017)	(287,073)
Depreciation and amortisation	(170,131)	(160,191)	(134,572)
Other operational expenses	(355,923)	(326,344)	(297,719)
TOTAL OPERATING EXPENSES	**(858,470)**	**(793,552)**	**(719,364)**

For the year ended 31 December 2023:

Euronext operating expenses in 2023 were €858.5 million, compared to €793.6 million in 2022, an increase of €64.9 million or +8.2%. The overall cost increase in 2023 was primarily due to:

- increase in depreciation and amortisation resulting from the go-live of sofware assets;
- costs related to the integration of the Borsa Italiana Group and the realisation of strategic projects.

For the year ended 31 December 2022:

Euronext operating expenses in 2022 were €793.6 million, compared to €719.4 million in 2021, an increase of €74.2 million or +10.3%. The overall cost increase in 2022 was primarily due to:

- the consolidation of the costs from the Borsa Italiana Group (consolidated for eight months in 2021);
- increase in depreciation and amortisation resulting from the Borsa Italiana Group, including its related PPA;
- integration costs related to the new acquisitions.

For the year ended 31 December 2021:

Euronext operating expenses in 2021 were €719.4 million, compared to €439.4 million in 2020, an increase of €280.0 million or 52.8%. The overall cost increase in 2021 was due to:

- the consolidation of the costs from the Borsa Italiana Group, Euronext Securities Copenhagen (since 4 August 2020) and 3Sens (part of Corporate Services);
- increase in depreciation and amortisation resulting from the Borsa Italiana Group, including its related PPA for €39.0 million (for eight months of consolidation);
- integration costs related to the new acquisitions.

Salaries and Employee Benefits

For the year ended 31 December 2023:

Salaries and Employee Benefits increased by €25.4 million, or +8.3%, to €332.4 million, compared to €307.0 million in 2022. This increase is attributable to an increase of the headcount and non-underlying expenses related to the integration of the Borsa Italiana Group.

For the year ended 31 December 2022:

Salaries and Employee Benefits increased by €19.9 million, or 6.9%, to €307.0 million in 2022, compared to €287.1 million in 2021. The increase is mainly attributable to the increase in headcount following the incorporation of the Borsa Italiana Group that was only consolidated for eight months in 2021.

For the year ended 31 December 2021:

Salaries and Employee Benefits increased by €83.8 million, or 41.2%, to €287.1 million in 2021, compared to €203.3 million in 2020. The increase is mainly attributable to the increase in headcount following the incorporation of the Borsa Italiana Group and other recent acquisitions.

Depreciation and Amortisation

For the year ended 31 December 2023:

Depreciation and amortisation accounted for €170.1 million in 2023, up +6.2%, mainly due to the go-live of several internally developed software assets. PPA related to acquired businesses accounted for €82.2 million and is included in depreciation and amortisation.

For the year ended 31 December 2022:

Depreciation and amortisation accounted for €160.2 million in 2022, up +19.0%, mostly due to the consolidation of the Borsa Italiana Group. PPA related to acquired businesses accounted for €83.3 million and is included in depreciation and amortisation.

For the year ended 31 December 2021:

Depreciation and amortisation accounted for €134.6 million in 2021, up +127.0%, resulting primarily from the consolidation of the Borsa Italiana Group, including its related PPA for €39.0 million (for eight months of consolidation).

Other Operational Expenses

In thousands of euros	2023	2022	2021
Systems and communications	(102,622)	(121,924)	(86,286)
Professional services	(76,469)	(71,234)	(89,119)
Clearing expenses	(34,502)	(35,604)	(33,650)
Accommodation	(18,712)	(13,520)	(9,343)
Other expenses	(123,618)	(84,062)	(79,321)
TOTAL	**(355,923)**	**(326,344)**	**(297,719)**

For the year ended 31 December 2023:

Systems and Communications decreased by €19.3 million, or -15.8%, to €102.6 million in 2023, reflecting the decrease of expenses for services received from LSEG under the TSA agreement.

Professional services increased by €5.2 million, or +7.4%, to €76.5 million in 2023, mainly related to an increase in one-off expenses for services used for the implementation of the integration of Borsa Italiana Group.

Clearing expenses (solely related to clearing activities with LCH SA) decreased by €1.1 million, or -3.1%, to €34.5 million in

2023. This is mostly linked to the softer volume environment for the clearing activity in 2023.

Accommodation increased by €5.2 million, or +38.4%, to €18.7 million in 2023. This is mostly linked to higher costs in Italy, especially from data centers and energy expenses across the different locations.

Other Expenses increased by €39.6 million, or +47.1%, in 2023 to €123.6 million. This mostly reflects the termination fee paid to LCH SA for the termination of the Clearing Agreement.

For the year ended 31 December 2022:

Systems and Communications increased by €35.6 million, or +41.3%, to €121.9 million in 2022, compared to €86.3million in 2021. The increase can primarily be attributed to recent acquisitions.

Professional Services decreased by €17.9 million, or -20.1%, to €71.2 million in 2022, compared to €89.1 million in 2021. This change is mainly attributable to the decrease of outsourced services.

Clearing expenses (solely related to clearing activities with LCH SA) increased by €2.0 million, or 5.8%, to €35.6 million, compared to €33.6 million in 2020. This is mainly linked to higher clearing revenues.

Accommodation increased by €4.2 million, or +44.7%, to €13.5 million, compared to €9.3 million in 2021. This increase can be attributed to the impact of recently acquired subsidiaries as well as the new core data centre.

Other Expenses increased by €4.7 million, or +6.0%, to €84.1 million in 2021, compared to €79.3 million in 2021. This can primarily be attributed to higher marketing and events expenses in post-pandemic context.

For the year ended 31 December 2021:

Systems and Communications increased by €47.8 million, or +124.0%, to €86.3 million in 2021, compared to €38.5 million in 2020. The increase can primarily be attributed to recent acquisitions and an increase in licence fees.

Professional Services increased by €25.3 million, or 39.7%, to €89.1 million in 2021, compared to €63.8 million in 2020. This change is mainly attributable to the impact of recently acquired subsidiaries.

Clearing expenses (solely related to clearing activities with LCH SA) increased by €0.6 million, or 1.8%, to €33.6 million, compared to €33.1 million in 2020. This is mainly linked to higher clearing revenues.

Accommodation increased by €2.6 million, or 37.9%, to €9.3 million, compared to €6.8 million in 2020. This increase can be attributed to the impact of recently acquired subsidiaries.

Other Expenses increased by €44.7 million, or +129.2%, to €79.3 million in 2021, compared to €34.6 million in 2020. This can primarily be attributed to recent acquisitions.

Net Financing Income / (Expense)

In thousands of euros	2023	2022	2021
Interest expense (effective interest method)	(34,598)	(36,587)	(40,295)
Interest in respect of lease liabilities	(1,116)	(733)	(718)
Other finance costs	–	242	309
Total finance costs	**(35,714)**	**(37,078)**	**(40,704)**
Interest income (effective interest method)	30,526	5,806	1,479
Total finance income	**30,526**	**5,806**	**1,479**
Interest income from interest rate swaps	–	1,479	5,004
Hedging result	–	–	(698)
Gain / (loss) on disposal of treasury investments	4,721	(2,307)	(711)
Net foreign exchange gain/(loss)	487	137	1,238
Other net financing result	**5,208**	**(691)**	**4,833**
Total	**20**	**(31,963)**	**(34,392)**

For the year ended 31 December 2023:

Net financing income for 2023 was €20k, compared to a net financing expense of €32.0 million in 2022. This decrease in net financing expense reflects the recent evolution of ascending interest rates, which resulted in an increase of interest income on the Group's outstanding cash balances.

For the year ended 31 December 2022:

Net financing expense for 2022 was €32.0 million compared to a net financing expense of €34.4 million in 2021. This decrease results from elimination of costs in relation to the financing of the acquisition of the Borsa Italiana Group partially offsetting the higher costs of issued debt.

For the year ended 31 December 2021:

Net financing expense for 2021 was €34.4 million compared to a net financing expense of €12.8 million in 2020. This increase results from the costs of the newly issued debt in relation to the financing of the acquisition of the Borsa Italiana Group.

Result from equity investments and gain on disposal of subsidiaries

For the year ended 31 December 2023:

In 2023, results from equity investments amounted to €83.1 million, mainly reflecting the following items:

- €41.6 million gain for the disposal of Euronext's 11.1% stake in LCH SA.
- €23.5 million of dividends received from the Group's investments in Euroclear S.A. and Sicovam Holding S.A and the contribution of Euronext's stake in LCH SA until its sale.
- €11.4 million gain for the sale of Euronext's 18.93% investment in Tokeny S.a.r.l.

For the year ended 31 December 2022:

In 2022, results from equity investments amounted to €18.7 million, mainly reflecting the following items:

- €9.8 million of dividends received from Euroclear;
- the contribution from LCH SA, in which Euronext owns a 11.1% stake.

In addition, the Group disposed its interests in subsidiaries Finance Web Working SAS and MTS Markets International Inc. in 2022. This resulted in a combined result from disposal of €2.3 million.

For the year ended 31 December 2021:

In 2021, results from equity investments amounted to €33.2 million, reflecting the following items:

- €25.7 million of dividends received from Euroclear and Sicovam Holding S.A.;
- the contribution from LCH SA, in which Euronext owns a 11.1% stake.

In addition, the Group disposed its interest in subsidiaries Centevo AB and Oslo Market Solutions AS in 2021. This resulted in a combined result from disposal of €2.7 million.

Profit before Income Tax

For the year ended 31 December 2023:

Euronext profit before income tax for the year ended 31 December 2023 was €699.1 million, up +13.8% compared to €614.2 million for the year ended 31 December 2022. This increase mainly reflects the higher results from equity investments and lower net financing expense described above.

For the year ended 31 December 2022:

Euronext profit before income tax for the year ended 31 December 2022 was €614.2 million, compared to €580.7 million for the year ended 31 December 2021, an increase of €33.5 million or +5.8%. This increase was mainly caused by the €46.0 million increase in operating profit already described above, partially offset by lower results from equity investment.

For the year ended 31 December 2021:

Euronext profit before income tax for the year ended 31 December 2021 was €580.7 million, compared to €442.7 million for the year ended 31 December 2020, an increase of €138.0 million or +31.2%. This increase was mainly caused by the €134.3 million increase in operating profit already described above, as well as higher results from equity investment, partly offset by higher net financing income / (expense).

Income Tax Expense

For the year ended 31 December 2023:

Euronext's income tax expense for the year ended 31 December 2023 was €162.7 million, down -0.6% compared to €163.6 million in 2022. Euronext's effective tax rate was 23.3% for the year ended 31 December 2023, compared to 26.6% for the year ended 31 December 2022. This decrease of the effective tax rate mostly reflects the tax-exempt proceeds from the sales of Euronext's stakes in LCH SA and Tokeny.

For the year ended 31 December 2022:

Euronext's income tax expense for the year ended 31 December 2022 was €163.6 million, compared to €158.6 million for the year ended 31 December 2021, an increase of €5.0 million or +3.1%. Euronext's effective tax rate was 26.6% for the year ended 31 December 2022, compared to 27.3% for the year ended 31 December 2021. The decrease of the effective tax rate in 2022 is primarily due to less non deductible acquisition expenses and less unrecognized tax losses recognized in 2022 compared to 2021.

For the year ended 31 December 2021:

Euronext's income tax expense for the year ended 31 December 2021 was €158.6 million, compared to €122.2 million for the year ended 31 December 2020, an increase of €36.4 million or +29.9%. Euronext's effective tax rate was 27.3% for the year ended 31 December 2021 compared to 27.6% for the year ended 31 December 2020. The decrease of the effective tax rate in 2021 is primarily due to non-deductible acquisition costs.

Profit for the Year

For the year ended 31 December 2023:

Euronext reported profit for the year ended 31 December 2023 of €536.4 million, compared to €450.6 million for the year ended 31 December 2022, an increase of €85.7 million or 19.0%. Of this profit, €513.6 million was attributable to the shareholders of the parent.

For the year ended 31 December 2022:

Euronext reported profit for the year ended 31 December 2022 of €450.6 million, compared to €422.1 million for the year ended 31 December 2021, an increase of €28.6 million or +6.8%. Of this profit, €437.8 million was attributable to the shareholders of the parent.

For the year ended 31 December 2021:

Euronext reported profit for the year ended 31 December 2021 was €422.1 million, compared to €320.5 million for the year ended 31 December 2020, an increase of €101.5 million or +32%. Of this profit, €413.3 million was attributable to the shareholders of the parent.

7.1.9 Balance sheet

For the figures used in the balance sheet review below, reference is made to the table containing the Consolidated Balance Sheet in Chapter 5 'Selected historical consolidated financial information and other financial information'.

For the year ended 31 December 2023 compared to the year ended 31 December 2022:

Total assets increased by €17,100.0 million, to €192,237.3 million for year ended 31 December 2023, compared to €175,137.3 million for the year ended 31 December 2022. This increase was mainly attributable to:

- €97.7 million of decrease in the line Goodwill and other intangible assets, which was primarily impacted by the amortization of intangible assets that were recognised as part of past acquisitions (PPA).
- €70.7 million of decrease in the line Investments in associates and joint ventures, which was mainly related to the sale and subsequent de-recognition of the investments in LCH SA and Tokeny in 2023.
- €16,872.7 million of increase in the line CCP clearing business assets, which reflect the financial instrument positions linked to the Central Counterparty (CCP) activity of Cassa di Compensazione e Garanzia S.p.A. (CC&G). The increase mainly relates to assets under repurchase transactions.
- €59.7 million of decrease in the line other current financial assets, which impact is mainly driven by redemptions of short-term deposits and investments in debt instruments and in various Euronext entities.
- €447.7 million of increase in the line cash and cash equivalents, which movement is further explained in section 7.1.10.

Total equity increased by €45.0 million, to €4,085.3 million for year ended 31 December 2023, compared to €4,040.3 million for the year ended 31 December 2022. This increase was mainly attributable to:

- €277.7 million of increase in the line Retained earnings, which was primarily caused by €513.6 million of profit for the year attributable to the shareholders of the Company, partly offset by the dividends paid to the shareholders of the company for €237.2 million.
- €36.7 million of decrease in other reserves, which was caused by a decrease in foreign currency translation reserve, that was partially offset by an increase in revaluation of financial assets held at fair value through OCI.
- €209.3 million of decrease in reserve own shares, following the share repurchase programmes that were executed in 2023.
- €13.3 million of increase in non-controlling interests (NCI), which is driven by the profit for the year attributable to NCI, partly offset by dividends paid to NCI.

Total liabilities increased by €17,055.0 million, to €188,152.0 million for year ended 31 December 2023, compared to €171,097.0 million for the year ended 31 December 2022. This increase was mainly attributable to:

- €16,973.6 million of increase in the line CCP clearing business liabilities, which reflect the financial instrument positions linked to the Central Counterparty (CCP) activity of Cassa di Compensazione e Garanzia S.p.A. (CC&G). The increase mainly relates to liabilities under repurchase transactions.
- €60.7 million of increase in the line current income tax liabilities tax, which was driven by the increased profit before tax for the year 2023.
- €19.6 million of increase in the line Trade and other payables, which was mainly related to an increase in accrued expenses driven by the termination and migration fees related to the termination of the Derivatives Clearing Agreement with LCH SA in 2023.

For the year ended 31 December 2022 compared to the year ended 31 December 2021:

Total assets increased by €29,231.0 million, to €175,137.3 million for year ended 31 December 2022, compared to €145,906.3 million for the year ended 31 December 2021. This increase was mainly attributable to:

- €23.9 million of decrease in the line Right-of-Use assets, which was impacted by the amortization of right-of-use assets in relation to the Group's office buildings and equipment leases in 2022.
- €70.9 million of decrease in the line Trade and other receivables, which was mainly related to the impact from Nord Pool power sales, as a result of lower energy prices at the end of 2022.
- €29,097.1 million of increase in the line CCP clearing business assets, which reflect the financial instrument positions linked to the Central Counterparty (CCP) activity of Cassa di Compensazione e Garanzia S.p.A. (CC&G). The increase mainly relates to assets under repurchase transactions.
- €45.0 million of increase in the line current income tax receivable, which impact is mainly driven by prepayments of declared income tax provisions at Borsa Italiana Group that did not reflect the mitigating impact of the revaluation loss resulting from the partial disposal of the debt investment portfolio held at CC&G.
- €196.7 million of increase in the line cash and cash equivalents, which movement is further explained in section 7.1.10.

Total equity increased by €269.6 million, to €4,040.3 million for year ended 31 December 2022, compared to €3,770.7 million for the year ended 31 December 2021. This increase was mainly attributable to:

- €242.9 million of increase in the line Retained earnings, which was primarily caused by €437.8 million of profit for the year attributable to the shareholders of the Company, partly offset by the dividends paid to the shareholders of the company for €206.0 million.
- €13.6 million of increase in other reserves, which was caused by an increase in revaluation of financial

assets held at fair value through OCI, that was partially offset by a decrease in foreign currency translation reserve.

- €10.0 million of increase in reserve own shares, following the vesting of employee share plans in 2022.

Total liabilities increased by €28,961.4 million, to €171,097.0 million for year ended 31 December 2022, compared to €142,135.5 million for the year ended 31 December 2021. This increase was mainly attributable to:

- €17.9 million of decrease in the line Non-current Borrowings, which relates to fair value adjustments linked to the bond interest rate hedge. As per 3 May 2022, the hedge was discontinued.
- €39.9 million of decrease in the line Deferred tax liability, which was caused by deferred tax impact on amortisation of certain intangible assets valued on historical acquisitions (PPA).
- €29,126.3 million of increase in the line CCP clearing business liabilities, which reflect the financial instrument positions linked to the Central Counterparty (CCP) activity of Cassa di Compensazione e Garanzia S.p.A. (CC&G). The increase mainly relates to liabilities under repurchase transactions.
- €43.5 million of decrease in the line Trade and other payables, which was mainly related to Nord Pool power purchases, as a result of lower energy prices at the end of 2022.

7.1.10 Cash flow

The table below summarises Euronext consolidated cash flow for the years ended 31 December 2023, 2022 and 2021:

	Year ended		
In thousands of euros	**31 December 2023**	**31 December 2022**	**31 December 2021**
Net cash generated by operating activities	826,073	616,486	543,706
Net cash provided by/(used in) investing activities (b)	155,392	(122,585)	(4,210,509)
Net cash (used in)/provided by generated by financing activities (b)	(519,700)	(282,368)	3,834,087
NET INCREASE IN CASH AND CASH EQUIVALENTS	**461,765**	**211,533**	**167,284**
Cash and cash equivalents – Beginning of period	1,001,082	809,409	629,469
Non-cash exchange gains/(losses) on cash and cash equivalents	(14,059)	(19,860)	12,656
CASH AND CASH EQUIVALENTS – END OF PERIOD	**1,448,788**	**1,001,082**	**809,409**

(a) includes €5.0 million of cash and cash equivalents classified as held for sale for the year ended 31 December 2021.
(b) As from 2023, the Group presents 'interest received' as part of cash flows from investing activities, whereas in previous periods this item was presented as part of cash flows from financing activities. The Group re-presented the comparative periods accordingly by reclassifying €5.9 million in 2022 and €5.0 million in 2021 from 'Net cash (used in)/provided by financing activities' to 'Net cash provided by/(used in) investing activities'.

Net Cash Generated by Operating Activities

Net cash generated by operating activities increased by € +209.6 million, to €+826.1 million for the year ended 31 December 2023, compared to €+616.5 million for the year ended 31 December 2022. This was mainly attributable to:

- The effect of an increase in profit before tax of € +84.9 million, an increase of €+90.6 million from less income taxes paid and an increase of €+88.1 million from changes in working capital, mostly driven by the outstanding positions in power sales and power purchases of Nord Pool at end of 2023 and CCP activities at Euronext Clearing.
- These impacts were partly offset by an adjusting effect of €-53.0 million related to gains on sale of associates LCH SA and Tokeny.

Net cash generated by operating activities increased by € +72.8 million, to €+616.5 million for the year ended 31 December 2022, compared to €+543.7 million for the year ended 31 December 2021. This was mainly attributable to:

- The effect of an increase in profit before tax of € +33.5 million, an increase adjusting effects for depreciation and amortisation of €+25.6 million related to the acquired intangible assets of Borsa Italiana Group, an increase of €+16.4 million from changes in working capital, primarily attributable to the outstanding positions in power sales and power purchases of Nord Pool at end of 2022 and an increase of €+3.6 million from share based payments related to inclusion of Borsa Italiana Group in the perimeter.
- These impacts were partly offset by €-1.4 million of impact related to share of profit from associates and joint ventures and €-5.0 million of impact from increased income taxes paid.

Net Cash provided by/(used in) Investing Activities

Net cash provided by investing activities increased by € +278.0 million, to €+155.4 million for the year ended 31 December 2023, compared to €-122.6 million for the year ended 31 December 2022. This was mainly attributable to:

- €+63.5 million of increasing impact, as the comparative period included the acquisitions of the technology businesses from Nexi's capital markets activities and the acquisition of Spafid's business.
- €+122.4 million of increasing impact related to the proceeds from the sale of the investments in LCH SA and Tokeny.

- €+70.9 million of net impact from purchases and redemptions of short-term deposits and debt investments.
- €+19.4 million of increasing impact from interest received, given the increased interest rates in 2023.

Net cash used in investing activities decreased by €-4.087.9 million, to €-122.6 million for the year ended 31 December 2022, compared to €-4,210.5 million for the year ended 31 December 2021. This was mainly attributable to:

- €-4,130 million of decreasing impact from acquisitions of subsidiaries, related to the acquisition of the Borsa Italiana Group in 2021, offsetting the acquisitions of the technology businesses from Nexi's capital markets activities and the acquisition of the General Meetings, Designated Representative, and Shareholder's Registers activities of Spafid
- €+31.9 million of increasing impact from increased capital expenditures.
- €+15.9 million of increasing impact related to a decrease in dividends received from equity investment.

Net Cash (used in)/provided by Financing Activities

Net cash used in financing activities decreased by €-237.3 million, to €-519.7 million for the year ended 31 December 2023, compared to €-282.4 million for the year ended 31 December 2022. This was mainly attributable to:

- €-219.1 million of decreasing impact from transactions in own shares, almost fully attributable to the share buy back programmes executed in 2023.
- €-31.2 million of decreasing impact of increased dividends paid to the shareholders of the Company, following higher net profit in 2022 versus 2021.

Net cash provided by financing activities decreased by €4,116.5 million, to €-282.4 million for the year ended 31 December 2022, compared to €+3,834.1 million for the year ended 31 December 2021. This was mainly attributable to:

- €-5,471.7 million of decreasing impact from draw down of bridge loan facility for €3,690.0m and bond issuance for €1,781.7 during the comparative period.
- €+3,762.9 million increasing impact from repayment of bridge loan for €-3,690.0m and repayment of loan in Borsa Italiana Group with LSEG for €-72.9m during the comparative period.
- €-13.5 million decreasing impact from increased interest payments, following the increased loan portfolio after the Bond Issue in May 2021.
- €-2,375.2 million decreasing impact from issuance of new shares during the comparative period.
- €-31.8 million of decreasing impact from transactions in own shares, due to the share buy back performed in the comparative period.
- €-48.8 million of decreasing impact of increased dividends paid to the shareholders of the Company, following higher net profit in 2021 versus 2020.

7.1.11 Facilities Agreements and Bonds

Loan facilities

On 12 April 2017, the Group entered into a new revolving loan facility agreement ("the Facility") amounting to €250 million, with BNP Paribas and ABN AMRO BANK N.V. as Lead Arrangers. This new Facility has replaced the revolving credit facility of €390 million.

On 18 July 2017, the Group entered into a syndicated bank loan facility ("the Bank Loan") with BNP Paribas and ABN AMRO BANK N.V. as Lead Arrangers, providing for €175 million. The Bank Loan has been drawn in the amount of €165 million on 9 August 2017 in order to (i) fund the acquisition of 89.8% of the shares and voting rights in FastMatch Inc and (ii) refinance the acquisition of 60% of the shares and voting rights in iBabs B.V. previously financed through the Facility. The Bank Loan and Facility are together referred to as Instruments. As per 31 December 2017 a non-current borrowing of €165.0 million was recognised related to the Bank Loan.

On 8 April 2019, the Group signed a supplemental agreement with nine banks to amend the €250 million Facility originally dated 12 April 2017. This new agreement enabled the Group to increase the Facility to €400.0 million and set a new maturity of 5 years plus a two-year extension possibility.

The revolving credit facility agreement allowed the Group to apply all amounts borrowed by it towards (i) general corporate and/or working capital purposes of the Group, (ii) satisfaction of the consideration payable for an acquisition and/or (iii) the payment of fees, costs and expense incurred in relation to an acquisition. The revolving credit facility bore an interest rate of EURIBOR plus a margin initially set at 0.25%, which increased to 0.30% on 31 May 2019, based on the "A-" rating. It should be noted that as at 31 December 2020, no advances had been drawn under the revolving credit facility. During the year, the Group had temporarily drawn €45.0 million which it used for repayment of the bond loan, which was included in the acquisition of Oslo Børs VPS. The Group repaid this €45.0 million at the end of 2019.

Euronext was required to maintain compliance with a maximum leverage ratio if the credit rating would drop below BBB+. The maximum leverage ratio measures Euronext total gross debt to EBITDA[13] (as such terms are defined in the Facilities Agreement). Euronext was required to maintain a leverage ratio of no more than 3.5x.

On 26 April 2021, the Group requested the irrevocable cancellation of the total commitments under the €400.0 million Facility which gave rise to the termination of the revolving credit facility agreement.

On 6 November 2020, the Group entered into a new revolving credit facility agreement with a group of 12 banks for the amount of €600.0 million conditional to the closing of the acquisition of the Borsa Italiana Group, that allows the Group to apply all amounts borrowed by it towards (i) general corporate and/or working capital purposes of the Group, (ii) satisfaction of the consideration payable for an acquisition and/or (iii) the payment of fees, costs and expense incurred in relation to an acquisition. This new revolving credit facility has a maturity of 5 years plus a two-year extension possibility and bears an interest rate of EURIBOR plus a margin dependent on rating. Following the closing of the Borsa Italiana acquisition this revolving credit facility replaced the

[13] *EBITDA as defined in the Facilities Agreement*

former facility signed on 8 April 2019. In October 2021 the first one year extension was requested and received from all banks party to the revolving credit facility agreement. In October 2022 the Group requested the second one year extension, which was accepted by all banks party to the revolving credit facility agreement. The revolving facility has not been and is not drawn as per 31 December 2023.

In case of a downgrading event of Euronext, below BBB- or equivalent by rating agencies, Euronext shall ensure that the leverage ratio as defined in the revolving credit facility agreement would not be greater than 4x.

Term, Repayment and Cancellation

The Facility had an initial maturity of 5 years plus a two-year extension possibility. Euronext has the possibility to voluntarily cancel the Facility in whole or part or prepay amounts drawn.

Interest Rates and Fees

The Facility has borne an interest rate of EURIBOR plus a margin initially set at 0.55%, based on the initial rating of BBB by S&P. It should be noted that as at 31 December 2021, there was no outstanding advance drawn under the Facility. EURIBOR is floored at 0%.

An extension fee of (i) 0.05% of the full amount is payable if Euronext requests that the initial maturity date be extended to the first relevant anniversary date or, (ii) 0.10% of the full amount of the relevant Instrument is payable if Euronext requests that the initial maturity date be extended to the second relevant anniversary date.

A utilisation fee accrues on a daily basis at the following applicable rate per annum to be applied on the amount drawn:

- if less than 33.33% of the total commitment under the Facility has been drawn at the relevant date, 0.10%;
- if 33.33% or more (but less than 66.67%) of the total commitment under the Facility has been drawn at the relevant date, 0.20%; or
- if 66.67% or more of the total commitment under the Facility has been drawn at the relevant date, 0.40%.

Euronext must also pay customary commitment fees at a rate per annum equal to 35% of the then applicable margin for the relevant Instrument on each lender's available commitment under the relevant Instrument during its availability period.

Certain Covenants and Undertakings

The Facility contains a number of additional undertakings and covenants that, among other things, restrict, subject to certain exceptions, Euronext ability to:

- grant security interests over their assets;
- sell, transfer or dispose of certain assets;
- make certain loans or grant certain credit;
- enter into any amalgamation, demerger, merger or corporate reconstruction, unless the Company remains the surviving entity;
- make any substantial change to the general nature of Euronext business.

Euronext is permitted, among other things, to dispose of assets in the ordinary course of trading on arm's length terms for full market value without restriction, and otherwise where the aggregate fair value of the assets disposed of does not exceed 5% of Euronext consolidated total assets in any financial year.

In case of a downgrading event of Euronext, below BBB- or equivalent by rating agencies, Euronext shall ensure that the leverage ratio (Net debt/EBITDA) as defined in the Revolving Facility Agreement would not be greater than 4x.

Whereby EBITDA means the consolidated operating profit of the Group, before taking into account:

1. Interest Expense
2. Tax
3. any share of the profit f any associated company or undertaking, except for dividends received in cash by any member of the Group; and
4. extraordinary and exceptional items; and

after adding back all amounts provided for depreciation and amortisation to the extent deducted for the purposes of determining consolidated profit of the Group before taxation, as determined from the financial statements of the Group.

Whereby Total Net Debt means the total gross debt less Cash and Cash Equivalent with respect to the Group on a consolidated basis.

Events of Default

The Facility contains customary events of default, in each case with customary and appropriate grace periods and thresholds, including, but not limited to:

- non-payment of principal or interest;
- violation of financial covenants or other obligations;
- representations or statements being materially incorrect or misleading;
- cross-default and cross-acceleration relating to indebtedness of at least €50.0 million;
- certain liquidation, insolvency, winding-up or bankruptcy events;
- creditors' process and attachment having an aggregate value of more than €25.0 million;
- invalidity and unlawfulness;
- cessation of business;
- loss of any licence required to carry on the Company's or any material subsidiary's business; and
- repudiation by the Company of a finance document.

Bridge Loan Facility

On 7 October 2020, Euronext entered into a €4.4 billion bridge loan facility agreement with a group of banks to pre-finance the acquisition of London Stock Exchange Group Holdings Italia S.p.A. (Borsa Italiana Group). The initial maturity date of this facility is 11 September 2021, which may be extended at the option of the issuer for two additional periods of six months each. The bridge loan facility bears an interest rate of EURIBOR plus an initial margin of 0.45%, that increases as the closing date of the acquisition moves further in time.

On 23 April 2021, Euronext sent a utilisation request, to draw €3,690 million on the Bridge Loan Facility, as per 28 April 2021 to partially fund the purchase price of the Borsa Italiana Group due on 29 April 2021. As per 23 April 2021, Euronext sent a voluntary cancellation request based on the Bridge Facility Agreement to cancel the remaining €710 Million.

In case of a downgrading event of Euronext, below BBB- or equivalent by rating agencies, Euronext shall ensure that the leverage ratio as defined in the Bridge Loan Facility Agreement would not be greater than 4x.

On 10 May 2021, Euronext sent a request for partial irrevocable voluntary repayment, for the amount of €1.820 million as per 14 May 2021. On 11 May 2021, Euronext sent a request for partial irrevocable voluntary repayment, for the amount of €1.790 million as per 17 May 2021. These partial repayments of the Bridge Loan Facility were funded from the proceeds of the rights issue and bond issues. As per 29 November 2021 the Bridge Loan Facility was fully repaid.

Bonds

On 18 April 2018, the Group issued a €500 million Bond ("Senior Unsecured Note #1") to refinance its 2017 and 2018 acquisitions and diversify its financing mix. The Bond has a seven year maturity, with an annual coupon of 1%. On 18 April 2018 the Bond, rated "A" by Standard & Poor's rating agency, was listed on Euronext Dublin. The Bond issue included €2.9 million of Bond discount and €0.5 million of issue costs, which are subsequently accounted for under the Effective Interest Rate method. Following receipt of the proceeds of the issued Bond, the Group repaid the €165.0 million Bank Loan.

On 4 June 2019, the Group issued a €500 million Bond ('Senior Unsecured Note #2') to (i) pre-finance the outstanding shares of Oslo Børs VPS Holding ASA not already owned by the Group and (ii) for general corporate purposes in line with the Group's strategy. The Bond has a ten year maturity, with an annual coupon of 1.125%. On 12 June 2019 the Bond, rated "A-" by S&P Global Ratings Limited, was listed on Euronext Dublin. The Bond issue included €6.1 million of Bond discount and issue costs, which are subsequently accounted for under the Effective Interest Rate method.

On 22 June 2020, the Group successfully priced a tap offering of €250 million on its outstanding Senior Unsecured Note #2, rated A- by Standard & Poor's rating agency, which is listed on Euronext Dublin. Settlement of this tap offering was made on 29 June 2020. This tap offering will mature in June 2029. This increases the total principal amount bearing interest at an annual rate of 1.125% to €750 million. The proceeds of the issue were used to (i) finance the acquisition of the outstanding shares of VP Securities AS and (ii) for general corporate purposes in line with the Group's strategy. The Bond issue included €5.7 million of Bond premium and issue costs, which are subsequently accounted for under the Effective Interest Rate method.

On 17 May 2021, the Group issued €1.800 million 3 equal tranches bond ("Senior Unsecured Note #3, #4 and #5") to partially refinance the Bridge Loan Facility entered into to initially finance the Borsa Italiana Group acquisition. The Bond #3 has a 5 year maturity and a fixed annual rate coupon of 0.125%. The Bond #4 has a 10 year maturity and a fixed annual rate coupon of 0.75%.The Bond #3 has a 20 year maturity and a fixed annual rate coupon of 1.50%. The Bonds are rated BBB by Standard & Poor's rating agency, and are listed on Euronext Dublin. The bond issue included €18.6 million of bond premium and issue costs, which are subsequently accounted for under the Effective Interest Rate method.

CCP credit lines

As at 31 December 2023, the Group's CCP had €440 million (2022 and 2021: €420 million) credit lines granted by commercial banks serving as liquid recourse to mitigate liquidity risks according to EMIR regulation. None of the credit lines had been used as of 31 December 2023.

7.1.12 Contractual Obligations

The table below summarises Euronext debt, future minimum payment lease obligations under non-cancellable leases and capital expenditure commitments as at 31 December 2023:

		Payments due by year			
In thousands of euros	**Total**	**2024**	**2025-2028**	**Thereafter**	**Notes of the consolidated financial statements**
Debt (principal and accrued interest obligations)	3,067,286	17,286	1,100,000	1,950,000	Note 37.1 - Liquidity risk
Debt (future interest obligations)	243,590	10,402	94,250	138,938	Note 37.1 - Liquidity risk
Lease liabilities – minimum payments	66,600	22,865	30,666	13,069	Note 37.1 - Liquidity risk
Capital expenditure commitments	6,264	3,814	2,450	–	Note 39.1 – Capital Commitments
TOTAL	**3,310,949**	**27,715**	**1,194,283**	**2,088,951**	

Capital Expenditures

Euronext's capital expenditures were €103.0 million, €99.5 million and €67.6 million for the years ended 31 December 2023, 2022 and 2021, respectively.

Capital expenditures increased in 2023 when compared to 2022 and 2021, which is driven by the capitalisation of software development costs primarily linked to: (i) the migration of Borsa Italiana Group to Euronext's trading platform Optiq®, (ii) the expansion of clearing activities to all Euronext markets by Euronext Clearing, (iii) the pan-Europeanisation of Euronext CSDs, and (iv) several digital ambition projects within the Group.

An additional driver for the increase in Capital expenditures in 2022 when compared to 2021 was the inclusion of the full year impact of capitalised expenses at Borsa Italiana Group.

Euronext's capital expenditure requirements depend on many factors, including the rate of its trading volume growth, strategic plans and acquisitions, required technology initiatives, regulatory requirements, the timing and introduction of new products and enhancements to existing products, the geographic mix of Euronext's business, and the continuing market acceptance of its electronic platform.

For the years ending 31 December 2023, 2022 and 2021, Euronext has made operational capital expenditures as well as incurred capitalised software development costs. These expenditures were aimed at enhancing Euronext technology and supporting the continued expansion of Euronext's businesses. In 2022, Euronext spent €27.7 million on hardware and investments in properties (2022: €31.9 million and 2021: €33.4 million) and €75.3 million on development efforts and acquisition of third party licenses (2022: €67.7 million and 2021: €34.2 million).

7.1.13 Off-Balance Sheet Arrangements

Euronext is not a party to any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on Euronext's financial condition, results of operations, liquidity, capital expenditure or capital resources, other than the €600 million revolving credit facility under the Facilities Agreement and the commitments described in Note 39 of the Consolidated Financial Statements.

7.1.14 Quantitative and Qualitative Disclosures about Market Risk

As a result of its operating and financing activities, the Group is exposed to market risks such as interest rate risk, currency risk and credit risk. The Group has implemented policies and procedures designed to measure, manage, monitor and report risk exposures, which are regularly reviewed by the appropriate management and supervisory bodies. The Group's central treasury team is charged with identifying risk exposures and monitoring and managing such risks on a daily basis. To the extent necessary and permitted by local regulation, the Group's subsidiaries centralise their cash investments, report their risks and hedge their exposures in coordination with the Group's central treasury team. The Group performs sensitivity analyses to determine the effects that may result from market risk exposures. The Group uses derivative instruments solely to hedge financial risks related to its financial position or risks that are otherwise incurred in the normal course of its commercial activities. The Group does not use derivative instruments for speculative purposes.

Interest Rate Risk

Substantially all interest-bearing financial assets and liabilities of the Group are either based on floating rates or based on fixed rates with an interest term of less than one year, except for the fixed rated Bonds #1 to #5 with an aggregated notional amount of €3,050 million, which have maturities between 5 and 20 years. The Group entered into interest rate swap contracts in order to hedge the interest rate risk inherent to the fixed rate Bond #1. As a result, the Group was exposed to fair value risk affecting fixed-rate financial assets and liabilities through its remaining fixed rate Bonds #2 to #5. As at 31 December 2021, the Group had an aggregated notional of €500 million fixed-to-floating interest rate swaps outstanding in relation to the fair value hedge of the €500 million Bond #1.

On 3 May 2022, the Group terminated its fixed-to-floating interest rate swap agreements in relation to the fair value hedge of the €500 million Bond #1. On termination, the Group cash-settled the swap agreements and the hedge relationship was discontinued. Consequently, the Group had no remaining interest rate swaps outstanding as per 31 December 2022. As from the moment of discontinuation of the fair value hedge, the accumulated fair value adjustments of Bond #1 are amortised to profit or loss based on a recalculated Effective Interest Rate over the remaining term of Bond #1.

The Group is exposed to cash-flow risk arising from net floating-rate positions.

The Group was a net borrower in Euros exposed to fixed interest rates and a net lender in Euros exposed to floating rates at 31 December 2023 and 2022. Therefore, the sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €2.2 million based on the positions at 31 December 2023 (2022: €3.1 million).

The Group was a net lender in Pound Sterling at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.2 million based on the positions at 31 December 2023 (2022: €0.2 million).

The Group was a net lender in US Dollar at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.1 million based on the positions at 31 December 2023 (2022: €0.1 million).

The Group was a net lender in Norwegian Kroner at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.5 million based on the positions at 31 December 2023 (2022: €0.5 million).

The fluctuation of the DKK against the EUR is set within the bandwidth +/-2.25% as an exchange rate mechanism established by the Denmark's National Bank. Therefore, currency risk sensitivity inherent to the Group exposure to that currency is deemed to be irrelevant.

Interest rate risk - CCP clearing business

The Group's CCP faces interest rate exposure through the impact of changes in the reference rates used to calculate member liabilities versus the yields achieved through their predominantly secured investment activities.

In the Group's CCP, interest bearing assets are generally invested in secured instruments or structures and for a longer term than interest bearing liabilities, whose interest rate is reset daily. This makes investment revenue vulnerable to volatility in overnight rates and shifts in spreads between overnight and term rates. On daily basis the interest rate risk associated to investments is monitored via capital requirements.

The Group's CCP has an investment policy, mitigating market risks. The Group's CCP investments generally have an average duration of less than one year and are held until maturity. Losses will not materialise unless the investment portfolio is liquidated before maturity or in an event of portfolio rebalancing before maturity. In case of a forced liquidation of the CCP's financial investment portfolio before maturity to provide necessary liquidity, the CCP may face higher interest rate exposure on its financial investment portfolio. The interest rate exposure of the investment portfolio is predominantly at fixed rates (only a negligible part is at floating rates) at the amounts and maturities as disclosed in *7.1.14 - Liquidity Risk CCP clearing business*.

As per 31 December 2023, an increase/decrease of the rate by 100 basis points would have an increasing/decreasing impact on the investment portfolio market value of €0.5 million or 0.20% (2022: €3.8 million or 0.20%).

Liquidity Risk

The Group would be exposed to a liquidity risk in the case where its short-term liabilities become, at any date, higher than its cash, cash equivalents, short-term financial investments and available bank facilities and in the case where the Group is not able to refinance this liquidity deficit, for example, through new banking lines.

Cash, cash equivalents and short-term financial investments are managed as a global treasury portfolio invested in non-speculative financial instruments, readily convertible to cash, such as bank balances, money market funds, overnight deposits, term deposits and other money market instruments, thus ensuring a very high liquidity of the financial assets. The Group's policy is to ensure that cash, cash equivalents and available bank facilities allow the Group to repay its financial liabilities at all maturities, even disregarding incoming cash flows generated by operational activities, excluding the related party loans granted by the Group's subsidiaries to its Parent.

The net position of current financial assets, financial liabilities and available credit facilities, excluding working capital items, as of 31 December 2023 and 2022 is described in the table below:

In thousands of euros	2023	2022
Cash, cash equivalents and short term investments	1,551,841	1,163,822
Available revolving credit facility (RCF)	600,000	600,000
Financial debt (long-term and short-term borrowings)	(3,048,915)	(3,044,531)
NET POSITION	**(897,074)**	**(1,280,709)**

The Group has a €600 million revolving credit facility (2022: €600 million) that can be used for general corporate or M&A purposes. As of 31 December 2023, the Group did not have any amounts drawn under the facility.

Liquidity risk - CCP clearing business

The Group's CCP must maintain a level of liquidity (consistent with regulatory requirements) to ensure the smooth operation of its respective markets and to maintain operations in the event of a single or multiple market stress event or member failure. This includes the potential requirement to liquidate the position of a clearing member under a default scenario including covering the associated losses and the settlement obligations of the defaulting member.

The Group's CCP maintains sufficient cash and cash equivalents and has access to intraday central bank refinancing (collateralized with ECB eligible bonds) along with commercial bank credit lines to meet in a timely manner its payment obligations.

Revised regulations requires the CCP to ensure that appropriate levels of back-up liquidity are in place to underpin the dynamics of a largely secured cash investment requirement, ensuring that the maximum potential outflow under extreme market conditions is covered (see credit risk section). The Group's CCP monitors its liquidity needs daily under normal and stressed market conditions. Where possible, the Group employs guaranteed delivery versus payment settlement techniques and manages CCP margin and default fund flows through central bank or long-established, bespoke commercial bank settlement mechanisms. Monies due from clearing members remain the clearing members' liability if the payment agent is unable to effect the appropriate transfer. In addition, the Group's CCP maintains operational facilities with commercial banks to manage intraday and overnight liquidity (see section *7.1.11 - Facilities Agreements and Bonds*).

In line with the investment policy and the regulatory requirements, the Group's CCP has deposited the default funds and margin mainly at the Central Bank of Italy as per 31 December 2023.

As per 31 December 2022 the default funds and margin were partially invested in Government bonds with an average maturity of less than 12 months. Even though these financial assets are generally held to maturity, a forced liquidation of the investment portfolio could lead to losses and lack of required liquidity.

In thousands of euros	Maturity < 1 year	Maturity between 1 and 2 years	Maturity between 2 and 3 years	Total
2023				
Investment portfolio	116,286	–	–	116,286
2022				
Investment portfolio	1,753,811	–	–	1,753,811

The table below summarises the maturity profile of the Group's financial liabilities as of 31 December 2023 and 2022, based on contractual undiscounted payments, including principal - and interest amounts, expected throughout the life of the obligations:

In thousands of euros	Maturity < 1 year	Maturity between 1 and 5 years	Maturity > 5 years	Total
2023				
Trade and other payables	415,843	—	—	415,843
Borrowings	27,688	1,194,250	2,088,938	3,310,876
Lease liabilities	22,865	30,666	13,069	66,600
CCP clearing member liabilities	183,832,245	—	—	183,832,245
2022				
Trade and other payables	396,287	—	—	396,287
Borrowings	27,688	1,191,562	2,119,313	3,338,563
Lease liabilities	28,786	20,208	2,163	51,157
CCP clearing member liabilities	166,858,684	—	—	166,858,684

Currency Risk

The Group's net assets are exposed to the foreign currency risk arising from the translation of assets and liabilities of subsidiaries with functional currencies other than the Euro.

The following table summarises the assets and liabilities recorded in GBP functional currency and the related impact of a 10% in/decrease in the currency exchange rate on balance sheet and profit or loss as of 31 December 2023 and 2022:

In thousands		2023		2022
Assets	£	89,586	£	71,760
Liabilities	£	(11,759)	£	(12,465)
Net currency position	**£**	**77,827**	**£**	**59,295**
Net currency position after hedge	**£**	**77,827**	**£**	**59,295**
Absolute impact on equity of 10% in /decrease in the currency exchange rate	€	8,977	€	6,697
Absolute impact on profit or loss of 10% in /decrease in the currency exchange rate		Not Material		Not Material

The following table summarises the assets and liabilities recorded in USD functional currency and the related impact of a 10% in/decrease in the currency exchange rate on balance sheet and profit or loss as of 31 December 2023 and 2022:

In thousands		2023		2022
Assets	$	198,636	$	203,405
Liabilities	$	(8,502)	$	(11,231)
Net currency position	**$**	**190,134**	**$**	**192,174**
Absolute impact on equity of 10% in /decrease in the currency exchange rate	€	17,224	€	17,952
Absolute impact on profit or loss of 10% in /decrease in the currency exchange rate	€	520	€	921

The following table summarises the assets and liabilities recorded in NOK functional currency and the related impact of a 10% in/decrease in the currency exchange rate on balance sheet and profit or loss as of 31 December 2023 and 2022:

In thousands		2023		2022
Assets	kr	11,094,389	kr	10,753,715
Liabilities	kr	(2,527,631)	kr	(2,493,787)
Net currency position	**kr**	**8,566,758**	**kr**	**8,259,928**
Absolute impact on equity of 10% in /decrease in the currency exchange rate	€	76,326	€	78,670
Absolute impact on profit or loss of 10% in /decrease in the currency exchange rate	€	1,469	€	1,780

Most operating revenue and expenses in the various subsidiaries of the Group are denominated in the functional currency of each relevant subsidiary. The Group's consolidated income statement is exposed to foreign currency risk arising from receivables and payables denominated in currencies different from the functional currency of the related entity.

Credit Risk

The Group is exposed to credit risk in the event of a counterparty's default. The Group is exposed to credit risk from its operating activities (primarily trade receivables), from its financing activities and from the investment of its cash and cash equivalents and short-term financial investments. The Group limits its exposure to credit risk by rigorously selecting the counterparties with which it executes agreements. Most customers of the Group are leading financial institutions that are highly rated. Investments of cash and cash equivalents in bank current accounts and money market instruments, such as short-term fixed and floating rate interest deposits, are governed by rules aimed at reducing credit risk: maturity of deposits strictly depends on credit ratings, counterparties' credit ratings are permanently monitored and individual counterparty limits are reviewed on a regular basis. In addition to the intrinsic creditworthiness of counterparties, the Group's policies also prescribe the diversification of counterparties (banks, financial institutions, funds) so as to avoid a concentration of risk. Derivatives are negotiated with leading high-grade banks.

The Group's trade and contract receivables, and other debt financial assets at amortised cost and FVOCI are exposed to credit risk. The maximum exposure to credit risk at the reporting date is the carrying value of each class of these financial assets. The Group evaluates the concentration of credit risk with respect to trade and contract receivables as low, as most of its customers are leading financial institutions that are highly rated. The other debt financial assets comprises i) debt investments at amortised cost, which include short-term deposits with a maturity over three months and ii) debt investments at FVOCI, which include investments in listed bonds and government bonds. All of the entity's other debt financial assets at amortised cost and FVOCI are considered to have low credit risk, as the issuers of the instruments have a low risk of default evidenced by their strong capacity to meet their contractual cash flow obligations in the near term.

Credit risk - CCP clearing business

In its role as CCP clearer to financial market participants, the Group's CCP guarantees final settlement of transactions acting as buyer towards each seller and as seller towards each buyer. It manages substantial credit risks as part of its operations including unmatched risk positions that might arise from the default of a party to a cleared transaction.

Clearing membership selection is based upon supervisory capital, technical and organisational criteria. Each member must pay margins, computed and collected at least daily, to cover the exposures and theoretical costs which the CCP might incur in order to close out open positions in the event of the member's default. Margins are calculated using established and internationally acknowledged risk models and are debited from participants' accounts through central bank accounts and via commercial bank payment systems. Minimum levels of cash collateral are required. Non-cash collateral is revalued daily but the members retain title of the asset and the Group only has a claim on these assets in the event of a default by the member.

Clearing members also contribute to default funds managed by the CCP to guarantee the integrity of the markets in the event of multiple defaults in extreme market circumstances. Amounts are determined on the basis of the results of periodic stress testing examined by the risk committees of the CCP. Furthermore, the Group's CCP reinforces its capital position to meet the most stringent relevant regulatory requirements applicable to it, including holding a minimum amount of dedicated own resources to further underpin the protective credit risk framework in the event of a significant market stress event or participant failure.

An analysis of the aggregate clearing member contributions of margin and default funds across the CCP is shown below:

In thousands of euros	31 December 2023	31 December 2022
Total collateral pledged		
Margin received in cash	15,381,233	17,777,769
Margin received by title transfer	987,595	625,779
Default fund total	5,154,917	5,909,844
Total on balance sheet collateral (a)	**21,523,745**	**24,313,392**
Total member collateral pledged	**21,523,745**	**24,313,392**

(a) The counterbalance of the total on balance sheet collateral is included in the line 'other payables to clearing members' in the table at Note 35.1 of the Consolidated Financial Statements as included in section 8.

Investment counterparty risk for CCP margin and default funds is managed by investing the cash element in instruments or structures deemed 'secure', including through direct investments in highly rated, 'regulatory qualifying' sovereign bonds and supra-national debt, investments in tri-party and bilateral reverse repos (receiving high-quality government securities as collateral) in certain jurisdictions and deposits with the central bank. The small proportion of cash that is invested unsecured is placed for short durations with highly rated counterparties where strict limits are applied with respect to credit quality, concentration and tenor.

In thousands of euros	31 December 2023	31 December 2022
Investment portfolio	116,286	1,753,811
CCP other financial assets (a)	**116,286**	**1,753,811**
Clearing member cash equivalents - short term deposits	10,084	10,011
Clearing member cash - central bank deposits	15,983,047	13,601,918
Clearing member cash - other banks	2,001	1,800
Total clearing member cash (b)	**15,995,132**	**13,613,729**

(a) The CCP other financial assets are included in the line 'Debt instruments at fair value through other comprehensive income' in the table at Note 35.1 of the Consolidated Financial Statements as included in section 8.

(b) The total clearing member cash is included in the line 'Cash and cash equivalents of clearing members" in the table at Note 35.1 of the Consolidated Financial Statements as included in section 8.

Distress can result from the risk that certain governments may be unable or find it difficult to service their debts. This could have adverse effects, particularly on the Group's CCP, potentially impacting cleared products, margin collateral, investments, the clearing membership and the financial industry as a whole.

Specific risk frameworks manage country risk for both fixed income clearing and margin collateral and all clearing members' portfolios are monitored regularly against a suite of sovereign stress scenarios. Investment limits and counterparty and clearing membership monitoring are sensitive to changes in ratings and other financial market indicators, to ensure the Group's CCP is able to measure, monitor and mitigate exposures to sovereign risk and respond quickly to anticipated changes. Risk Committees maintain an ongoing watch over these risks and the associated policy frameworks to protect the Group against potentially severe volatility in the sovereign debt markets. The Group's sovereign exposures at the end of the financial reporting period were:

In thousands of euros	**31 December 2023**	**31 December 2022**
Sovereign investments		
Italy	14,899	392,962
Spain	25,889	609,319
EU Central (a)	—	144,737
Portugal	—	389,740
France	29,915	166,099
Germany	26,810	14,950
Ireland	—	—
Netherlands	—	16,112
Belgium	28,857	29,903
Total for all countries (b)	**126,370**	**1,763,822**

(a) 'EU Central' consists of supra-national debt.
(b) The total sovereign investments include the investment portfolio of CCP clearing business assets as disclosed in the line 'Debt instruments at fair value through other comprehensive income' in the table at Note 35.1 of the Consolidated Financial Statements as included in section 8.

7.1.15 Significant Accounting Policies

Euronext Consolidated Financial Statements included in this Universal Registration Document have been prepared and presented in accordance with International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB) and adopted by the European Union. See also Note 3 of the Consolidated Financial Statements, on 'Significant accounting policies and judgements'.

7.1.16 Critical Accounting Estimates and Judgments

In the application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. All assumptions, expectations and forecasts used as a basis for certain estimates within Euronext Financial Statements represent good faith assessments of its future performance for which Euronext management believes there is a reasonable basis. These estimates and assumptions represent Euronext's view at the times they are made, and only then. They involve risks, uncertainties and other factors that could cause Euronext actual future results, performance and achievements to differ materially from those estimated or forecasted. The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. The estimates and assumptions that may have a risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below. Euronext has discussed the development and selection of these critical accounting policies and estimates with its independent auditors.

Significant judgments made in the preparation of the Consolidated Financial Statements include the following:

Impairment of Goodwill

Goodwill represents the excess of the consideration transferred in a business combination over the Group's share in the fair value of the net identifiable assets and liabilities of the acquired business at the date of acquisition. Goodwill is not amortised but is tested at least annually for impairment, or whenever an event or change in circumstances indicate a potential impairment.

For the purpose of impairment testing, goodwill arising in a business combination is allocated to the cash-generating units (CGUs) or groups of CGUs that are expected to benefit from the synergies of the combination. Each CGU or CGU Group to which goodwill is allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes.

The carrying value of a CGU Group is compared to its recoverable amount, which is the higher of its value in use and its fair value less costs of disposal. Impairment losses on goodwill are not subsequently reversed. Value in use is derived from the discounted future free cash flows[14] of the CGU Group. Fair value less costs of disposal is based on discounted cash flows and market multiples applied to forecasted earnings. Cash flow projections are based on budget and business plan approved by management and covering a 2-year period in total. Cash flows beyond the business plan period are extrapolated using a perpetual growth rate. Key assumptions used in goodwill impairment test are described in Note 18 of the Consolidated Financial Statements.

Income Taxes

Due to the inherent complexities arising from the nature of the Group's business, from conducting business and being taxed in a substantial number of jurisdictions, significant judgments and estimates are required to be made for income taxes. The Group computes income tax expense for each of

[14] As defined in section *5.2 - Other Financial information*

the jurisdictions in which it operates. However, actual amounts of income tax due only become final upon filing and acceptance of the tax return by relevant authorities, which may not occur for several years subsequent to issuance of the Consolidated Financial Statements.

The estimation of income taxes also includes evaluating the recoverability of deferred income tax assets based on an assessment of the ability to use the underlying future tax deductions against future taxable income before they expire. This assessment is based upon existing tax laws and estimates of future taxable income. To the extent estimates differ from the final tax return, earnings may be affected in a subsequent period.

The Group operates in various countries with local tax regulations. New tax legislation being issued in certain territories as well as transactions that the Group enters into regularly result in potential tax exposures. The calculation of Euronext's tax liabilities involves uncertainties in the application of complex tax laws. Euronext's estimate for the potential outcome of any uncertain tax position is highly judgmental. However, Euronext believes that it has adequately provided for uncertain tax positions. Settlement of these uncertainties in a manner inconsistent with Euronext's expectations could have a material impact on its results of operations, financial condition and cash flows. The Group recognises a liability for uncertain tax positions when it is not probable that a taxation authority will accept an uncertain tax treatment.

Fair Value of Equity Investments

The Group holds investments in unlisted equity securities which are carried at fair value in the balance sheet. The valuation methodology and critical assumptions are described in Note 20 of the Consolidated Financial Statements.

Classification of investments in associates

The Group classified the interest in LCH SA as an investment in associate suggesting significant influence even though it owned less than 20% of the voting rights (see Note 7 of the Consolidated Financial Statements). The Group concluded it has significant influence over this investment, which is derived from the governance structure that was put in place and the Group's position as the largest customer and sole minority shareholder of LCH SA.

Contingent consideration and buy options resulting from business combinations

The Group may structure its business combinations in a way that leads to recognition of contingent consideration to selling shareholders and/or buy options for equity held by non-controlling interests. Contingent consideration and buy options are recognised at fair value on acquisition date. When the contingent consideration or buy option meets the definition of a financial liability or financial instrument, it is subsequently re-measured to fair value at each reporting date. The determination of fair value is based on the expected level of EBITDA -as defined in the Share Purchase Agreements of the acquired companies involved- over the last 12 months that precede the contractual date (in case of contingent consideration) or exercise date of the underlying call- and put options (in case of buy option). The Group monitors the expected EBITDA -as defined in the Share Purchase Agreements of the acquired companies involved- based on updated forecast information from the acquired companies involved.

Purchase price allocation

The cost of other intangible assets that are acquired in the course of business combinations, corresponds to their acquisition date fair values. Depending on the nature of the intangible asset, fair value is determined by application of:

- market approach (by reference to comparable transactions);
- income approach (Relief-from-Royalty- or Multi-period Excess Earnings Method;
- cost approach.

Assets with a finite useful life are amortised using the straight-line method over their expected useful life. Assets with an indefinite useful life are tested for impairment at least once a year.

Revenue from contracts with customers

The Group applied the following judgments that significantly affect the determination of the amount and timing of revenue from contracts with customers:

(i) Identifying performance obligations and determining the timing of revenue recognition of Listing admission fees

The Group provides services related to the initial (and subsequent) listing of securities on its markets and hereto directly related corporate action services, and ongoing services related to the continuous listing.

The Group determined that the admission services around initial (and subsequent) admission and its directly related corporate action services do not transfer a good or service to the customer, but are considered activities that the Group needs to undertake to enable the customer to be listed. The Group concluded that these activities should be combined with the ongoing listing services and should be used as inputs to produce the combined output, which is the service of being listed. As the service of being listed is satisfied over a period of time, as the customer simultaneously receives and consumes the benefits from the service, the related revenues are therefore recognised over a period of time.

The Group determined that the period of time that best reflects the satisfaction of listing admission services is the period over which the customer actually benefits from the admission. An average lifetime of companies being listed on Euronext markets would serve as best proxy for the period that a listing customer benefits from an admission. Specific local market characteristics can result and would justify differences in amortisation terms. Based on historic evidence, the Group has defined the following average lifetimes for the relevant groupings of listed securities:

- Equity admissions: 5-12 years
- Bond- and fund admissions: 3 years
- Equity subsequent admissions (follow-on's): 3 years

Revenue from the listing admission services is therefore recognised over those periods of time.

(ii) Cost to obtain or fulfil a contract related to listing admission services

The Group has considered the type of cost that is directly associated to a listing contract and that can be separately identifiable. Such cost would typically concern staff cost incurred by the Listings team involved in admission- and subsequent listing of an issuer. There is no correlation between number of listings and staff cost associated to the Listings team.

The majority of the cost to obtain and fulfil the contract is incurred in the period before the actual admission. The remaining cost associated to an admission and subsequent listing that is recorded post-admission, and its impact on the Group's income statement, would be marginal, therefore the Group has decided not to capitalise cost incurred to obtain- or fulfil listing contracts.

(iii) Principal versus agent considerations

On 14 October 2013, the Group entered into a clearing agreement with LCH SA in respect of the clearing of trades on our continental Europe derivatives markets (the "Derivatives Clearing Agreement"). Under the terms of this Derivatives Clearing Agreement Euronext agreed with LCH SA to share revenues and receives clearing fee revenues based on the number of trades on these markets cleared through LCH SA. In exchange for that, we have agreed to pay LCH SA a fixed fee plus a variable fee based on revenues.

The definition of the accounting treatment of this agreement requires significant management judgment for the valuation and weighting of the indicators leading the principal versus agent accounting analysis. Based on all facts and circumstances around this arrangement, management has concluded that Euronext is 'principal' in providing Derivatives clearing services to its trading members. Therefore Euronext recognises (i) the clearing fees received are classified as post trade revenues, and (ii) the fixed and variable fees paid to LCH SA as other operational expenses.

Provision for expected credit losses of trade and contract receivables

The Group uses a provision matrix to calculate ECLs for trade and contract receivables. To measure expected credit losses, trade and contract receivables have been grouped based on shared credit risk characteristics and the days past due. The historical loss rates are based on the payment profiles of the sales over a period of 24 months before reporting date and the corresponding historical credit losses experience within this period. The historical loss rates are adjusted to reflect current and forward-looking factors specific to the debtors and economic environment.

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade and contract receivables is disclosed in note 37.5 of the Consolidated Financial Statements included in this Registration Document.

Determining the lease term of contract with extension and termination options

In determining the lease term, management assesses the period for which the contract is enforceable. It considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). If the Group concludes that the contract is enforceable beyond the notice period of a cancellable lease (or the initial period of a renewable lease), it then need to assess whether the Group is reasonably certain not to exercise the option to terminate the lease. However in general, the Group's lease portfolio contains very limited leases that include renewal -or termination options.

Estimating the incremental borrowing rate (IBR)

The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using the observable inputs (such as market interest rates) when available and makes certain entity-specific estimates if needed.

Internally developed software cost

The Group develops various software applications for internal use. Development costs for self-developed intangible assets are capitalized if the applicable criteria of IAS 38 are fulfilled. Development costs that do not satisfy the requirements for capitalization are expensed as incurred. Capitalised own software development costs are amortized over the useful economic life of the asset and charged on a straight line basis to the income statement. The useful lives are management's best estimate of the period over which value from the asset is realized. In determining the useful lives, management considers a number of factors including: expected usage by the entity of the asset, product upgrade cycles for software and technology assets and the level of maintenance required to maintain the asset's operating capability.

7.2 Material Contracts and Related Party Transactions

7.2.1 Material contracts

The major contracts for Euronext, entered into the ordinary course of business, but essential for its activity as holding a regulated markets operators and CSDs and investment firms, are:

- the Derivatives Clearing Agreements with LCH SA for the clearing of trades executed on Euronext derivatives markets;
- The post-trade services agreements with CBOE Clear Europe for the clearing of trades executed on Euronext cash markets under the open access model;
- the clearing agreement signed with SIX X-Clear for the clearing of trades executed on Oslo Børs cash market;
- the clearing agreements signed with CBOE Clear Europe for the clearing of trades executed on Oslo Børs cash market;
- the clearing agreements signed with LCH Ltd for the clearing of trades executed on Oslo Børs cash market;
- the clearing agreements signed with NASDAQ Clearing for the clearing of trades executed on Fish Pool;
- the clearing agreements signed between MTS and LCH SA;
- the agreement related to the interoperability link between Euronext Clearing (CC&G) and LCH SA: Service agreement for Allied Clearing House of the LCH Clearnet SA System;
- the Data Centre Services agreement signed with ICE;
- the Master Services agreement signed with Aruba S.p.A., a company operating in data centre services;
- the Cloud Enterprise agreement signed with Amazon Web Services;
- the Disaster Recovery Enterprise agreement signed with Equinix;
- the SOC Enterprise agreement signed with Cap Gemini;
- the CSD mainframe Enterprise agreements signed with IBM;
- the IT Outsourced agreement signed with Nexi for the custody services provided to Euronext Securities Milan;
- the Trading Surveillance and Pre-Settlment Agreement between MTS S.p.A. and Nexi Payments S.p.A.;
- the agreement governing Mainframe outsourcing services and CO-location services for Distributed systems for Euronext Securities Oslo with Tietoevry Norway AS;
- the IT services agreement with Vermeg Solution SA for a Corporate Action solution for the CSDs;
- the Separation Framework Agreement with SSC Global Business Services (LSEG) for the provision of Millennium trading platform and related ancillary services to Borsa Italiana;
- the licence agreement with Bourse de Montreal for the licence of the Sola platform that support Borsa Italiana derivatives market.

The Clearing Agreements are referred to in section *1.3.7 - Post Trade* and section *7.1.5 - Key Factors Affecting Businesses and Results of Operations*.

7.2.2 Related party transactions

Euronext has related party relationships with its associates and joint ventures, as disclosed in Note 36 of the Consolidated Financial Statements. The other related parties disclosure relates entirely to the key management of Euronext. For the transactions with its key management personnel, refer to section 4.4 - *Remuneration Report* of this Universal Registration Document.

From the IPO on 20 June 2014, the transactions with ICE do not qualify as "related party transactions" under IAS 24. Nevertheless the agreements between Euronext and ICE were in force after the IPO. Some of them are long term agreements. Some of these services have been progressively terminated and replaced over the period 2014-2016.

Over the year 2022, services received from or rendered to ICE include the use of Data centre service, Colocation, Connectivity, UTP and other intellectual property rights as well as ancillary services. As at 31 December 2023, the following agreements remain active

- data Centre Services Agreement;
- colocation Agreement;
- connectivity Agreement;
- UTP and Trading Technology Licence Deed;
- intellectual Property Agreement;
- Euronext Equity Index Trademark Licence Agreement.

Data Centre Services Agreement

ICE provides data centre services to Euronext from the Basildon site. Specifically, ICE houses the data centre equipment in the Data Centre and provides sub-services, such as power, access, physical security, environment, fire protection, connectivity, monitoring, support, remote hands, installation, receiving and warehouse space.

The agreement will subsist for an initial term of five years, starting 1 April 2014, with automatic renewal for a further five-year period, unless notice of termination is provided by either party at least twelve months before expiry of the initial term but no earlier than 24 months before the end of the initial term. ICE will guarantee to continue providing the services for a further two-year period from the date on which notice of non-renewal is received. Accordingly, the minimum period for this service is five years. In the course of 2015, the agreement has been renegotiated, leading to, under certain conditions, a lower price structure, to come into effect on 1 January 2016.

In December 2018, the contract has been renewed for a 5 years period, until April 2024, and adjusted on some specific clauses (e.g. exit clause, Data Protection)

Colocation Agreement

ICE provides co-location services directly to Euronext members on terms that are no worse than the terms on which ICE currently provides equivalent co-location services to its members. As the service is provided to members, there is no services agreement between ICE and Euronext but rather a commitment and payment of commission to Euronext by ICE for the right to provide the services.

This agreement will remain in force for a period of five years, starting 1 April 2014, unless terminated earlier with mutual agreement. ICE will commit not to increase the pricing, nor reduce the service or performance levels of colocation for the initial two-year period to ensure that Euronext customers receive colocation services at an equal (or better) standard to that currently provided by Euronext without any adverse price impact. Euronext is free to build its own colocation facility after the end of this two-year period if it wishes to do so, and in that case ICE will have the right to terminate the agreement on six months' notice.

ICE pays to Euronext commission in respect of the fees received under the colocation contracts as follows: 35% of the colocation hosting fee; 35% of any Liquidity Centre Network (LCN) fees; and 100% of any subscription fees (for specific Euronext exchanges).

In December 2018, the contract has been renewed for a 5 years period, until April 2024, and adjusted on some specific clauses (e.g. exit clause, Data Protection)

Connectivity Agreement

Euronext's customers are connected to the SFTI® network either *via* an SFTI® managed connection, a direct connection, or a third-party connection. ICE provides application services, including logical connections to the relevant Euronext products between the subscriber and host infrastructure. ICE agrees to provide the SFTI® services to Euronext customers on terms (including pricing, service, and performance) that, in the aggregate, are no worse than the standard terms on which ICE provides equivalent connectivity services to its customers.

This agreement will remain in force for five years, starting on 1 April 2014, unless terminated earlier with mutual agreement. This agreement contains substantially the same terms as the colocation agreement, including a general commitment not to raise fees or reduce services for two years. Euronext receives a commission based on 50% of the revenue earned from the access/subscription fees to Euronext markets *via* SFTI®.

In December 2018, the contract has been renewed for a 5 years period, until April 2024, and adjusted on some specific clauses (e.g. exit clause, Data Protection)

UTP and Trading Technology Licence Deed

The intellectual property in the UTP and other trading technology, including core software and technology ("Core Items") and related support items (Support Items) that are currently being used for the continental Euronext market is licensed by ICE (through NYSE Arca, LLC) to Euronext (through one of its subsidiaries) for the operation of the Euronext trading platforms.

Under the licence agreement, Euronext has been granted a perpetual, irrevocable, worldwide, non-exclusive, royalty-free and fully paid-up licence in respect of the use, modification and maintenance of the Core Items for any purpose and in respect of the use, modification and maintenance of the Support Items for the sole purpose of enabling the use of the Core Items. The licence includes any improvements or enhancements to the Core Items and the Support Items that are made before the IPO on 20 June 2014. Euronext owns improvements or enhancements that it makes or have made to the Core Items and the Support Items after the IPO, and Euronext and ICE are not obliged to share their respective improvements or enhancements after the IPO.

Euronext may sub-licence its rights, including through multiple tiers of sub-licences. However, for a period of two years from the IPO, neither Euronext nor ICE is entitled to permit a defined list of exchange operators or owners of registered swap execution facilities or their affiliates to use UTP (though this will not affect any licences that were already in place as at 13 November 2013). The restricted list includes any of Nasdaq OMX, CME Group, Inc., BM&F Bovespa, London Stock Exchange Group Plc, Singapore Exchange Limited, Hong Kong Stock Exchange, Deutsche Börse Group, BATS Global Markets, Inc., Direct Edge, or Chi-X Global Holdings LLC; any person that acquires all or substantially all of the business of any of these entities; any person that at the time of the assignment or licence operates a registered swap execution facility; and any affiliate of any such persons. This restriction terminated in June 2016.

There are no circumstances in which the licence may be terminated by ICE.

Except where there is a breach of warranty by the indemnified parties, Euronext will indemnify NYSE Arca and its affiliates within ICE for all liability incurred under a third-party claim in connection with use of the UTP by Euronext or any of its sub-licensees after the IPO.

In the event of any infringement of the licensed rights, ICE will have the right to determine what enforcement action to take. ICE will offer Euronext the right to participate in any action it takes. If ICE does not take any enforcement action, Euronext will have the sole right to determine what enforcement action to take. If Euronext or any sub-licensee of Euronext is sued for infringement, ICE will provide all such information and assistance as Euronext may reasonably require.

Intellectual Property Agreement

Under this agreement, Euronext is granted a perpetual, irrevocable, worldwide, non-exclusive, royalty-free and fully paid-up licence to use and sub-license the name "Euronext UTP" in connection with its use of the UTP technology. The licence is not supported by any warranties from ICE. There are no circumstances in which the licence may be terminated by ICE.

To the extent that ICE wishes to use the name "UTP" in connection with its version of the UTP technology, ICE has agreed that it will use the name "NYSE UTP".

Also under this agreement, Euronext and ICE have permitted each other's groups to have until 1 June 2015 to cease current uses of each other's trademarks. From that date onwards, Euronext and ICE have ceased using each other's trademarks.

Euronext Equity Index Trademark Licence Agreement

Under the licence agreement, LIFFE is granted a worldwide and non-exclusive licence in relation to the trademarks and associated logos for the indices generated by the Euronext Regulated Markets. The licence permits the use of these trademarks and associated logos in connection with the marketing, listing and trading of any tradable contract. However, until 1 January 2016, the licensed use is limited to LIFFE's current tradable contracts for listings on Bclear and only in respect of equity indices for AEX®, BEL 20®, CAC 40®, and PSI®. This limitation will terminate early in case a third-party infrastructure provider acquires control of any Euronext company, or is granted a licence by Euronext company to use any of the trademarks for any of the indices generated by the Euronext Regulated Markets. Subject to appropriate limitations, LIFFE may sub-license the rights to ICE.

For its use of the licensed trademarks and associated logos, LIFFE pays the greater of (i) €0.05 per traded contract and (ii) 15% of the exchange and clearing fees on the traded contracts.

LIFFE will indemnify Euronext and its affiliates for all liability incurred under a third-party claim in connection with ICE's use of the licensed trademarks, other than where the third-party claim is for trademark infringement.

The licence agreement recognises that the parties may need to renegotiate the terms where Euronext is required, by a change in the law, to grant licences at market rates and on a non-discriminatory basis albeit such renegotiation shall take due account for the fact that ICE has already provided value for the use of the equity indices as part of the acquisition of NYSE Euronext by ICE.

Also, in connection with the separation of Euronext from ICE, Euronext and ICE entered into a series of transitional services agreements (SLAs). There were some ancillary services provided by ICE to Euronext ("ICE Ancillary Services") and ancillary services provided by Euronext to ICE (Euronext Ancillary).

Crossfinder licence agreement

FastMatch's operating system for its matching engine is based on the Crossfinder(R) software licensed by FastMatch from Credit Suisse pursuant to a perpetual licence. The licence granted by Credit Suisse is limited in scope to use by FastMatch in its operations as an electronic exchange for the trading of foreign exchange. Pursuant to that licence, FastMatch has exclusive and unrestricted ownership of all modifications made to the Crossfinder code by FastMatch, as well as to any software developed by FastMatch independently.

7.3 Legal Proceedings

The Group is involved in a number of legal proceedings that have arisen in the ordinary course of our business. Other than as discussed below in sections *7.3.1* there are no governmental, legal or arbitration proceeding that might have or have had in the recent past significant effects on the Group's financial position or profitability.

Management does not expect these pending or threatening legal proceedings to have a significant effect on the Group's financial position or profitability. The outcome of legal proceedings, however, can be extremely difficult to predict and the final outcome may be materially different from management's expectations.

7.3.1 Euronext Amsterdam pension fund

In the court case between Euronext Amsterdam and approximately 120 retired and/or former Euronext Amsterdam employees, united in an association ("VPGE"), the Higher Court ordered Euronext to restore the pension reduction to the VPGE members and to pay for indexation of the VPGE member's pensions on 28 July 2020. Euronext lodged an appeal in Cassation before the Supreme Court on 23 October 2020.

On 29 October 2021, the Attorney General ("Advocaat-Generaal") advised the Supreme Court to annul the decision of the Higher Court and to reject the cross-appeal filed by VPGE. On 23 September 2022, the Supreme Court has overturned the verdict of the Higher Court. The Supreme Court agreed with Euronext's position on all points raised.

In accordance with Dutch procedural rules, the case will now be reverted back to the Higher Court that has to take the final decision, taking into account the verdict of the Supreme Court. The date of this hearing will be 3 May 2024.

No provision has been booked in connection with this case.

7.4 Insurance

Euronext maintains a comprehensive insurance programme with the assistance of an insurance broker allowing Euronext to make an assessment of its risks, take out the proper insurance policies and deal with insurance management as smoothly as possible.

The main characteristics of the insurance programme are the following:

- the main insurance policies are consolidated at the Euronext group level in order to ensure consistency of coverage across the Euronext group and to benefit from lower premiums;

- the scope of risks covered is determined by reference to Euronext's activities (listing, trading, market data, post-trade and technologies & other); and
- all insurance carriers are analysed from a credit rating perspective.

The main risks covered by Euronext's insurance programme are the following:

- directors' & officers' liability: this policy covers losses related to an alleged wrongful Act committed by members of Euronext Managing Board, Euronext Supervisory Board and other senior management. Under this policy, any of Euronext past, present or future directors or officers will be insured against liability for negligence, default or breach of duty or other liability, other than cases of wilful misconduct or gross negligence (opzet of grove nalatigheid);
- professional indemnity & crime: this policy provides first party coverage and indemnification against third-party claims arising out of negligence, errors or omissions in connection with professional services or failure to meet contractual obligations in the conduct of exchange activities and exchange related activities. This policy also covers first party losses resulting directly from dishonest or fraudulent acts committed by Euronext employees or third parties working with Euronext employees;
- cyber: this policy provides coverage for an Euronext's business interruption following malicious action on an IT system. Coverage is provided for claims arising from the interruption of systems or other failures of IT Security caused by damage to computer programs or data that results from a computer attack or unauthorised access or use of system. This policy also covers claims for the failure to protect personality identifiable information or unauthorised disclosure of confidential corporate information in any form;
- property damage & business interruption: this policy provides first party coverage for losses to Euronext's property or business interruption. The coverage includes tenant's liability and liability to third parties;
- terrorism; and
- commercial general liability: this policy provides coverage for negligent acts and/or omissions resulting in bodily injury, property damage, consequential losses and pure financial losses to third parties, their reputation, or their property as a result of using Euronext products and services.

In addition to the insurance program, risk management and business continuity plan policy and procedures are implemented in a complementary manner. Euronext believes that its existing insurance coverage, including the amounts of coverage and the conditions, provides reasonable protection, taking into account the costs for the insurance coverage and the potential risks to business operations.

As from closing date of the Borsa Italiana Group transaction, Borsa Italiana Group has been fully integrated into the global Euronext Insurance programme.

7.5 Liquidity and Capital Resources

7.5.1 Liquidity

Euronext's financial policy seeks to finance the growth of the business, remunerate shareholders and ensure financial flexibility, while maintaining strong creditworthiness and liquidity.

Euronext primary sources of liquidity are cash flows from operating activities, current assets and existing bank facilities. Euronext's principal liquidity requirements are for working capital, capital expenditures and general corporate use.

Euronext business is becoming more diversified and thus less dependent upon the levels of activity in its exchanges, and in particular upon the volume of financial instruments traded, the number of shares outstanding of listed issuers, the number of new listings, the number of traders in the market and similar factors. As a result of this diversification away from the activities to which Euronext has no direct control, the volatility of revenue has reduced. While Euronext activities are not subject to significant seasonal trends, cash flows vary from month to month due to Euronext billing and collection efforts (most notably the annual billings for listed companies during the first quarter).

Euronext business has historically generated significant cash flow from operating activities to meet its cash requirements as well as to distribute dividends to its shareholders. Euronext expects future cash flow from operating activities to be sufficient to fund its capital expenditures, distribute dividends as well as repay its debts as they become due. In addition, Euronext has access to a €600 million revolving credit facility (see section *7.1.11 - Facilities Agreements and Bonds*).

More information on Euronext's cash flows is provided in section *7.1.10 - Cash Flow*.

Because of its strict financial policy of maintaining strong creditworthiness and liquidity, and its significant operating cash flow generation capacities, Euronext N.V. considers its financial position as at 31 December 2023 as solid, both from a solvency and a liquidity perspective.

The financial resources ultimo 2023 can be summarised as follows:

In thousands of euros	**Financial resources**
Cash & cash equivalents	1,448,788
Revolving credit facility	600,000
TOTAL FINANCIAL RESOURCES	**2,048,788**

7.5.2 Consolidated Regulatory Capital Requirements

Euronext N.V. is subject to regulatory capital requirements. These requirements were first set out in the exchange licence that was issued by the Dutch Minister of Finance in June 2014. Following discussion with the Dutch Minister of Finance in 2015 and 2016 a new exchange licence was granted on 23rd of May 2016, including new capital requirements for both Euronext consolidated and Euronext Amsterdam N.V.

As from 23 May 2016 the following capital requirements apply to Euronext.

Euronext N.V. is subject to minimum regulatory capital requirements defined by the Minister of Finance and the AFM, under which Euronext is required:

- to ensure that its shareholders equity, liquidity and solvency satisfy what is required with a view to the interests which the Dutch Act on Financial Supervision (Wet op het financieel toezicht –Wft) aims to protect;
- Euronext shall have a minimum shareholders equity on a consolidated basis of at least €250 million;
- Euronext shall take care of a stable financing. To that end, the total of long term assets of Euronext will to the satisfaction of the AFM be financed with shareholders equity and long term liabilities;
- Euronext shall have a positive regulatory capital on a consolidated basis. The regulatory capital is calculated according to the following formula: the paid up share capital plus the freely available reserves, less the items listed in section 36 of Regulation (EU) no. 575/2013. The standards drawn up by the European Banking Authority as referred to in section 36, second paragraph, of the Capital Requirements Regulation are taken into account in relation hereto;
- in deviation of the calculation set out in bullet point 4 of the regulatory capital, the value of the intangible fixed assets in connection with the acquiring of a controlling influence through an acquisition will be deducted in ten equal amounts from the regulatory capital, starting in the year that the acquisition has taken place (the year of acquisition pro rata for the number of months). If the value of the intangible assets is higher than factor ten times the most recent profits of the acquired business, the grow-in term can after approval from the AFM be based on a higher, reasonable factor (= grow-in term), taking into account a prudent and consistent dividend policy proposed by Euronext. If the grow-in term and the related dividend policy provide for a negative regulatory capital for a limited number of years of the grow-in term, than this fact will not prevent the execution of the consistent and prudent dividend policy of Euronext in those years;
- if Euronext foresees or reasonably can foresee that its shareholders equity or regulatory capital does not satisfy or will not satisfy the prescribed prudential requirements, it will notify the AFM thereof immediately. If at any moment Euronext does not comply with the prescribed requirements with respect to the minimum shareholders equity, the regulatory capital or the grow-in of the regulatory capital is behind the grow-in term as determined on beforehand, Euronext will provide the AFM with a prognosis of how it expects to again comply with the prescribed prudential requirements. Dividend distributions will be possible in such a situation, unless the AFM is of the opinion that the future development of the shareholders equity or the regulatory capital of Euronext do not allow for this. If necessary, the AFM can prescribe within which term and in which manner Euronext will need to comply with the prudential requirements.

In addition, Euronext is required to obtain the prior approval of the AFM in the following circumstances:

- the granting of personal and in rem security for debts of other enterprises or the assumption of debts and security by Euronext, to the extent this is or can be of influence on the functioning of the regulated markets held by Euronext or possibly can result in Euronext or one or more of its regulated subsidiaries no longer satisfying the prescribed prudential requirements;
- to the extent there is a reorganisation, operational or legal separations of the licence holders or merger which can be of material influence of the functioning of the regulated markets in the Netherlands operated by the license holders;
- proposed resolutions of Euronext which can be of significant influence on the financial soundness of Euronext.

Euronext is also required to ensure that, in the event of a possible insolvency of Euronext N.V., the local exchanges can continue to function operationally.

The AFM may impose further requirements with respect to the shareholders equity position, liquidity and solvency of Euronext, to the extent necessary for the compliance with the requirements of the regulated markets.

In addition, each of the Group's subsidiaries that is an operator of a regulated market and subsidiaries that are investment firms are subject to regulatory capital requirements relating to their general financial soundness, which include certain minimum capital requirements.

As of 31 December 2023, Euronext shareholders equity and regulatory equity was the following:

In thousands of euros	31 Dec 2023	31 Dec 2022
Shareholders equity	3,945,691	3,913,967
Less		
Intangible assets and deferred tax	1,563,768	1,187,392
Investments in financial sector	261,060	319,914
Non-significant threshold	(238,192)	(272,658)
REGULATORY EQUITY	**2,359,055**	**2,679,319**

7.6 Tangible Fixed Assets

The main tangible fixed assets of the Group consist of the following categories:

- land & buildings;
- hardware & IT equipment;
- other Property & Equipment.

7.6.1 Principal properties

Euronext's headquarters are located in Amsterdam, the Netherlands at Beursplein 5, and in Paris, France, at La Défense (92054), 14 Place des Reflets. Euronext's registered office is located at Beursplein 5, 1012 JW Amsterdam, the Netherlands.

Real estate Euronext – per 31 December 2023

Location / Building	Address	ZIP	City	Country	Lease commence	Lease expiry	Surfaces (sqm)	Owned / Leased
Amsterdam, BEURSPLEIN 5	5 Beursplein	1012 JW	Amsterdam	Netherlands	N/A	N/A	14,450	Owned
London (expires March' 24)	110 Cannon Street	EC4N6EU	London	UK	2017	2024	1,085	Leased
London	25 North Colonnade	E14 5HS	London	UK	2023	2030	1,083	Leased
Brussels / LE MARQUIS	1 rue de Marquis	1000	Brussels	Belgium	2014	2030	860	Leased
Lisbon / VICTORIA- Seuros vida	196-7 Avenida da Liberdade	1250-147	Lisbon	Portugal	2018	2026	554	Leased
Porto / Euronext Securities / Euronext Technologies	3433 Avenida da Boavista	410-138	Porto	Portugal	2016	2026	3,448	Leased
Paris / PRAETORIUM	14 place des Reflets	92054	Paris Cedex	France	2015	2033	10,339	Leased
SCI Frepillon	7 Rue Louis Bleriot	93350	Frepillon	France	2022	2025	282	Leased
CCI Nantes	6 rue Bisson	44000	Nantes	France	2020	2025	15	Leased
SCI Lyon	52 Rue de la Republique	69002	Lyon	France	2022	2025	58	Leased
Regus Marseille	165 Avenue du Prado	13008	Marseille Cedex	France	2019	2024	13	Leased
Spain / REGUS / Cuzco IV	141 Paseo de Castellana – 5 floor	28046	Madrid	Spain	2017	2024	12	Leased
New York	180 Maiden Lane	NY10038	New York	USA	2016	2026	854	Leased
Bengalore/ Obeya	17 Cross Road, AJ Forte	560102IN	Bengalore	India	2022	2024	308	Leased
Dublin Exchange building	Foster Place 2		Dublin	Ireland	N/A	N/A	1,525	Owned
Stock Exchange	Anglesea Street		Dublin	Ireland	N/A	N/A	1,330	Owned
Oslo Børs	Tollbugata 2		Oslo	Norway	N/A	N/A	3,004	Owned
Fishpool Bergen	Fantoftvegen 38		Bergen	Norway	2019	2024	140	Leased
Euronext Securities Copenhagen	Nicolai Eightveds Gade 8		Copenhagen	Denmark	2022	2028	3,097	Leased
Palazzo Mezzanotte[1]	6 Piazza Affari		Milan	Italy	2018	2024	12,305	Leased
Gatelab	Viale dei Pentrei		Isernia	Italy	2018	2024	440	Leased
Euronext Clearing/ MTS	146 Via Tomacelli		Rome	Italy	2019	2025	1,636	Leased
iBabs (expires April '24)	De Factorij 33		Zwaag	Netherlands	2016	2024	292	Leased
iBabs	Maelsonstraat 28		Hoorn	Netherlands	2023	2031	339	Leased
Company Webcast	Rivium Boulevard 176		Rotterdam	Netherlands	2014	2024	1,136	Leased
Nordpool Oslo	Lilleakerveien 2 AS		Oslo	Norway	N/A	2029	2,024	Leased
Nordpool Stockholm	Västra Järvägsgatan 111		Stockholm	Sweden	2019	2024	45	Leased
Nordpool Helsinki	Keilasatama 2150		Helsinki	Finland	2022	2027	693	Leased
Singapore	7 Straits View		Singapore	Singapore	2019	2024	27	Leased
Delhi / We Work	Udyhog Vihar Pahse 4R		Gurugram	India	2022	2024	18	Leased
Netherlands/ Company Webcast	Strawinskylaan 47	1077XW	Amsterdam	Netherlands	2018	2024	97	Leased
London/ Company Webcast	16-18 Finsbury Circus	EC2M7FEB	London	United Kingdom	2021	2031	156	Leased

Brusels/ Company Webcast	1, rue du marquis	1000	Brussels	Belgium	2017	2025	96	Leased
Paris/ Company Webcast	8, place de l'Opéra	75009	Paris CEDEX	France	2020	2029	112	Leased
Italy/ Company Webcast	20, Via Agnello	20121	Milan	Italy	2022	2026	165	Leased
Germany/ Company Webcast	Bockenheimer Landstrasse 23	60323	Frankfurt am Main	Germany	2022	2029	219	Leased

[1] *A new lease agreement with Palazzo Mezzanotte will enter into force on 1 January 2025, expiring in 2031.*

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8 FINANCIAL STATEMENTS

8.1 Consolidated Statement of Profit or Loss

In thousands of euros (except per share data)	Note	Year ended 31 December 2023 Underlying items	Non-Underlying items (a)	Total	Year ended 31 December 2022 Underlying items	Non-Underlying items (a)	Total
Revenue	8	1,426,876	–	1,426,876	1,418,774	–	1,418,774
Net treasury income through CCP business	8	46,660	–	46,660	44,038	(48,951)	(4,913)
Other income	8	1,171	–	1,171	4,949	–	4,949
Total revenue and income		**1,474,707**	**–**	**1,474,707**	**1,467,761**	**(48,951)**	**1,418,810**
Salaries and employee benefits	9	(319,485)	(12,931)	(332,416)	(301,059)	(5,958)	(307,017)
Depreciation and amortisation	10	(74,215)	(95,916)	(170,131)	(68,829)	(91,362)	(160,191)
Other operational expenses	11	(290,556)	(65,367)	(355,923)	(305,085)	(21,259)	(326,344)
Operating profit		**790,451**	**(174,214)**	**616,237**	**792,788**	**(167,530)**	**625,258**
Finance costs	13	(35,683)	(31)	(35,714)	(37,078)	–	(37,078)
Finance income (b)	13	30,526	–	30,526	5,806	–	5,806
Other net financing results (b)	13	5,208	–	5,208	(691)	–	(691)
Results from equity investments	14	23,500	–	23,500	9,842	–	9,842
(Loss)/gain on disposal of subsidiaries	14	–	(206)	(206)	–	2,274	2,274
Gain on sale of associates	14	–	53,028	53,028	–	–	–
Share of net profit/(loss) of associates and joint ventures accounted for using the equity method, and impairments thereof	7	6,533	–	6,533	10,360	(1,526)	8,834
Profit before income tax		**820,535**	**(121,423)**	**699,112**	**781,027**	**(166,782)**	**614,245**
Income tax expense	15	(208,925)	46,228	(162,697)	(208,321)	44,716	(163,605)
Profit for the period		**611,610**	**(75,195)**	**536,415**	**572,706**	**(122,066)**	**450,640**
Profit attributable to:							
– Owners of the parent		584,674	(71,107)	513,567	555,308	(117,481)	437,827
– Non-controlling interests		26,936	(4,088)	22,848	17,398	(4,585)	12,813
Basic earnings per share	27	**5.51**	**(0.67)**	**4.84**	**5.21**	**(1.10)**	**4.10**
Diluted earnings per share	27	**5.50**	**(0.67)**	**4.83**	**5.19**	**(1.10)**	**4.10**

(a) *Details of non-underlying items are disclosed in Note 12.*

(b) *As from 2023, the Group presents finance income separately on the face of the income statement, following increased income from interest calculated using the effective interest method. The Group re-presented the comparative period accordingly by reclassifying €5.8 million from 'Other net financing results' that was originally reported at €5.1 million in 2022.*

The above Consolidated Statement of Profit or Loss should be read in conjunction with the accompanying notes.

8.2 Consolidated Statement of Comprehensive Income

In thousands of euros	Note	Year ended 31 December 2023	31 December 2022
Profit for the period		**536,415**	**450,640**
Other comprehensive income			
Items that may be reclassified to profit or loss:			
– Exchange differences on translation of foreign operations		(57,822)	(29,371)
– Income tax impact on exchange differences on translation of foreign operations	19	6,253	2,773
– Change in value of debt investments at fair value through other comprehensive income		7,099	(40,346)
– Realisation of fair value changes upon disposal of debt investments		–	48,951
– Income tax impact on change in value of debt investments at fair value through other comprehensive income	19	(2,046)	(2,426)
Items that will not be reclassified to profit or loss:			
– Change in value of equity investments at fair value through other comprehensive income		11,865	42,054
– Income tax impact on change in value of equity investments at fair value through other comprehensive income	19	(3,061)	(8,469)
– Remeasurements of post-employment benefit obligations	30	(1,366)	11,896
– Income tax impact on remeasurements of post-employment benefit obligations	19	190	(1,329)
Other comprehensive income for the period, net of tax		**(38,888)**	**23,733**
Total comprehensive income for the period		**497,527**	**474,373**
Comprehensive income attributable to:			
– Owners of the parent		475,703	461,989
– Non-controlling interests		21,824	12,384

The above Consolidated Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

8.3 Consolidated Balance Sheet

In thousands of euros	Note	As at 31 December 2023	As at 31 December 2022
Assets			
Non-current assets			
Property, plant and equipment	16	114,373	109,389
Right-of-use assets	17	55,739	42,290
Goodwill and other intangible assets	18	6,108,152	6,205,826
Deferred tax assets	19	31,258	18,917
Investments in associates and joint ventures	7	1,329	72,009
Financial assets at fair value through other comprehensive income	20,35	262,655	278,219
Financial assets at amortised cost	35	3,452	2,312
Other non-current assets		1,088	1,374
Total non-current assets		**6,578,046**	**6,730,336**
Current assets			
Trade and other receivables	21	303,515	318,087
Other current assets	22	30,128	27,585
Income tax receivables		58,563	54,931
CCP clearing business assets	35	183,715,218	166,842,539
Other current financial assets	24	103,053	162,740
Cash and cash equivalents	25	1,448,788	1,001,082
Total current assets		**185,659,265**	**168,406,964**
Total assets		**192,237,311**	**175,137,300**
Equity and liabilities			
Equity			
Issued capital	26	171,370	171,370
Share premium		2,432,426	2,432,426
Reserve own shares		(242,117)	(32,836)
Retained earnings		1,543,458	1,265,765
Other reserves		40,554	77,242
Shareholders' equity		**3,945,691**	**3,913,967**
Non-controlling interests		139,655	126,339
Total equity		**4,085,346**	**4,040,306**
Non-current liabilities			
Borrowings	29	3,031,629	3,027,161
Lease liabilities	17	37,314	21,648
Deferred tax liabilities	19	531,895	552,574
Post-employment benefits	30	22,677	19,631
Contract liabilities	33	60,029	63,785
Provisions	31	7,295	7,049
Total non-current liabilities		**3,690,839**	**3,691,848**
Current liabilities			
Borrowings	29	17,286	17,370
Lease liabilities	17	22,159	28,466
Derivative financial instruments	23	34	19
CCP clearing business liabilities	35	183,832,245	166,858,684
Current income tax liabilities		89,120	28,463
Trade and other payables	32	415,843	396,287
Contract liabilities	33	79,270	75,198
Provisions	31	5,169	659
Total current liabilities		**184,461,126**	**167,405,146**
Total equity and liabilities		**192,237,311**	**175,137,300**

The above Consolidated Balance Sheet should be read in conjunction with the accompanying notes.

8.4 Consolidated Statement of Cash Flows

In thousands of euros	Note	Year ended 31 December 2023	31 December 2022
Profit before income tax		**699,112**	**614,245**
Adjustments for:			
• Depreciation and amortisation	10	170,131	160,191
• Share based payments	9	14,378	13,994
• Results from equity investments (a)	14	(23,496)	(9,840)
• Gain on sale of associates	14	(53,028)	–
• Share of profit from associates and joint ventures, and impairments thereof	7	(6,533)	(8,834)
• Changes in working capital and provisions (a)		155,495	67,366
Cash flow from operating activities		**956,059**	**837,122**
Income tax paid		(129,986)	(220,636)
Net cash generated by operating activities		**826,073**	**616,486**
Cash flow from investing activities			
Acquisition of associates		–	(654)
Acquisition of business combinations, net of cash acquired	5	(2,513)	(65,988)
Acquisition of equity investments		(1,326)	–
Proceeds from disposal of equity investments		240	–
Purchase of other current financial assets		(72,280)	(30,599)
Redemption of other current financial assets		155,494	42,900
Proceeds from disposal of subsidiaries (b)		(208)	8,743
Proceeds from sale of associates		122,444	–
Purchase of property, plant and equipment	16	(27,703)	(31,867)
Purchase of intangible assets	18	(75,333)	(67,650)
Interest received (c)		25,261	5,889
Dividends received from equity investments	14	23,496	9,840
Dividends received from associates	7	7,820	6,748
Proceeds from sale of property, plant and equipment and intangible assets		–	53
Net cash (used in) investing activities		**155,392**	**(122,585)**
Cash flow from financing activities			
Interest paid		(28,711)	(29,565)
Settlement of derivatives financial instruments		–	(8,886)
Dividends paid to the company's shareholders	26	(237,191)	(205,985)
Dividends paid to non-controlling interests		(5,347)	(10,931)
Payment of lease liabilities	17	(28,423)	(23,417)
Transactions in own shares	26	(219,061)	(18)
Employee Share transactions		(967)	(3,566)
Net cash generated by financing activities		**(519,700)**	**(282,368)**
Net (decrease)/increase in cash and cash equivalents		**461,765**	**211,533**
Cash and cash equivalents - Beginning of the period		1,001,082	809,409
Non-cash exchange (losses)/gains on cash and cash equivalents		(14,059)	(19,860)
Cash and cash equivalents - End of the period		**1,448,788**	**1,001,082**

(a) In prior periods, the Group adjusted for results from equity investments in the line 'Changes in working capital and provisions'. As per 2023, the Group has changed its presentation and adjusts for 'Results from equity investments' in a separate line item. The Group re-presented the comparative period accordingly by reclassifying €9.8 million from 'Changes in working capital and provisions' that was originally reported at €57.5 million in 2022.

(b) The current period included a settlement payment of €0.2 million related to the finalisation of the sale of MTS Markets International Inc. at end of last year.

(c) The Group has re-presented 'interest received' as part of cash flows from investing activities, whereas in previous periods this item was presented as part of cash flows from financing activities.

The above Consolidated Statement of Cash Flows should be read in conjunction with the accompanying notes.

8.5 Consolidated Statement of Changes in Equity

In thousands of euros	Note	Issued capital	Share premium	Reserve own shares	Retained Earnings	Other reserves: Foreign currency translation reserve	Other reserves: Fair value reserve of financial assets at FVOCI	Other reserves: Total other reserves	Total Shareholders' equity	Non-controlling interests	Total equity
Balance as at 1 January 2022		**171,370**	**2,432,426**	**(42,778)**	**1,022,921**	**(10,631)**	**74,278**	**63,647**	**3,647,586**	**123,114**	**3,770,700**
Profit for the period		–	–	–	437,827	–	–	–	437,827	12,813	450,640
Other comprehensive income for the period		–	–	–	10,567	(26,169)	39,764	13,595	24,162	(429)	23,733
Total comprehensive income for the period		**–**	**–**	**–**	**448,394**	**(26,169)**	**39,764**	**13,595**	**461,989**	**12,384**	**474,373**
Transfer of revaluation result to retained earnings		–	–	–	–	–	–	–	–	–	–
Issuance of common stock		–	–	–	–	–	–	–	–	–	–
Share based payments		–	–	–	13,976	–	–	–	13,976	–	13,976
Dividends paid		–	–	–	(205,985)	–	–	–	(205,985)	(8,990)	(214,975)
Transactions in own shares	26	–	–	(18)	–	–	–	–	(18)	–	(18)
Acquisition of non-controlling interest		–	–	–	–	–	–	–	–	–	–
Non-controlling interests on acquisition/(disposal) of subsidiary		–	–	–	–	–	–	–	–	(169)	(169)
Other movements		–	–	9,960	(13,541)	–	–	–	(3,581)	–	(3,581)
' Balance as as 31 December 2022		**171,370**	**2,432,426**	**(32,836)**	**1,265,765**	**(36,800)**	**114,042**	**77,242**	**3,913,967**	**126,339**	**4,040,306**
Profit for the period		–	–	–	513,567	–	–	–	513,567	22,848	536,415
Other comprehensive income for the period		–	–	–	(1,176)	(50,545)	13,857	(36,688)	(37,864)	(1,024)	(38,888)
Total comprehensive income for the period		**–**	**–**	**–**	**512,391**	**(50,545)**	**13,857**	**(36,688)**	**475,703**	**21,824**	**497,527**
Share based payments		–	–	–	14,134	–	–	–	14,134	–	14,134
Dividends paid		–	–	–	(237,191)	–	–	–	(237,191)	(6,881)	(244,072)
Transactions in own shares	26	–	–	(219,061)	–	–	–	–	(219,061)	–	(219,061)
Acquisition of non-controlling interest		–	–	–	(885)	–	–	–	(885)	(1,627)	(2,512)
Non-controlling interests on acquisition/(disposal) of subsidiary		–	–	–	–	–	–	–	–	–	–
Other movements		–	–	9,780	(10,756)	–	–	–	(976)	–	(976)
Balance as at 31 December 2023		**171,370**	**2,432,426**	**(242,117)**	**1,543,458**	**(87,345)**	**127,899**	**40,554**	**3,945,691**	**139,655**	**4,085,346**

The above Consolidated Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Notes to the Consolidated Financial Statements

Note 1. General information

Euronext N.V. ("the Group" or "the Company") is a public limited liability company incorporated and domiciled at Beursplein 5, 1012 JW, Amsterdam in the Netherlands under Chamber of Commerce number 60234520 and is listed on the following Euronext local markets: Euronext Amsterdam, Euronext Brussels, Euronext Lisbon and Euronext Paris.

The Group operates securities and derivatives exchanges in Continental Europe, Ireland and Norway. It offers a full range of exchange- and corporate services, including security listings, cash and derivatives trading, and market data dissemination. It combines the Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo and Paris exchanges in a highly integrated, cross-border organisation.The Group also operates Interbolsa S.A. (Euronext Securities Porto), Verdipapirsentralen ASA (Euronext Securities Oslo), VP Securities AS (Euronext Securities Copenhagen) and Monte Titoli S.p.A. (Euronext Securities Milan) (respectively the Portuguese, Norwegian, Danish and Italian national Central Securities Depositories (CSDs)) and Cassa di Compensatione e Garanzia S.p.A. (Euronext Clearing), a fully owned Italian multi-asset clearing house.

The Group further owns Euronext FX Inc., a US-based Electronic Communication Network in the spot foreign exchange market, and has majority stakes in Nord Pool, a leading power market in Europe offering intraday and day-ahead trading in the physical energy markets, and MTS S.p.A., a leading trading platform for European government bonds.

The Group's in-house IT function supports its exchange operations. In addition, the Group provides software licenses as well as IT development, operation and maintenance services to third-party exchanges.

These Consolidated Financial Statements were authorised for issuance by Euronext N.V.'s Supervisory Board on 28 March 2024 and will be submitted for adoption by the Annual General Meeting (AGM) of Shareholders on 15 May 2024. The AGM has the power to amend the Consolidated Financial Statements after issue.

Note 2. Significant events and transactions

The financial position and performance of the Group was particularly affected by the following events and transactions that have occurred during the year:

Termination of Derivatives Clearing Contract with LCH SA

During the first weeks of January 2023, Euronext local boards decided to terminate the Derivatives Clearing Agreement with LCH SA. On 16 January 2023, a termination notice was sent to LCH SA. The Group recognised a payable for the termination fees and migration fees (including indexation) indicated in the agreement of approximately €36.6 million. The amount was recognised as a non-underlying expense (see Note 12). The amount will be due in January 2024.

Sale of investment in associate LCH SA

Following the notification of the early termination of the Derivatives Clearing Agreement, LCH Group Ltd. had the option to buy back Euronext's 11.1% stake in LCH SA, which it executed on 21 June 2023.

On 26 June 2023, the Group entered into a definitive agreement for the sale of its 11.1% stake in LCH SA to LCH Group Ltd., for an amount of €111.0 million, which was valued by independent valuation experts.

The completion of the transaction (transfer of all risks and rewards related to the shares) occurred on 6 July 2023. Subsequently, the Group derecognised its investment in associate LCH SA at its carrying amount of €69.4 million and recognised a €41.6 million 'non-underlying' gain on sale of associate in the consolidated income statement (see Notes 12 and 14).

Sale of investment in associate Tokeny S.a.r.l.

On 1 December 2023, the Group sold its interest in associate Tokeny S.a.r.l. for an amount of €11.4 million. As the investment was held at a carrying amount of zero, the full proceeds of the sale were recognised as a gain on sale of associate in the income statement (see Note 14).

Purchase price allocation of Nexi's technology businesses acquisition

In 2023, the Group finalised the purchase price allocation of the technology businesses of Nexi S.p.A., that the Group had acquired on 1 December 2022 at a purchase consideration of approximately €57 million (on a debt free, cash free basis). The Group identified €10.1 million of software intangible assets and €3.2 million of customer relationships as part of the purchase price allocation, which were subsequently offset in goodwill (see Notes 5 and 18).

Share repurchase programmes

On 9 June 2023, the Group announced that it would repurchase 330,000 of its own shares as part of its Long-Term Incentive plans (see Note 26). This repurchase programme was implemented and directed by an independent agent from 12 June 2023 to 7 July 2023 and was carried out in accordance with the conditions of the authorisation granted by the General Meeting of Shareholders of Euronext on 17 May 2023.

On 27 July 2023, the Group announced a share repurchase programme (the 'Programme') for an amount of €200 million. The Programme was implemented as follows:

- Purpose: the purpose of the Programme is to reduce the share capital of the Group. All shares repurchased as part of the Programme will be cancelled;

- Maximum amount allocated: €200 million;
- Duration: the targeted period for the Programme is from 31 July 2023 for a maximum duration of a year, to be implemented on Euronext Paris;
- Framework: Euronext aims to repurchase approximately 3.0% of its ordinary shares, as authorised by the General Meeting on 17 May 2023 to a limit of 10.0%.

Euronext entered into a non-discretionary arrangement with a financial intermediary to conduct the repurchase.

The Programme was executed in compliance with applicable rules and regulations, including the Market Abuse Regulation 596/2014 and the Commission Delegated Regulation (EU) 2016/1052, and based on the authority granted by the annual general meeting of shareholders on 17 May 2023.

On 3 January 2024, the Group completed the Programme, see Note 40 for more details.

Revaluation of direct- and indirect stakes in Euroclear S.A./N.V.

For the determination of fair value of its direct and indirect investments in Euroclear S.A./N.V., the Group applied a weighted approach of the Gordon Growth model and recent observed market transactions taking into account an illiquidity discount for the limited number of transactions. This valuation method resulted in a total valuation of Euroclear S.A./N.V. of €5.3 billion and to an increase in fair value of Euronext S.A./N.V.'s direct- and indirect investments of €11.7 million as per 31 December 2023. This revaluation was recorded in Other Comprehensive Income.

Long-Term Incentive Plan 2023

On 22 May 2023, a Long-Term Incentive plan ("LTI 2023") was established under the revised Remuneration Policy that was approved by the AGM in May 2021. The LTI cliff vests after 3 years whereby performance criteria will impact the actual number of shares at vesting date. The share price for this grant at grant date was €66.60 and 257,436 Restricted Stock Units ("RSU's") were granted. The total share-based payment expense at the vesting date in 2026 is estimated to be €13.6 million. As from the grant date, compensation expense recorded for this LTI 2023 plan amounted to €2.6 million in the income statement for the year ended 31 December 2023.

Changes in the Group's key management personnel during 2023

On 17 May 2023, at the Annual General Meeting, the Group appointed Benoît van den Hove as Member of the Managing Board of Euronext N.V. with effect from 1 July 2023, following the announced retirement of Vincent Van Dessel. At that same meeting, Manuel Bento was appointed as Member of the Managing Board of Euronext N.V. with immediate effect.

On 8 November 2023, Simon Gallagher was appointed CEO of Euronext London, Head of Global Sales and Member of the Managing Board of Euronext N.V., subject to shareholders' and regulatory approvals. This as a result of Chris Topple stepping down from his roles at Euronext.

No changes in the Supervisory Board occurred to date.

See Note 36, for more details on the Group's key management personnel.

Note 3. Accounting policies and significant judgments

The accounting policies applied in the preparation of these Consolidated Financial Statements are set out below. These policies have been consistently applied to all the years presented, unless stated otherwise. The financial statements for the year ended 31 December 2023 are for the Group consisting of Euronext N.V. and its subsidiaries.

A). Basis of preparation

The Consolidated Financial Statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) adopted by the European Union. They also comply with the financial reporting requirements included in Title 9 Book 2 of the Dutch Civil Code, as far as applicable.

The Consolidated Financial Statements have been prepared on a historical cost basis, unless stated otherwise. They have also been prepared on the basis that the Group will continue to operate as a going concern.

B). Principles of consolidation and equity accounting

These Consolidated Financial Statements include the financial results of all subsidiaries in which entities in the Group have a controlling financial interest and it also incorporates the share of results from associates and joint ventures. The list of individual legal entities which together form the Group, is provided in Note 4. All transactions and balances between subsidiaries have been eliminated on consolidation. All transactions and balances with associates and joint ventures are reflected as related party transactions and balances (see Note 36).

(i) Subsidiaries

Subsidiaries are all entities controlled by the Group. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

Intergroup transactions, balances and unrealised gains and losses on transactions between companies within the Group are eliminated upon consolidation unless they provide evidence of impairment. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interest in the results and equity of subsidiaries are shown separately in the consolidated statement or profit or loss, statement of comprehensive income, statement of changes in equity and balance sheet respectively.

(ii) Associates and joint arrangements

Associates are entities over which the Group has the ability to exercise significant influence, but does not control. Generally, significant influence is presumed to exist when the Group holds 20% to 50% of the voting rights in an entity. Joint arrangements are joint operations or joint-ventures over which the Group, together with another party or several other parties, has joint control. Investments in associates and joint ventures are accounted for using the equity method of accounting.

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the group's share of the post-acquisition profits or losses of the investee in profit or loss, and the group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment. When the group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity. Unrealised gains on transactions between the group and its associates and joint ventures are eliminated to the extent of the group's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity accounted investees have been changed where necessary to ensure consistency with the policies adopted by the group. The carrying amount of equity-accounted investments is tested for impairment.

C). Business combinations

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses.

The Group determines that it has acquired a business when the acquired set of activities and assets include an input and a substantive process that together significantly contribute to the ability to create outputs. When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. The identifiable assets acquired and liabilities are measured initially at their fair values at the acquisition date. Contingent consideration is classified either as equity or as a financial liability. Amounts classified as a financial liability are subsequently re-measured to fair value with changes in fair value recognised in profit or loss.

The consideration transferred is measured at the fair value of any assets transferred, liabilities incurred and equity interests issued. The excess of the consideration transferred over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. To the extent applicable, any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree are added to consideration transferred for purposes of calculating goodwill. Goodwill is initially measured at cost. After initial recognition, goodwill is measured at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units. Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

D). Segment reporting

Segments are reported in a manner consistent with how the business is operated and reviewed by the chief operating decision maker (CODM), who is responsible for allocating resources and assessing performance of the operating segments. The chief operating decision maker of the Group is the Extended Managing Board, comprising the Managing Board and permanent attendees of Senior Management. The organisation of the Group reflects the high level of mutualisation of resources across geographies and product lines. Operating results are monitored on a group-wide basis and, accordingly, the Group represents one operating segment and one reportable segment. Operating results reported to the Extended Managing Board are prepared on a measurement basis consistent with the reported Consolidated Statement of Profit or Loss.

In presenting and discussing the Group's financial position, operating results and net results, management uses certain Alternative performance measures not defined by IFRS. These Alternative performance measures (APMs) should not be viewed in isolation as alternatives to the equivalent IFRS measures and should be used as supplementary information in conjunction with the most directly comparable IFRS measures. APMs do not have standardised meaning under IFRS and therefore may not be comparable to similar measures presented by other companies. The Group measures performance based on EBITDA1, as management believes that this measurement is most relevant in evaluating the operating results of the Group. This measure is included in the internal management reports that are reviewed by the CODM.

Reference is made to one of the below definitions, whenever the term 'EBITDA' is used throughout these Consolidated Financial Statements:

- EBITDA1: 'Underlying' operating profit before 'underlying' depreciation and amortisation (D&A), taking into account the lines described in the Consolidated Statement of Profit or Loss;
- EBITDA2: Profit before (i) interest expense, (ii) tax, (iii) any share of the profit of any associated company or undertaking, except for dividends received in cash by any member of the Group, (iv) non-underlying items included in operating profit

excluding D&A; and (v) depreciation and amortisation;

- EBITDA3: EBITDA as defined in the Share Purchase Agreements of the acquired companies involved.

E). Foreign currency transactions and translation

(i) Functional and presentation currency

These Consolidated Financial Statements are presented in Euro (EUR), which is the Group's presentation currency. The functional currency of each Group entity is the currency of the primary economic environment in which the entity operates.

(ii) Transactions and balances

Foreign currency transactions are converted into the functional currency using the rate ruling at the date of the transactions. Foreign exchange gains or losses resulting from the settlement of such transactions and from the translation at year-end rates of monetary assets and liabilities denominated in foreign currencies are recognised in the Income Statement.

Exceptions to this are where the monetary items form part of the net investment in a foreign operation or are designated as hedges of a net investment, in which case the exchange differences are recognised in Other Comprehensive Income.

(iii) Group companies

The results and financial position of Group entities that have a functional currency different from the presentation currency are converted into the presentation currency as follows:

- assets and liabilities (including goodwill) are converted at the closing balance sheet rate.
- income and expenses are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- all resulting exchange differences are recognised as currency translation adjustments within Other Comprehensive Income.

F). Property, plant and equipment

Property, plant and equipment is carried at historical cost, less accumulated depreciation and any accumulated impairment loss. The cost of purchased property, plant and equipment is the value of the consideration given to acquire the assets and the value of other directly attributable costs. All repairs and maintenance costs are charged to expense as incurred.

Property, plant and equipment is depreciated on a straight-line basis over the estimated useful lives of the assets, except land and construction in process assets, which are not depreciated. The estimated useful lives, which are reviewed annually and adjusted if appropriate, used by the Group in all reporting periods presented are as follows:

- Buildings (including leasehold improvements) 5 to 40 years
- IT equipment 2 to 3 years
- Other equipment 5 to 12 years
- Fixtures and fittings 4 to 10 years

G). Leases

(i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost less any accumulated depreciation and if necessary any accumulated impairment. The cost of a right-of-use asset comprise the present value of the outstanding lease payments, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs and an estimate of costs to be incurred in dismantling or removing the underlying asset. If the lease transfers ownership of the underlying asset to the lessee at the end of the lease term or if the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the right-of-use asset is depreciated to the end of the useful life of the underlying asset. Otherwise the right-of-use asset is depreciated to the end of the lease term.

(ii) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable payments that depend on an index or rate and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments for penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs. In this context, the Group also applies the practical expedient that the payments for non-lease components are generally recognised as lease payments. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

(iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the lease of low-value assets recognition exemption to leases of office IT equipment and other staff equipment that are of low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

H). Goodwill and other intangible assets

(i) Goodwill

Goodwill represents the excess of the consideration transferred in a business combination over the Group's share in the fair value of the net identifiable assets and liabilities of the acquired business at the date of acquisition. Goodwill is not amortised but is tested at least annually for impairment, or whenever an event or change in circumstances indicate a potential impairment.

For the purpose of impairment testing, goodwill arising in a business combination is allocated to the cash-generating units (CGUs) or groups of CGUs that are expected to benefit from the synergies of the combination. Each CGU or CGU Group to which goodwill is allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes.

The carrying value of a CGU Group is compared to its recoverable amount, which is the higher of its value in use and its fair value less costs of disposal. Impairment losses on goodwill are not subsequently reversed. Value in use is derived from the discounted future free cash flows of the CGU Group. Fair value less costs of disposal is based on discounted cash flows and market multiples applied to forecasted earnings. Cash flow projections are based on budget and business plan approved by management and covering a 2-year period in total. Cash flows beyond the business plan period are extrapolated using a perpetual growth rate. Key assumptions used in goodwill impairment test are described in Note 18.

(ii) Internally generated intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance. Such an asset is identifiable when it is separable, or when it arises from contractual or other legal rights.

Software development costs are capitalised only from the date when all of the following conditions are met:

- The technical feasibility of the development project is demonstrated
- It is probable that the project will be completed and will generate future economic benefits; and
- The project development costs can be reliably measured.

Capitalised software development costs are amortised on a straight-line basis over their useful lives, generally from 2 to 7 years. Other development expenditures that do not meet these criteria, as well as software maintenance and minor enhancements, are expensed as incurred.

(iii) Other intangible assets

Other intangible assets, which are acquired by the Group, are stated at cost less accumulated amortisation and accumulated impairment losses (if applicable). The estimated useful lives are as follows:

- Purchased software and licenses: 2-8 years
- Customer relationships: 11-40 years
- Brand names: Generally for brand names an indefinite useful life is assumed. For brand names with finite useful lives the expected useful life is up to 3 years.

I). Impairment of non-financial assets other than goodwill

Assets that are subject to amortisation and depreciation are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. Assets that have an indefinite useful life are not subject to amortisation nor depreciation and are tested at least annually for impairment. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. For purposes of assessing impairment, assets are grouped into Cash Generating Units (CGUs). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent from other groups of assets. Non-financial assets, other than goodwill, that were previously impaired are reviewed for possible reversal of the impairment at each reporting date.

J). Derivative financial instruments and hedging activities

(i) Initial recognition and measurement

The Group uses derivative financial instruments, such as forward currency contracts and interest rate swaps, to hedge its foreign currency risk and interest rate risks. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the purpose of hedge accounting, hedges are classified as fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

The hedges relevant to the Group, that meet all the qualifying criteria for hedge accounting are accounted for, as described below:

Fair value hedges

The change in the fair value of a hedging instrument is recognised in the statement of profit or loss. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognised in the statement of profit or loss.

For fair value hedges relating to items carried at amortised cost, any adjustment to carrying value is amortised through profit or loss over the remaining term of the hedge using the Effective Interest Rate (EIR) method. The EIR amortisation may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedged item is derecognised, the unamortised fair value is recognised immediately in profit or loss.

K). Financial instrument

(i) Classification and initial recognition

The Group classifies its financial instruments in the following measurement categories:

- Amortised cost
- Fair value through Other Comprehensive Income (FVOCI)
- Fair value through profit or loss (FVPL)

The classification depends on the Group's business model for managing the financial instruments and the contractual terms of the cash flows. For instruments measured at fair value, gains and losses will either be recorded in profit or loss or Other Comprehensive Income. For investments in equity instruments that are not held for trading, this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through Other Comprehensive Income (FVOCI).

Financial assets and financial liabilities are initially recognised on their settlement date. Except for trade receivables, at initial recognition the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss. Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest. Trade receivables are initially measured at their transaction price if they do not contain a significant financing component in accordance with IFRS 15.

(ii) Subsequent measurement

Financial assets at amortised cost

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is measured using the effective interest rate method and is shown in finance income. Any gain or loss arising on de-recognition is recognised directly in profit or loss and presented in other net financing results, together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss, if material.

The Group's financial assets at amortised cost include the Group's trade and other receivables, loans and deposits included under (non-current) Financial assets at amortised cost, short-term deposits with a maturity of more than three months included under other current financial assets and cash and cash equivalents.

Financial assets at amortised cost - CCP clearing business

For financial assets from CCP clearing business all measurement effects are shown in net treasury income through CCP business.

This category includes clearing member trading balances relating to certain collateralised transactions, other receivables from clearing members of the CCP business and clearing member cash and cash equivalents, representing amounts received from the clearing members to cover initial and variation margins and default fund contributions that are not invested in bonds.

Financial assets at fair value through Other Comprehensive Income (FVOCI)

Debt instruments that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through Other Comprehensive Income, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in Other Comprehensive Income is reclassified from equity to profit or loss. Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other net financing results and impairment expenses are presented as separate line item in the statement of profit or loss, if material. The Group's debt instruments at FVOCI include the Group's investments in short-term listed bonds and government bonds (long-term and short-term) linked to Euronext Clearing's own funds.

Where the Group's management has elected to present fair value gains and losses on equity investments in Other Comprehensive Income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the de-recognition of the investment. Dividends from such investments will be recognised in profit or loss as results from equity investments when the Group's right to receive payments is established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in Other Comprehensive Income. The Group elected to classify irrevocably its unlisted equity securities that are held as long-term strategic investments that are not expected to be sold in the foreseeable future in this category.

Financial assets at fair value through Other Comprehensive Income (FVOCI) - CCP clearing business

This category includes the investments made in (predominantly) government bonds, that are funded by the margins and default funds deposited by members of the CCP clearing business. These investments are recognised in 'CCP clearing business assets'. Interest income and reclassified fair value gains/(losses) from these financial assets are shown in net treasury income through CCP business.

Financial assets at fair value through Profit or Loss (FVPL)

Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. Changes in the fair value of financial assets at FVPL are recognised in other net financing results in the statement of profit or loss as applicable.

Financial assets at fair value through Profit or Loss (FVPL) - CCP clearing business

This category includes clearing member trading balances comprising derivatives, equity and debt instruments that are marked to market on a daily basis. In particular these include open transactions not settled at the reporting date on the derivatives market in which Euronext Clearing operates as a central counterparty. The fair valuation of such positions is determined on the market price of each individual financial instrument at closing of the reporting period.

As the amounts of clearing member trading assets and liabilities at FVPL are equally entered in both assets and liabilities, the fair valuation of both items does not lead to any net profit or loss in the income statement of the Group.

Financial liabilities at fair value through Profit or Loss (FVPL)

Liabilities that are held for trading are measured at FVPL. Changes in the fair value of financial liabilities at FVPL are recognised in other net financing results in the statement of profit or loss as applicable.

Financial liabilities at fair value through Profit or Loss (FVPL) - CCP clearing business

This category includes clearing member trading balances comprising derivatives, equity and debt instruments that are marked to market on a daily basis. In particular these include open transactions not settled at the reporting date on the derivatives market in which Euronext Clearing operates as a central counterparty. The fair valuation of such positions is determined on the market price of each individual financial instrument at closing of the reporting period.

As the amounts of clearing member trading assets and liabilities at FVPL are equally entered in both assets and liabilities, the fair valuation of both items does not lead to any net profit or loss in the income statement of the Group.

Financial liabilities at amortised cost

Financial liabilities that are not held for trading are generally accounted for at amortised cost. These instruments are measured using the effective interest rate method and interest expense is shown in finance costs. The Group's financial liabilities at amortised cost include the Group's trade and other payables, borrowings and lease liabilities.

Financial liabilities at amortised cost - CCP clearing business

For financial liabilities from CCP clearing business all measurement effects are shown in net treasury income through CCP business. This category includes as well CCP repurchase agreements and other payables to clearing members related to initial and variation margins and default fund contributions.

(iii) Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade and contract receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

Further disclosures relating to impairment of financial assets are also provided in Note 37.5. Generally, the Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

(iv) Offsetting of financial assets and liabilities

Financial assets and liabilities are offset and only the net amount is presented in the consolidated balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

L). Trade receivables

Trade receivables are amounts due from customers for services performed in the ordinary course of business. They are generally due for settlement within 30 days and therefore are all classified as current. Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method, less loss allowance.

At Nord Pool all trades are settled on the day of trading or on the following business day, with invoices and credit notes being dispatched in the afternoon. Financial settlement is due one working day after trading for net buyers and two working days after trading for net sellers. Variations in settlement cycle following variations in working days combined with variations in physical power prices traded on Nord Pool markets can give rise to significant fluctuations in trade receivables from period to period.

M). Cash and cash equivalents

Cash and cash equivalents comprise cash at banks, highly liquid investments with original maturities of three months or less and investments in money market funds that are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value.

N). Borrowings

Borrowings are initially recorded at the fair value of proceeds received, net of transaction costs. Subsequently, these liabilities are carried at amortised cost, and interest is charged to profit or loss over the period of the borrowings using the effective interest method. Accordingly, any difference between the proceeds received, net of transaction costs, and the redemption value is recognised in profit or loss over the period of the borrowings using the effective interest rate method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

O). Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reliably estimated. Restructuring provisions primarily comprise employee termination payments. Provisions are not recognised for future operating losses, unless there is an onerous contract. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax risk-free discount rate. The increase in the provision due to passage of time is recognised as interest expense.

An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it or any compensation or penalties arising from failure to fulfil it.

P). Trade and other payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business. Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

At Nord Pool all trades are settled on the day of trading or on the following business day, with invoices and credit notes being dispatched in the afternoon. Financial settlement is due one working day after trading for net buyers and two working days after trading for net sellers. Variations in settlement cycle following variations in working days combined with variations in physical power prices traded on Nord Pool markets can give rise to significant fluctuations in trade payables from period to period.

Q). Post-employment benefits

The Group operates defined benefit pension schemes and defined contribution pension schemes. When the Group pays fixed contributions to a pension fund or pension insurance plan and the Group has no legal or constructive obligation to make further contributions, if the fund's assets are insufficient to pay all pension benefits, the plan is considered to be a defined contribution plan. In that case, contributions are recognised as employee expense when they become due.

For the defined benefit schemes, the net asset or liability recognised on the balance sheet comprises the difference between the present value of the defined benefit pension obligation and the fair value of plan assets. A net asset is recognised only to the extent the Group has the right to effectively benefit from the plan surplus. The service cost, representing benefits accruing to employees in the period, and the net interest income or expense arising from the net defined benefit asset or liability are recorded within operating expenses in the Statement of Profit or Loss. Actuarial gains and losses arising from experience adjustments, changes in actuarial assumptions or differences between actual and expected returns on assets are recognised in equity as a component of Other Comprehensive Income. The impact of a plan amendment, curtailment or settlement is recognised immediately when it arises in profit or loss.

R). Share-based compensation

Certain employees of the Group participate in Euronext's share-based compensation plans. Awards granted by Euronext under the plans are restricted stock units (RSUs). Under these plans, Euronext receives services from its employees as consideration for equity instruments of the group. As the awards are settled in shares of Euronext N.V., they are classified as equity settled awards.

The share-based compensation reflected in the Statement of Profit or Loss relates to the RSUs granted by Euronext to the Group's employees. The equity instruments granted do not vest until the employee completes a specified period of service, typically three years. The grant-date fair value of the equity settled RSUs is recognised as compensation expense over the required vesting period, with a corresponding credit to equity.

Euronext has performance share plans, under which shares are conditionally granted to certain employees. The fair value of awards at grant date is calculated using market-based pricing, i.e. the fair value of Euronext shares. This value is expensed over their vesting period, with a corresponding credit to equity. The expense is reviewed and adjusted to reflect changes to the level of awards expected to vest, except where this arises from a failure to meet a market condition or a non-vesting condition in which case no adjustment applies.

S). Treasury shares

The Group reacquires its own equity instruments. Those instruments ('treasury shares') are deducted from equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of an entity's own equity instruments. Such treasury shares may be acquired and held by the entity or by other members of the consolidated group. Consideration paid or received is recognised directly in equity.

T). Revenue (from contracts with customers) and income

The Group is in the business of providing a diverse range of products and services combining transparent and efficient equity, fixed income securities and derivatives markets. The Group's main businesses comprise listing, cash trading, derivatives trading, fixed income trading, spot FX trading, power trading, market data and indices, post-trade and market solutions & other. Revenue from contracts with customers is recognised when control of the good and services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that, except for the revenue sharing agreement with Intercontinental Exchange (ICE), it is principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer.

The disclosures of significant accounting judgements, estimates and assumptions relating to revenue from contracts with customers are provided in section *'Critical accounting estimates and assumptions'*.

(i) Listing and Corporate services

Listing fees primarily consist of original listing fees paid by issuers to list securities on the various cash markets (admission fees), subsequent admission fees for other corporate actions (such as admission of additional securities) and annual listing fees paid by companies whose financial instruments are listed on the cash markets. The admission services around initial (and subsequent) admission and its directly related corporate action services are considered activities that the Group needs to undertake to enable the customer to be listed. These activities are combined with the ongoing listing services and are used as inputs to produce the combined output, which is the service of being listed. Consequently, revenue generated from this combined performance obligation is recognised based on time elapsed over the listing period, as this best reflects the continuous transfer of the listing services.

Corporate services revenues are earned from webcast solutions, board portal solutions, insider list management solutions and investor relationship management solutions. For corporate services that are provided to customers under an access license, revenue is recognised evenly over the contractual period of the license, as this best reflects the continuous benefit from the license by the customer throughout this period. For corporate services that are provided to customers on an event basis or under a 'right-to-use' license, revenue will be recognised at the point in time of the event or acceptance of the license.

(ii) Trading

The Group earns cash trading fees for customer orders of equity securities and other cash instruments on the Group's cash markets, earns derivative trading fees for the execution of trades of derivative contracts on the Group's derivative markets and earns fixed income trading fees for the execution of trades of debt securities on the Group's fixed income markets. Spot FX trading fees are earned for execution of trades of foreign exchange contracts on the FastMatch markets. Power trading fees are earned for execution of trades on Nord Pool's day ahead and intraday physical energy markets. Customers obtain control over the service provided at execution of the trade. Revenue is recognised at that point in time.

Membership and subscription fees for the Borsa Italiana Group markets are generally paid in advance on the first day of the membership or subscription period. The Group recognises revenue on a straight-line basis over the period to which the fee relates, as this best reflects the extent of the Group's progress towards completion of the performance obligation under the contract.

(iii) Advanced data services

The Group charges clients on a per-user basis for the access to its real-time and proprietary market data information services. The Group also collects periodic license fees from clients for the right to distribute the Group data to third parties. Customers obtain control over the market data service provided during the period over which it has access to the data. Consequently revenue is recognised based on time elapsed over the market data access period, as the Group meets its obligation to deliver data consistently throughout this period.

The Group generates indices revenues from Index licensing fees, which gives customers the right to apply Euronext Index Trademark names in their products and ETFs. The nature of an index-license is considered a distinct 'right-to-access' license as the customer can reasonably expect the Group to undertake ongoing activities to support and maintain the value of its trademark names. Revenue generated from these licenses are therefore recognised evenly over the contractual period of the license, as this best reflects the continuous benefit from the license by the customer throughout this period.

(iv) Post trade

Post-trade revenue primarily include clearing, settlement and custody fees. Clearing fees are recognised when the clearing of the trading transaction is completed. Customers obtain control over the service provided at completion of clearing the securities, which is the only performance obligation. Revenue is recognised at that point in time. The Group earns clearing fees through the activities from its own clearing house CC&G SPA (Euronext Clearing) and through an agreement with LCH S.A. in which the latter is providing clearing service as a service provider, executing the service under control of the Group. The nature of the promise is the execution of a cleared trade on the Group's trading platforms. The Group controls the services that are derived from that promise, before it is transferred to the customer. This makes the Group the principal in the transaction of providing clearing services to its customers and consequently the Group recognises its clearing revenue on a gross basis.

Settlement fees are recognised when the settlement of the trading transaction is completed. Customers obtain control over the service provided at completion of the settlement of the securities, which is the only performance obligation. Revenue is recognised at that point in time. Custody fees are recognised as the service of holding the customer's securities in custody is performed. Revenue is recognised based on time elapsed over that period of time, as this best reflects the continuous transfer of services.

(v) Euronext Technologies & Other revenue

Euronext Technologies and other revenue include software license and maintenance services, IT (hosting) services provided to third-party market operators, connection services and data centre colocation services provided to market participants, and other revenue.

Software licenses that are distinct can be considered a 'right-to-use' license, given the significant stand-alone functionality of the underlying intellectual property. Consequently revenue will be recognised at the point in time of acceptance of the software and the source code by the customer. For software licenses that are combined with a significant modification service, revenues are recognised over time, using the input method of labour hours spend during the significant modification period, as the Group has no alternative use for these combined performance obligations and would have an enforceable right to payment for performance completed to date. Revenue from software maintenance services are recognised evenly over the maintenance agreement period, as this best reflects the continuous transfer of maintenance services throughout the contract period.

The Group delivers hosting services to customers that are using the software installed in the Euronext data centre to use the Group's trading platforms. Installation services provided before the start of a hosting service do not include significant client customisation of the software installed in the Euronext data centre. The installation service itself does not transfer a good or service to the customer, but are required to successfully transfer the only performance obligation for which the customer has contracted, which is the hosting service. Revenue generated from this performance obligation is recognised evenly over the full service period of the hosting contract, as this best reflects the continuous transfer of hosting services to the customer.

Part of the connection services and data centre colocation services are provided under a revenue sharing agreement with Intercontinental Exchange (ICE). Euronext is providing ICE the right to provide services directly to Euronext customers, to which Euronext provides a continuous customer access to the relevant Euronext Group markets and as such, Euronext is arranging for the specified services to be provided by another party as an agent. Euronext customers connect to its markets via the ICE SFTI® network or rent colocation space in the ICE data centres that house Euronext's trading platforms. ICE receives fees from Euronext customers over the period of access to the SFTI® network and over the colocation rental period. The Group recognises its revenue share over that same period of time, using the practical expedient provided in IFRS 15.B16 that allows an entity to recognise revenue in the amount to which it has the right to invoice. The entitled amount that Euronext invoices to ICE corresponds directly with the value that Euronext's performance obligation has to ICE, which equals to the agreed commission.

As from the data centre migration in June 2022, revenues for connection services and data centre colocation services are also generated from Euronext's core data centre facility in Bergamo. Fees received for these services are recognised evenly over the customer's access period and colocation rental period, as this best reflects the continuous transfer of these services.

The Group also generates revenue from other connection services that trading members are using primarily for the purpose of placing their cash and derivatives trading orders. Members enter into contracts that generate access availability for placing trading orders (the active logon session). Customers obtain control over the service provided during the period of access to their active logon session. Revenue is recognised evenly over that period of time, as this best reflects the continuous transfer of technology services.

(vi) Net treasury income through CCP business

Income recognised in the CCP clearing businesses includes net treasury income earned on margin and default funds, held as part of the risk management process. Net treasury income is the result of interest earned on cash assets lodged with the clearing house, less interest paid to the members on their margin and default fund contributions. Net treasury income is shown separately from the Group's revenues on the face of the income statement to distinguish this income stream from revenues arising from other activities and provide a greater understanding of the operating activities of the Group. Where negative interest rates apply, the Group recognises interest paid on cash assets as a treasury expense and interest received on clearing members' margin as treasury income.

(vi) Other income

Other income is income not attributable to the typical business model of the Group. Other income primarily consists of transitional income from services provided by Borsa Italiana Group to London Stock Exchange Group (LSEG) to facilitate the transition of ownership following the acquisition of Borsa Italiana Group.

(vii) Contract balances

Receivables

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due from the customer). The Group refers to billed receivables as *trade receivables*, whereas unbilled receivables are referred to as *contract receivables* by the Group.

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

(viii) Significant financing component

Generally, the Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. The primary exception considers contracts containing listing services. As the payment for listing admission services appears upfront at the start of the contract, the period between revenue recognition from listing admission services and payment by the customer can exceed one year. However the Group determined that the payment terms were structured not with the primary purpose of obtaining financing from the customer, but to minimise the risk of non-payment as there is not a stated duration of the period of the listing. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(viv) Cost to obtain or fulfil a contract

The Group does not incur material costs to obtain contracts such as sales commissions. Costs to fulfil a contract are costs that relate directly to a contract or a specifically anticipated contract, generate or enhance resources of the Group that will be used to satisfy future performance obligations, and are recoverable. Costs to fulfil a contract are capitalised and amortised on a straight line basis over the term of the specific contract it relates to, consistent with the pattern of recognition of the associated revenue.

U). Non-underlying items

Non-underlying items are items of income and expense that are material by their size and/or that are infrequent and unusual by their nature or incidence are not considered to be incurred in the normal course of business and are classified as non-underlying items on the face of the income statement within their relevant category in order to provide further understanding of the ongoing sustainable performance of the Group.

Non-underlying items include:

• Operating income and expense items which are material by their size and/or are infrequent and unusual by their nature, such as integration or double run costs of significant projects (one side of the cost to resource both the old and the new services within the project), restructuring costs and costs related to acquisitions that change the perimeter of the Group.

• Non-operating income and expense items which are material by their size and/or are infrequent and unusual by their nature, such as one-off finance costs, gains or losses on sale of subsidiaries and impairments of investments.

• Amortisation and impairment of intangible assets which are recognised as a result of acquisitions. These intangible assets mostly comprise customer relationships, brand names and software that were identified during purchase price allocation (PPA). This amortisation is presented as a non-underlying item in order to provide more meaningful information regarding the Group's sustainable performance.

• Tax related to non-underlying items.

V). Taxation

The income tax expense for the fiscal year is comprised of current and deferred income tax. Income tax expense is recognised in the Income Statements, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the income tax impact is also recognised in other comprehensive income or directly in equity.

(i) Current income tax

The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Group operates and generates taxable income. The Group recognises liabilities for uncertain tax treatment when it is not probable that the tax authorities will accept the tax treatment. The liabilities are measured through one of the following methods depending on which method is expected to best predict the resolution of the tax uncertainty:

a) The most likely amount – the single most likely amount in a range of possible outcomes. The most likely amount may better predict the resolution of the uncertainty if the possible outcomes are binary or are concentrated on one value.

b) The expected value – the sum of the probability-weighted amounts in a range of possible outcomes. The expected value may better predict the resolution of the uncertainty if there is a range of possible outcomes that are neither binary nor concentrated on one value.

Estimated liabilities for uncertain tax treatments, along with estimates of interest and penalties, are presented within income taxes payable on the Balance Sheet and are included in current income tax expense in the Statement of Profit or Loss.

(ii) Deferred income tax

Deferred income tax is recognised on temporary differences arising between the tax basis of assets and liabilities and their carrying amounts in these Consolidated Financial Statements. However, deferred income tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction, other than a business combination, that at the time of the transaction affects neither accounting nor taxable profit or loss and at the time of the transaction, does not give rise to equal amounts of taxable and deductible temporary differences. If a transaction that is not a business combination gives rise to equal amounts of taxable and deductible differences, deferred taxation on the taxable temporary difference and the deductible temporary differences will be accounted for, which at initial recognition are equal and offset to zero (i.e. leases).

Deferred income tax is determined using tax rates that have been enacted or substantively enacted at the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences or tax losses can be utilised. Deferred income tax is provided on temporary differences arising from investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority on the same taxable entity.

W). Non-current assets held for sale

The Group classifies non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset (disposal group), excluding finance costs and income tax expense.

The criteria for held for sale classification is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Actions required to complete the sale should indicate that it is unlikely that significant changes to the sale will be made or that the decision to sell will be withdrawn. Management must be committed to the plan to sell the asset and the sale expected to be completed within one year from the date of the classification.

Property, plant and equipment and intangible assets are not depreciated or amortised once classified as held for sale. Assets and liabilities classified as held for sale are presented separately as current items in the statement of financial position.

X). Critical accounting estimates and assumptions

In the application of the Group's accounting policies, management is required to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following critical assumptions concerning the future, and other critical sources of estimation uncertainty at the end of the reporting period, have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year:

(i) Impairment of goodwill

The Group performs goodwill impairment reviews in accordance with the accounting policy described above in Note 18. The recoverable amount of a CGU Group is determined based on a discounted cash flow approach, which requires the use of estimates. The critical assumptions used and the related sensitivity analysis are described in Note 18.

(ii) Income taxes

Due to the inherent complexities arising from the nature of the Group's business, and from conducting business and being taxed in a substantial number of jurisdictions, critical assumptions and estimates are required to be made for income taxes. The Group computes income tax expense for each of the jurisdictions in which it operates. However, actual amounts of income tax due only become final upon filing and acceptance of the tax return by relevant authorities, which may not occur for several years subsequent to issuance of these Consolidated Financial Statements.

The estimation of income taxes also includes evaluating the recoverability of deferred income tax assets based on an assessment of the ability to use the underlying future tax deductions against future taxable income before they expire. This assessment is based upon existing tax laws and estimates of future taxable income. To the extent estimates differ from the final tax return, earnings may be affected in a subsequent period.

The Group operates in various countries with local tax regulations. New tax legislation being issued in certain territories as well as transactions that the Group enters into regularly result in potential tax exposures. The calculation of our tax liabilities involves uncertainties in the application of complex tax laws. Our estimate for the potential outcome of any uncertain tax treatment is highly judgmental. However, the Group believes that it has adequately provided for uncertain tax treatments. Settlement of these uncertainties in a manner inconsistent with our expectations could have a material impact on our results of operations, financial condition and cash flows. The Group recognises a liability for uncertain tax treatments when it is not probable that a taxation authority will accept an uncertain tax treatment.

(iii) Fair value of equity investments

The Group holds investments in unlisted equity securities which are carried at fair value in the balance sheet. The valuation methodology and critical assumptions are described in Note 20 and 35.

(iv) Classification of investments in associates

The Group had classified the interest in LCH SA as an investment in associate suggesting significant influence even though it owned less than 20% of the voting rights (see Note 7). The Group concluded that it had significant influence over this investment, which was derived from the governance structure that was put in place, the Group's position as the largest customer and sole minority shareholder of LCH SA.

(v) Contingent consideration and buy options resulting from business combinations

The Group may structure its business combinations in a way that leads to recognition of contingent consideration to selling shareholders and/or buy options for equity held by non-controlling interests. Contingent consideration and buy options are recognised at fair value on acquisition date. When the contingent consideration or buy option meets the definition of a financial liability or financial instrument, it is subsequently re-measured to fair value at each reporting date. The determination of fair value is based on the expected level of EBITDA3 over the last 12 months that precede the contractual date (in case of contingent consideration) or exercise date of the underlying call- and put options (in case of buy option). The Group monitors the expected EBITDA3 based on updated forecast information from the acquired companies involved.

(vi) Purchase price allocation

The cost of other intangible assets that are acquired in the course of business combinations, corresponds to their acquisition date fair values. Depending on the nature of the intangible asset, fair value is determined by application of:

- Market approach (by reference to comparable transactions)
- Income approach (Relief-from-Royalty- or Multi-period Excess Earnings Method)
- Cost approach

Assets with a finite useful life are amortised using the straight-line method over their expected useful life. Assets with an indefinite useful life are tested for impairment at least once a year.

(vii) Revenue from contracts with customers

The Group applied the following judgments that significantly affect the determination of the amount and timing of revenue from contracts with customers:

Identifying performance obligations and determining the timing of revenue recognition of Listing admission fees

The Group provides services related to the initial (and subsequent) listing of securities on its markets and hereto directly related corporate action services, and ongoing services related to the continuous listing.

The Group determined that the admission services around initial (and subsequent) admission and its directly related corporate action services do not transfer a good or service to the customer, but are considered activities that the Group needs to undertake to enable the customer to be listed. The Group concluded that these activities should be combined with the ongoing listing services and should be used as inputs to produce the combined output, which is the service of being listed. As the service of being listed is satisfied over a period of time, as the customer simultaneously receives and consumes the benefits from the service, the related revenues are therefore recognised over a period of time.

The Group determined that the period of time that best reflects the satisfaction of listing admission services is the period over which the customer actually benefits from the admission. An average lifetime of companies being listed on Euronext markets would serve as best proxy for the period that a listing customer benefits from an admission. Specific local market characteristics can result and would justify differences in amortisation terms. Based on historic evidence, the Group has defined the following average lifetimes for the relevant groupings of listed securities:

Equity admissions:	5-12 years
Bond- and fund admissions:	3 years
Equity subsequent admissions (follow-on's):	3 years

Revenue from the listing admission services is therefore recognised over those periods of time.

Cost to obtain or fulfil a contract related to listing admission services

The Group has considered the type of cost that is directly associated to a listing contract and that can be separately identifiable. Such cost would typically concern staff cost incurred by the Listings team involved in admission- and subsequent listing of an issuer. There is no correlation between number of listings and staff cost associated to the Listings team.

The majority of the cost to obtain and fulfil the contract is incurred in the period before the actual admission. The remaining cost associated to an admission and subsequent listing that is recorded post-admission, and its impact on the Group's income statement, would be marginal, therefore the Group has decided not to capitalise cost incurred to obtain- or fulfil listing contracts.

Principal versus agent considerations

The Group entered into a clearing agreement with LCH SA in respect of the clearing of trades on Euronext continental Europe derivatives markets (the "Derivatives Clearing Agreement"). Under the terms of this Derivatives Clearing Agreement Euronext agreed with LCH SA to share revenues and receives clearing fee revenues based on the number of trades on these markets cleared through LCH SA. In exchange for that, Euronext has agreed to pay LCH SA a fixed fee plus a variable fee based on revenues.

The definition of the accounting treatment of this agreement required significant management judgment for the valuation and weighting of the indicators leading the principal versus agent accounting analysis. Based on all facts and circumstances around this arrangement, management has concluded that Euronext is 'principal' in providing Derivatives clearing services to its trading members. Therefore Euronext recognises (i) the clearing fees received as post trade revenues, and (ii) the fixed and variable fees paid to LCH SA as other operational expenses.

(viii) Provision for expected credit losses of trade and contract receivables

The Group uses a provision matrix to calculate ECLs for trade and contract receivables. To measure expected credit losses, trade and contract receivables have been grouped based on shared credit risk characteristics and the days past due. The historical loss rates are based on the payment profiles of the sales over a period of 24 months before reporting date and the corresponding historical credit loss experience within this period. The historical loss rates are adjusted to reflect current and forward-looking factors specific to the debtors and economic environment.

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade and contract receivables is disclosed in Note 37.5.1

(ix) Determining the lease term of contracts with extension and termination options

In determining the lease term, management assesses the period for which the contract is enforceable. It considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). If the Group concludes that the contract is enforceable beyond the notice period of a cancellable lease (or the initial period of a renewable lease), it then need to assess whether the Group is reasonably certain not to exercise the option to terminate the lease. However in general, the Group's lease portfolio contains very limited leases that include renewal -or termination options.

(x) Estimating the incremental borrowing rate (IBR)

The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using the observable inputs (such as market interest rates) when available and makes certain entity-specific estimates if needed.

(xi) Internally developed software costs

The Group develops various software applications for internal use. Development costs for self-developed intangible assets are capitalized if the applicable criteria of IAS 38 are fulfilled. Development costs that do not satisfy the requirements for capitalization are expensed as incurred. Capitalised own software development costs are amortized over the useful economic life of the asset and charged on a straight line basis to the income statement. The useful lives are management's best estimate of the period over which value from the asset is realized. In determining the useful lives, management considers a number of factors including: expected usage by the entity of the asset, product upgrade cycles for software and technology assets and the level of maintenance required to maintain the asset's operating capability.

Y). Changes in accounting policies and disclosures

The International Accounting Standards Board (IASB) continues to issue new standards and interpretations, and amendments to existing standards. The Group applies these new standards when effective and endorsed by the European

Union. The Group has not opted for early adoption for any of these standards.

(i) New and amended standards and interpretations

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 January 2023.

IFRS 17 - Insurance Contracts

In May 2017, the IASB issued IFRS 17 Insurance Contracts (IFRS 17), a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. This standard does not affect the Group.

Amendments to IAS 8 - Definition of Accounting Estimates

In February 2021, the IASB issued amendments to IAS 8, in which it introduces a definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments had no impact on the Group.

Amendments to IAS 1 and IFRS Practice Statement 2 - Disclosure of Accounting Policies

In February 2021, the IASB issued amendments to IAS 1 and IFRS Practice Statement 2 Making Materiality Judgements, in which it provides guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

The amendments had no material impact on the Group's disclosures of accounting policies. The amendments had no impact on the measurement, recognition or presentation of any items in the Group's financial statements.

Amendment to IAS 12 - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments clarify that the initial recognition exemption does not apply to transactions in which equal amounts of deductible and taxable temporary differences arise on initial recognition. The amendments had no impact on the Group.

International Tax Reform—Pillar Two Model Rules – Amendments to IAS 12

The amendments to IAS 12 have been introduced in response to the OECD's BEPS Pillar Two rules and include:

• A mandatory temporary exception to the recognition and disclosure of deferred taxes arising from the jurisdictional implementation of the Pillar Two model rules; and

• Disclosure requirements for affected entities to help users of the financial statements better understand an entity's exposure to Pillar Two income taxes arising from that legislation, particularly before its effective date.

The mandatory temporary exception – the use of which is required to be disclosed – applies immediately. The remaining disclosure requirements apply for annual reporting periods beginning on or after 1 January 2023, but not for any interim periods ending on or before 31 December 2023.

The Group has disclosed the impact of the amendments in Note 15.

(ii) Future implications of new and amended standards and interpretations not yet adopted

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to IAS 1 - Classification of Liabilities as Current or Non-current

In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

• What is meant by a right to defer settlement

• That a right to defer must exist at the end of the reporting period

• That classification is unaffected by the likelihood that an entity will exercise its deferral right

• That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after 1 January 2024 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice.

Amendments to IAS 1 - Non-current Liabilities with Covenants

In October 2022, the IASB issued Non-current Liabilities with Covenants, which amended IAS 1 Presentation of Financial Statements. The amendments:

• Modify the requirements introduced by 'Classification of Liabilities as Current or Non-current' on how an entity classifies debt and other financial liabilities as current or non-current in particular circumstances: Only covenants with which an entity is required to comply on or before the reporting date affect the classification of a liability as current or non-current. In addition, an entity has to disclose information in the notes that enables users of financial statements to understand the risk that non-current liabilities with covenants could become repayable within twelve months.

• Defer the effective date of the 2020 amendments to 1 January 2024.

The amendments are effective for reporting periods beginning on or after 1 January 2024. The amendments are applied retrospectively and earlier application is permitted. The Group is currently assessing the impact that the amendments will have on current practice.

Amendments to IFRS 16: Lease Liability in a Sale and Leaseback

In October 2022, the IASB issued Non-current Liabilities with Covenants, which amended IAS In September 2022, the IASB issued amendments to IFRS 16 to specify the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction, to ensure the seller-lessee does not recognise any amount of the gain or loss that relates to the right of use it retains.

The amendments are effective for annual reporting periods beginning on or after 1 January 2024 and must applied retrospectively to sale and leaseback transactions entered into after the date of initial application of IFRS 16. Earlier application is permitted and that fact must be disclosed. The amendments are not expected to have a material impact on the Group.

Supplier Finance Arrangements - Amendments to IAS 7 and IFRS 7

In May 2023, the IASB issued amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures to clarify the characteristics of supplier finance arrangements and require additional disclosure of such arrangements. The disclosure requirements in the amendments are intended to assist users of financial statements in understanding the effects of supplier finance arrangements on an entity's liabilities, cash flows and exposure to liquidity risk. The amendments will be effective for annual reporting periods beginning on or after 1 January 2024. Early adoption is permitted, but will need to be disclosed. The amendments are not expected to have a material impact on the Group.

There are no other IFRS's or IFRIC interpretations not yet effective, that would be expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

Note 4. Group information

The following table provides an overview of the Group's subsidiaries, associates, joint-ventures and non-current investments:

		Ownership	
Subsidiaries	**Domicile**	**As at 31 December 2023**	**As at 31 December 2022**
Euronext Amsterdam N.V.	The Netherlands	100.00%	100.00%
Euronext Brussels S.A./N.V.	Belgium	100.00%	100.00%
Euronext IP & IT Holding B.V.	The Netherlands	100.00%	100.00%
Euronext Hong Kong Limited (g)	Hong Kong	0.00%	100.00%
Euronext Lisbon S.A. (a)	Portugal	100.00%	100.00%
Euronext London Ltd.	United Kingdom	100.00%	100.00%
Euronext Paris S.A.	France	100.00%	100.00%
Euronext Technologies S.A.S.	France	100.00%	100.00%
Euronext Technologies Unipessoal Lda.	Portugal	100.00%	100.00%
Euronext Technologies S.r.l.	Italy	100.00%	100.00%
Interbolsa S.A. (b),(c)	Portugal	100.00%	100.00%
The Irish Stock Exchange Plc. (d)	Ireland	100.00%	100.00%
Euronext Corporate Services B.V.	The Netherlands	100.00%	100.00%
Company Webcast B.V.	The Netherlands	100.00%	100.00%
iBabs B.V.	The Netherlands	100.00%	100.00%
Euronext Corporate Services UK Ltd.	United Kingdom	100.00%	100.00%
Euronext Corporate Services Sweden AB	Sweden	100.00%	100.00%
Euronext US Inc.	United States	100.00%	100.00%
Euronext Market Services LLC	United States	100.00%	100.00%
Euronext Markets Americas LLC	United States	100.00%	100.00%
Euronext FX Inc.	United States	100.00%	100.00%
Euronext Markets Singapore Pte Ltd.	Singapore	100.00%	100.00%
Euronext UK Holdings Ltd.	United Kingdom	100.00%	100.00%
Commcise Software Ltd.	United Kingdom	100.00%	100.00%
Euronext India Private Limited	India	100.00%	100.00%
Oslo Børs ASA	Norway	100.00%	100.00%
Verdipapirsentralen ASA ("VPS") (c)	Norway	100.00%	100.00%
Fish Pool ASA	Norway	97.00%	97.00%
NOTC AS (e)	Norway	0.00%	100.00%
Euronext Nordics Holding AS	Norway	100.00%	100.00%
Nord Pool Holding AS	Norway	66.00%	66.00%
Nord Pool AS	Norway	66.00%	66.00%
Nord Pool Finland Oy	Finland	66.00%	66.00%

Nord Pool AB	Sweden	66.00%	66.00%
Nord Pool European Market Coupling Operator AS	Norway	66.00%	66.00%
Euronext Corporate Services Finland Oy	Finland	100.00%	100.00%
Euronext Corporate Services France S.A.S.	France	100.00%	100.00%
VP Securities AS (c)	Denmark	100.00%	100.00%
Euronext Italy Merger S.r.l. (m)	Italy	0.00%	100.00%
Euronext Italy Merger 2 S.r.l. (m)	Italy	100.00%	0.00%
Euronext Holding Italia S.p.A.	Italy	100.00%	100.00%
GATElab S.r.l.	Italy	100.00%	100.00%
GATElab Ltd.	United Kingdom	100.00%	100.00%
Bit Market Services S.p.A. (g)	Italy	99.99%	99.99%
Borsa Italiana S.p.A.	Italy	99.99%	99.99%
Cassa di Compensazione e Garanzia S.p.A. (f)	Italy	99.99%	99.99%
Monte Titoli S.p.A. (c)	Italy	98.92%	98.92%
MTS S.p.A. (h)	Italy	63.14%	62.52%
Marche de Titres France SAS (h)	France	63.14%	62.52%
Euro MTS Ltd. (h)	United Kingdom	63.14%	62.52%
Elite S.p.A.	Italy	74.99%	74.99%
Elite Club Deal Ltd. (g)	United Kingdom	0.00%	74.99%
Elite SIM S.p.A.	Italy	74.99%	74.99%
Euronext Corporate Services GmbH	Germany	100.00%	100.00%
Euronext Corporate Services S.r.l.	Italy	100.00%	100.00%
Stichting Euronext Foundation (i)	The Netherlands	0.00%	0.00%
Associates	**Domicile**		
LCH SA (j)	France	0.00%	11.10%
Tokeny S.a.r.l. (k)	Luxembourg	0.00%	18.93%
ATS Advanced Technology Solutions S.p.A.	Italy	30.00%	30.00%
MTS Associated Markets SA	Belgium	23.00%	23.00%
Joint Ventures	**Domicile**		
LiquidShare S.A. (g)	France	16.23%	16.23%
FinansNett Norge	Norway	50.00%	50.00%
Non-current investments	**Domicile**		
Sicovam Holding S.A.	France	9.60%	9.60%
Euroclear S.A./N.V.	Belgium	3.53%	3.53%
EuroCTP B.V. (l)	The Netherlands	18.95%	0.00%
Nordic Credit Rating AS	Norway	5.00%	5.00%
Association of National Numbering Agencies	Belgium	2.20%	2.20%
Investor Compensation Company Designated Activity Company	Ireland	33.30%	33.30%

(a) Legal name of Euronext Lisbon S.A. is Euronext Lisbon - Sociedade Gestora de Mercados Regulamentados, S.A.
(b) Legal name of Interbolsa S.A. is Interbolsa - Sociedade Gestora de Sistemas de Liquidaçao e de Sistemas Centralizados de Valores Mobiliários, S.A.
(c) Interbolsa S.A., Verdipapirsentralen ASA, VP Securities AS and Monte Titoli S.p.A. respectively operate under the business names "Euronext Securities Porto", "Euronext Securities Oslo", "Euronext Securities Copenhagen" and "Euronext Securities Milan".
(d) The Irish Stock Exchange plc. operates under the business name Euronext Dublin.
(e) In 2023, NOTC AS has merged into Oslo Børs ASA.
(f) Cassa di Compensazione e Garanzia S.p.A.operates under the business name "Euronext Clearing".
(g) Euronext Hong Kong limited and Elite Club Deal Ltd. were liquidated in 2023 and Bit Market Services S.p.A. and LiquidShare S.A. were under liquidation as at 31 December 2023. LiquidShare S.A. was ultimately liquidated in January 2024.
(h) On 21 November 2023, the Group acquired an additional interest of 0.62% in MTS S.p.A. (and its subsidiaries).
(i) Stichting Euronext Foundation is not owned by the Group but included in the scope of consolidation.
(j) On 6 July 2023, the Group sold its 11.1% interest in associate LCH SA to LCH Group Ltd for consideration of €111.0 million.
(k) On 1 December 2023, the Group sold its 18.93% interest in associate Tokeny S.a.r.l. for an amount of €11.4 million.
(l) In 2023, the Group acquired an 18.95% equity interest in EuroCTP B.V. (incorporated on 23 August 2023).
(m) In 2023, Euronext Italy Merger S.r.l. was liquidated and Euronext Italy Merger S.r.l. 2 was incorporated.

Note 5. Business combinations and acquisition of non-controlling interests

No new business combinations occurred during the year ended 31 December 2023. The only impact from business combinations during the year related to the finalisation of the purchase price allocation of the acquired technology businesses of Nexi S.p.A., which impact is further described below.

5.1 Acquisition of Nexi S.p.A. technology businesses

On 1 December 2022, the Group acquired the technology businesses of Nexi S.p.A., an Italian bank specialised in payment systems, currently powering MTS and Euronext Securities Milan. The purchase price for this business acquisition approximated €57 million (on a debt free, cash free basis).

In 2023, the Group finalised the purchase price allocation of the acquired technology businesses of Nexi S.p.A.

The initial book values of the net assets acquired were considered not material from a Euronext Group perspective.

The Group identified €10.1 million of software intangible assets and €3.2 million of customer relationships as part of the purchase price allocation, which were subsequently offset in goodwill (see Note 18).

5.2. Acquisition of additional interest in MTS S.p.A.

On 21 November 2023, the Group acquired an additional interest of 0.62% of the shares in MTS S.p.A., increasing the Group's ownership in MTS S.p.A. to 63.14% (2022: 62.52%).

Cash consideration of €2.5 million was paid to the non-controlling shareholders, which was recognised directly against shareholders' equity.

The Group recognised a decrease in non-controlling interest of €1.6 million, reflecting the carrying amount of non-controlling interest acquired.

The difference of €0.9 million was recognised in retained earnings.

Note 6. Non-controlling interests (NCI)

Financial information of subsidiaries that have material non-controlling interest is provided below.

Proportion of equity interest held by non-controlling interests:

Name of entity	Place of business / country of Incorporation	% of ownership interest held by NCI 2023	2022
		%	%
Nord Pool Holding AS	Norway	34.00	34.00
MTS S.p.A.	Italy	36.86	37.48

The summarised financial information of these subsidiaries is provided below. This information is based on amounts before inter-company eliminations.

Summarised balance sheet	Nord Pool Holding AS		MTS S.p.A	
(In thousands of euros)	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
Current assets	172,104	159,574	80,353	51,113
Current liabilities	136,028	131,173	23,477	33,192
Current net assets	**36,076**	**28,401**	**56,876**	**17,921**
Non-current assets	20,698	26,084	354,368	358,026
Non-current liabilities	3,508	5,137	73,585	74,355
Non-current net assets	**17,190**	**20,947**	**280,783**	**283,671**
Net assets	**53,266**	**49,348**	**337,659**	**301,592**
Accumulated NCI	18,110	16,778	124,480	113,022

Summarised statement of comprehensive income	Nord Pool Holding AS		MTS S.p.A	
(In thousands of euros)	2023	2022	2023	2022
Revenue	47,890	42,156	91,485	79,073
Profit for the year	**15,164**	**7,141**	**41,797**	**26,505**
OCI	21	(180)	44	65
Total comprehensive income	**15,185**	**6,961**	**41,841**	**26,570**
Profit / (loss) allocated to NCI	5,156	2,428	15,410	9,934
Dividends paid to NCI	2,821	2,251	2,226	8,345

Summarised cash flow information	Nord Pool Holding AS		MTS S.p.A	
(In thousands of euros)	2023	2022	2023	2022
Cash flow from operating activities	31,186	(18,723)	63,088	665
Cash flow from investing activities	(1,017)	(1,393)	(34,286)	38,423
Cash flow from financing activities	(8,934)	(7,343)	(10,105)	(4,484)
Non-cash exchange gains/ (losses)	(8,281)	(15,811)	—	—
Net increase / (decrease) in cash and cash equivalents	**12,954**	**(43,270)**	**18,697**	**34,604**

Note 7. Investments in associates and joint ventures

7.1. Interests in associates and joint ventures

Set out below are the associates and joint ventures of the Group as at 31 December 2023. The country of incorporation or registration is also their principal place of business, and the proportion of ownership interest is the same as the proportion of voting rights held.

Name of entity	Place of business / country of Incorporation	% of ownership interest 2023	% of ownership interest 2022	Nature of relationship	Carrying amount *(In thousands of euros* 2023	Carrying amount 2022
		%	%			
LCH SA	France	—%	11.1%	Associate (a)	—	70,563
Immaterial joint ventures					230	348
Immaterial associates					1,099	1,098
Total equity accounted investments					**1,329**	**72,009**

(a) LCH SA is a Continental European clearing house, offering clearing services for a diverse range of asset classes. As described in Note 3, the Group determined that it had significant influence over LCH SA even though it only held 11.1% of the voting rights. On 6 July 2023, the Group sold its 11.1% interest in LCH SA to LCH Group Ltd for consideration of €111.0 million (see Note 14).

7.2 Commitments and contingent liabilities in respect of associates and joint ventures

The Group has no outstanding contingent liabilities with respect to its associates or joint ventures.

7.3 Summarised financial information for associates and joint ventures

The tables below provide summarised financial information for those associates and joint ventures that are material to the Group. The information disclosed reflects the amounts presented in the financial statements of the relevant associates or joint ventures and not Euronext's share of those amounts. They have been amended to reflect adjustments made by the entity when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

On 6 July 2023, the Group sold its 11.1% interest in LCH SA to LCH Group Ltd. Therefore, only the comparative financial information is disclosed.

Summarised balance sheet	**LCH SA**	
(In thousands of euros)	**31 Dec 2023**	**31 Dec 2022**
Non-current assets	–	141,920
Current assets	–	579,389,798
Non-current liabilities	–	(6,900)
Current liabilities	–	(579,051,100)
Net assets	**–**	**473,718**
Reconciliation to carrying amounts:		
Opening net assets 1 January	–	439,900
Adjustments	–	(4,782)
Profit/(loss) for the year (a)	–	101,700
Other comprehensive income	–	(3,184)
Dividends paid	–	(59,916)
Closing net assets	**–**	**473,718**
Group's share in %	–%	11.1%
Group's share in thousands of euros	–	52,583
Goodwill	–	17,980
Carrying amount	**–**	**70,563**

(a) *In 2023, LCH SA contributed a €6.6 million profit (2022: €10.4 million) to the line 'Share of net profit/(loss) of associates and joint ventures accounted for using the equity method, and impairments thereof' in the Consolidated Statement of Profit or Loss.*

Summarised statement of comprehensive income	**LCH SA**	
(In thousands of euros)	**2023**	**2022**
Revenue	–	204,100
Profit from continuing operations	**–**	**101,700**
Profit from discontinued operations	–	–
Profit for the year	**–**	**101,700**
Other comprehensive income	–	(3,184)
Total comprehensive income	**–**	**98,516**
Dividends received from associates	–	6,748

7.4 Individually immaterial associates and joint ventures

In addition to the interest in material associates and joint ventures disclosed above, the Group also has interests in individually immaterial associates and individually immaterial joint ventures, that are all accounted for using the equity method.

Individually immaterial associates

The Group had an 18.93% interest in Tokeny S.a.r.l., a tokenisation platform that provides users end-to-end solutions to issue, manage and transfer tokenised securities on public blockchain. On 1 December 2023, the Group sold its interest in Tokeny S.a.r.l. (see Note 2).

The Group has an 23.0% interest in MTS Associated Markets S.A., offering an electronic trading platform for sovereign securities (e.g. government bonds).

In addition, the Group has an 30% interest in ATS Advanced Technology Solutions S.p.A., which line of business includes designing, developing, and producing prepackaged computer software.

(In thousands of euros)	**2023**	**2022**
Aggregate carrying amount of individually immaterial associates	1,099	1,098
Aggregate amounts of the group's share of:		
Profit/(loss) from continuing operations	13	49
Post-tax profit or loss from discontinued operations	–	–
Other comprehensive income	–	–
Total comprehensive income	**13**	**49**

Individually immaterial joint ventures

The Group has an interest of 50% in joint venture FinansNett Norge AS, a company offering data communications through a metropolitan area network (MAN) in Oslo. This network provides communication services for use by backup and disaster recovery solutions as used by brokers and other participants in the financial sector.

In addition, the Group (sharing joint control with the other founders) has an interest of 16.23% in LiquidShare SAS, a fintech joint venture with the objective to improve SME's access to capital markets and improving the transparency and security of post-trading operations using blockchain technology. In 2022, following indications of a deteriorated future cash flow situation and Board decision to propose to the Shareholders meeting to liquidate the entity, the investment in joint venture LiquidShare was impaired by €1.5 million to zero value. The company was liquidated in January 2024.

(In thousands of euros)	2023	2022
Aggregate carrying amount of individually immaterial joint ventures	230	348
Aggregate amounts of the group's share of:		
Profit/(loss) from continuing operations	(92)	(142)
Post-tax profit or loss from discontinued operations	—	—
Other comprehensive income	—	—
Total comprehensive income	**(92)**	**(142)**

Note 8. Revenue and income

8.1 Revenue from contracts with customers

8.1.1 Disaggregation of revenue from contracts with customers

Substantially all of the Group's revenues are considered to be revenues from contracts with customers. At 31 December 2023 and 2022, there were no customers that individually exceeded 10% of the Group's revenue.

Set out below is the disaggregation of the Group's revenue from contracts with customers:

In thousands of euros	Year ended 31 December	Timing of revenue recognition		Year ended 31 December	Timing of revenue recognition	
		Product or service transferred			Product or service transferred	
Major revenue stream	**2023**	at a point in time	over time	**2022**	at a point in time	over time
Listing	220,642	15,763	204,879	218,380	14,989	203,391
of which						
Primary listing services and other	*175,189*	*4,421*	*170,768*	*178,868*	*4,280*	*174,588*
Corporate services	*45,454*	*11,342*	*34,112*	*39,512*	*10,709*	*28,803*
Trading revenue	490,008	472,910	17,097	514,125	491,609	22,516
of which						
Cash trading	*265,439*	*264,039*	*1,400*	*301,714*	*295,330*	*6,384*
Derivatives trading	*54,168*	*52,720*	*1,448*	*58,380*	*56,743*	*1,637*
Fixed income trading	*107,425*	*93,176*	*14,249*	*92,951*	*78,456*	*14,495*
FX trading	*25,556*	*25,556*	—	*28,406*	*28,406*	—
Power trading	*37,420*	*37,420*	—	*32,674*	*32,674*	—
Investor services	11,375	—	11,375	9,596	—	9,596
Advanced data services	224,774	1,306	223,469	212,053	1,523	210,530
Post-trade	370,183	205,697	164,486	364,519	206,701	157,818
of which						
Clearing	*121,283*	*121,283*	—	*121,393*	*121,393*	—
Custody & Settlement and other	*248,900*	*84,414*	*164,486*	*243,126*	*85,308*	*157,818*
Euronext Technology solutions & other revenue	109,894	624	109,270	100,101	1,020	99,081
Total revenue from contracts with customers	**1,426,876**	**696,300**	**730,576**	**1,418,774**	**715,842**	**702,932**

The significant movements in revenues from contracts with customers during the year, related to the following:

- Cash -and derivatives trading revenue decreased by €32.5 million, which is due to a drop in trading volumes when compared to prior period that included a highly volatile first quarter, driven by the Russian invasion of Ukraine.
- Fixed income trading revenue increased by €14.5 million, which is almost fully attributable to the MTS S.p.A. bond trading platform and driven by increasing interest rates and supportive market volatility in 2023.
- Advanced data services revenues increased by €12.7 million, which is driven by a strong performance of the core data business.
- Technology solutions and other revenue increased by €9.8 million, which is driven by the internalisation of the colocation activity following the migration of Euronext's Core Data Centre to Bergamo.

Set out below is the geographical information of the Group's revenue from contracts with customers:

In thousands of euros	France	Italy	Nether lands	United Kingdom	Belgium	Portugal	Ireland	United States	Norway	Sweden	Denmark	Finland	Germany	Total
2023														
Revenue from contracts with customers (a)	366,155	474,402	175,667	9,603	29,821	36,151	37,592	28,614	187,576	4,790	75,966	484	55	**1,426,876**
2022														
Revenue from contracts with customers (a)	375,945	436,696	184,858	8,029	31,039	34,604	39,104	31,266	199,507	4,137	73,069	520	–	**1,418,774**

(a) *Cash trading, Derivatives trading, Clearing and Advanced data services revenues are attributed to the country where the exchange is domiciled. Revenues from other categories are attributed to the billing entity.*

8.1.2 Contract balances

The Group has recognised the following assets and liabilities related to contracts with customers:

In thousands of euros	31 December 2023	31 December 2022	1 January 2022
Trade receivables (Note 21)	262,975	271,829	290,726
Contract receivables (Note 21)	29,259	32,096	24,695
Contract liabilities (Note 33)	139,299	138,983	150,822

Trade receivables are non-interest bearing and are generally due on terms of 30 to 90 days and represent amounts in respect of billed revenue, for which the Group has an unconditional right to consideration (i.e. only the passage of time is required before payment of the consideration is due).

Trade receivables decreased by €8.9 million, which is mainly attributable to less invoicing of volume related revenues driven by a drop in volatility when compared to prior period.

Contract receivables represent amounts in respect of unbilled revenue, for which the Group has an unconditional right to consideration (i.e. only the passage of time is required before payment of the consideration is due). Contract receivables decreased by €2.8 million, which is mainly attributable to less accrued income at Borsa Italiana Group.

In 2023, €8.6 million (2022: €7.4 million) was recognised as provision for expected credit losses on trade and contract receivables. The increase in loss allowance provision, was primarily due to increased risk on specific debtors.

Contract liabilities primarily relate to received consideration (or an amount of consideration is due) from customers for the initial (or subsequent) listing of equity securities, bond lifetime fees, indices licenses, software maintenance & hosting and corporate services. In 2023, contract liabilities remained relatively stable with a slight increase of €0.3 million.

Revenue recognised in the reporting period that was included in the contract liability balance at the beginning of the period amounted to €70.2 million (2022: €74.8 million). The amount of revenue recognised in the reporting period from performance obligations satisfied (or partially satisfied) in previous periods was considered not material (2022: not material).

8.1.3 Performance obligations

Information about the Group's performance obligations are described in Note 3 'Accounting policies and judgements'.

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) are as follows:

In thousands of euros	31 December 2023	31 December 2022
Within one year	81,082	76,855
More than one year	66,874	72,595
Total	**147,956**	**149,450**

The remaining performance obligations expected to be recognised in more than one year primarily relate to the initial (or subsequent) listing of equity securities and bond lifetime fees which are recognised over the related listing period. Other performance obligations included in this category are software maintenance & hosting contracts, market data and Indices license contracts and corporate services license contracts. The increase in remaining performance obligations to be satisfied within one year is primarily linked to an increased contract portfolio at corporate services business. The decrease in remaining performance obligations to be satisfied in more than one year is related to a declining listing admission fees balance, as a result of less IPOs in 2023. Furthermore, the shrinking term of certain long-term technology solutions contacts over time also contributes to the decrease.

8.2 Net treasury income through CCP business

Income recognised in the CCP clearing business executed by Euronext Clearing includes net treasury income earned on margin and default funds, held as part of the risk management process.

For the year ended 31 December 2023, 'underlying' net treasury income through CCP business amounted to €46.7 million (2022: €44.0 million) and is the result of gross interest income of €785.4 million (2022: €60.9 million), less gross interest expense of €738.7 million (2022: €16.8 million) (see Note 35). In a context of positive interest rates, the Group realized total interest earnings from Central Bank and LCH deposits of €778.5 million and a net treasury income from financial assets of €2.1 million. The Group recognised total interests paid on clearing members' margin and default fund as treasury expense, which amounted to €733.9 million.

In July 2022, the Group partially disposed of the debt investment portfolio held at Euronext Clearing. The related revaluation loss of €48.9 million was recycled from Other Comprehensive Income to 'non-underlying' net treasury income (see Note 12).

8.3 Other income

Other income of €1.2 million (2022: €4.9 million) primarily consists of transitional income from services provided by Borsa Italiana Group to London Stock Exchange Group (LSEG) to facilitate the transition of ownership following the acquisition of Borsa Italiana Group.

Transitional Service Agreements ("TSAs") were established, providing for temporary services rendered to or received from LSEG. Each individual service is priced separately, generally on a fixed fee basis, based on actual usage or mutually agreed service level. The agreement was established on arm's length basis.

Services rendered to LSEG primarily include technology and various ancillary services. All such services to LSEG are transitional and, accordingly, the related income from LSEG phased out during 2023.

Expenses for services received from LSEG under this agreement are recognised in other operational expenses (see Note 11). These services will be phased out after the migration of Borsa Italiana Group to Euronext trading platform Optiq® is completed in 2024.

Note 9. Salaries and employee benefits

	Year ended 31 December 2023			Year ended 31 December 2022		
In thousands of euros	Underlying items	Non-Underlying items	Total	Underlying items	Non-Underlying items	Total
Salaries and other short term benefits	(222,538)	(11,548)	(234,086)	(212,764)	(5,986)	(218,750)
Social security contributions	(67,385)	(1,192)	(68,577)	(60,070)	(110)	(60,180)
Share-based payment costs	(14,378)	–	(14,378)	(13,994)	–	(13,994)
Pension cost - defined benefit plans	(8,385)	(190)	(8,575)	(7,590)	(22)	(7,612)
Pension cost - defined contribution plans	(6,799)	(1)	(6,800)	(6,641)	160	(6,481)
Total salaries and employee benefits	**(319,485)**	**(12,931)**	**(332,416)**	**(301,059)**	**(5,958)**	**(307,017)**

Underlying salaries and employee benefits increased, primarily due to the increase in FTE when compared to prior period.

Non-underlying salaries and employee benefits mainly related to termination expenses linked to the integration of the Borsa Italiana Group activities with those of the Group and termination expenses in the various other Euronext entities (see Note 12).

At the end of the year, the number of employees, based on full-time equivalents (FTE) stood at 2,297 (2022: 2,203).

In 2023, 'Share based payments costs' primarily contain costs related to the LTI Plans 2020, 2021, 2022 and 2023. Details of these plans are disclosed in Note 28.

Note 10. Depreciation and amortisation

	Year ended 31 December 2023			Year ended 31 December 2022		
In thousands of euros	Underlying items	Non-Underlying items	Total	Underlying items	Non-Underlying items	Total
Depreciation of tangible fixed assets	(18,925)	(3,242)	(22,167)	(16,528)	(2,291)	(18,819)
Amortisation of intangible fixed assets	(33,874)	(89,125)	(122,999)	(29,801)	(85,555)	(115,356)
Depreciation of right-of-use assets	(21,416)	(3,549)	(24,965)	(22,500)	(3,516)	(26,016)
Total depreciation and amortisation	**(74,215)**	**(95,916)**	**(170,131)**	**(68,829)**	**(91,362)**	**(160,191)**

Underlying depreciation and amortisation increased, primarily due to the (phased) go-live of several internally developed software assets.

Non-underlying depreciation and amortisation mainly related to amortisation of acquired intangible assets (PPA) and accelerated depreciation of the right-of-use asset of the datacentre in Basildon (see Note 12).

Note 11. Other operational expenses

In thousands of euros	Year ended 31 December 2023			Year ended 31 December 2022		
	Underlying items	Non-Underlying items	Total	Underlying items	Non-Underlying items	Total
Systems and communications	(94,856)	(7,766)	(102,622)	(116,676)	(5,248)	(121,924)
Professional services	(58,260)	(18,209)	(76,469)	(58,740)	(12,493)	(71,233)
Clearing expenses (a)	(34,502)	—	(34,502)	(35,604)	—	(35,604)
Accommodation	(17,913)	(799)	(18,712)	(13,533)	12	(13,521)
Other expenses (b)	(85,025)	(38,593)	(123,618)	(80,532)	(3,530)	(84,062)
Total other operational expenses	**(290,556)**	**(65,367)**	**(355,923)**	**(305,085)**	**(21,259)**	**(326,344)**

(a) Clearing expenses consist of the fees paid to LCH SA for services received under the Derivatives Clearing Agreement.
(b) Other expenses include marketing, taxes, insurance, travel, professional membership fees, corporate management and other expenses.

Underlying other operational expenses decreased, primarily due to a significant drop in expenses for services received from LSEG under the TSA agreements, which include the use of operational systems and infrastructure, as well as certain market data, hosting, connectivity and other services.

These services will be phased out after the migration of Borsa Italiana Group to Euronext trading platform Optiq® is completed in 2024. For the year ended 31 December 2023, approximately €2.7 million of transitional costs were recognised (2022: approximately €10.4 million).

Non-underlying other operational expenses included the termination fees and migration fees of €36.6 million related to the termination of the Derivatives Clearing Agreement with LCH SA. Furthermore, it comprises cost incurred to integrate the Borsa Italiana Group activities with those of the Group and costs related to acquisitions that change the perimeter of the Group (see Note 12).

Note 12. Non-underlying items

In thousands of euros	Year ended 31 December 2023	31 December 2022
Non-underlying revenues and income		
Realisation of fair value changes upon disposal of debt investments a)	—	(48,951)
	—	**(48,951)**
Non-underlying salaries and employee benefits		
Integration -and double run costs b)	(8,836)	(6,472)
Restructuring costs	(4,095)	514
	(12,931)	**(5,958)**
Non-underlying depreciation and amortisation		
Integration -and double run costs b)	(11,152)	(6,912)
Amortisation and impairment of acquired intangible assets (PPA) c)	(81,913)	(83,664)
Amortisation and impairment of other assets	(2,851)	(786)
	(95,916)	**(91,362)**
Non-underlying other operational expenses		
Integration -and double run costs b)	(61,107)	(16,736)
Acquisition costs d)	(4,710)	(3,426)
Litigation (provisions)/settlements	450	(549)
Other	—	(548)
	(65,367)	**(21,259)**
Non-underlying non-operating items e)		
Finance costs	(31)	—
(Loss)/gain on sale of subsidiaries	(206)	2,274
Gain on sale of associate	53,028	—
Impairment of associates and joint ventures	—	(1,526)
	52,791	**748**
Non-underlying items before tax	**(121,423)**	**(166,782)**
Tax on non-underlying items f)	46,228	44,716
Non-controlling interest	4,088	4,585
Non-underlying profit / (loss) for the period attributable to the shareholders of the Company	**(71,107)**	**(117,481)**

a) *Following a one-off partial disposal of the debt investment portfolio held at Euronext Clearing, the Group recycled the related revaluation loss of €48.9 million from Other Comprehensive Income to net treasury income, during the comparative period.*

b) *The total integration- and double run costs amounted to €81.1 million (2022: €30.1 million), which included the termination fees and migration fees of €36.6 million related to the termination of the Derivatives Clearing Agreement with LCH SA (see Note 2). The remainder of the cost were attributable to significant projects and activities to integrate the Borsa Italiana Group businesses with those of the Group.*

c) *Amortisation of intangible assets that were recorded as a result of acquisitions amounted to €81.9 million (2022: €83.7 million).*

d) *The acquisition costs of €4.8 million mainly related to contemplated acquisitions that would increase the perimeter of the Group. In the comparative period, the acquisition costs of €3.4 million related to the acquisitions of Spafid's Issuer Services Business and the technology businesses of Nexi S.p.A.*

e) *The non-underlying non-operating items comprised €53.0 million of gains on sales of the interests in associates LCH SA and Tokeny S.a.r.l., as well as a settlement payment of €0.2 million related to the finalisation of the sale of MTS Markets International Inc. at end of last year. The comparative period included a €2.3 million gain on sale of the interest in subsidiaries Finance Web Working SAS and MTS Markets International Inc. and a €1.5 million impairment of investment in joint venture LiquidShare.*

f) *After the determination that an item is taxable, the tax impact of the Group's non-underlying items of the individual entities of the Group to which the non-underlying items relate, is computed based on the tax rates applicable to the respective territories in which the entity operates.*

The Group uses its judgment to classify items as non-underlying. The determination of non-underlying items is not measured under EU-IFRS and should be considered in addition to, and not as a substitute for IFRS measures.

Note 13. Net financing income / (expense)

In thousands of euros	Year ended 31 December 2023	31 December 2022
Interest expense (effective interest method)	(34,598)	(36,587)
Interest in respect of lease liabilities	(1,085)	(733)
Other finance costs	—	242
Underlying finance costs	**(35,683)**	**(37,078)**
Non-underlying finance costs	(31)	–
Total finance costs	**(35,714)**	**(37,078)**
Interest income (effective interest method)	30,526	5,806
Total finance income	**30,526**	**5,806**
Interest income from interest rate swaps	—	1,479
Gain / (loss) on disposal of treasury investments	4,721	(2,307)
Net foreign exchange (loss)/gain	487	137
Other net financing result	**5,208**	**(691)**
Total	**20**	**(31,963)**

Underlying finance costs for the year, includes the full year impact of interest expenses on the Senior Unsecured Notes, that are held by the Group.

The recent evolution of ascending interest rates resulted in an increase of interest income (effective interest method), which is primarily incurred on the Group's outstanding cash balances. The interest rates in the comparative period were at significantly lower levels.

Gain/(loss) on disposal of treasury investments includes the impact from changes in fair value of short-term investments in money market funds (see Notes 25 and 35).

The comparative period included interest income from interest rate swaps until the moment of termination of the interest rate swap agreements in May 2022 (see note 23).

The interest income and interest expenses from CCP clearing business assets and liabilities are shown in net treasury income through CCP business (see Note 8.2).

Note 14. Results from equity investments and gain/(loss) on disposals

Result from equity investments

In thousands of euros	Year ended 31 December 2023	31 December 2022
Dividend income	23,500	9,842
Total	**23,500**	**9,842**

In 2023, dividend income relates to dividends received from the Group's non-current equity investments at FVOCI in Euroclear S.A./N.V. and Sicovam Holding S.A.

In 2022, dividend income relates to dividends received from the Group's non-current equity investments at FVOCI in Euroclear S.A./N.V.

(Loss)/gain on disposals

In thousands of euros	Year ended 31 December 2023	31 December 2022
(Loss)/gain on disposal of subsidiaries	(206)	2,274
Gain on disposal of associates	53,028	–
Total	**52,822**	**2,274**

On 6 July 2023, the Group sold its 11.1% investment in associate LCH SA to LCH Group Ltd for consideration of €111.0 million. The investment was held at a carrying amount of €69.4 million, resulting in a gain on disposal of €41.6 million.

On 1 December 2023, the Group sold its 18.93% investment in associate Tokeny S.a.r.l. for an amount of €11.4 million. As the investment was held at a carrying amount of zero million, the full proceeds of the sale were recognised in gain on disposal of associates.

In addition, current period was impacted by a settlement payment of €0.2 million related to the finalisation of the sale of subsidiary MTS Markets International Inc. at end of last year.

In the comparative period, the Group disposed its interests in subsidiaries Finance Web Working SAS and MTS Markets International Inc.

The proceeds from the sale of Finance Web Working SAS were €0.8 million (net of cash), which resulted in a loss on disposal of €0.8 million.

The proceeds from the sale of MTS Markets International Inc. were €7.8 million, whereas the combined net assets disposed of amounted to €4.7 million. This resulted in a gain on disposal of €3.1 million.

Note 15. Income tax expense

	Year ended	
In thousands of euros	**31 December 2023**	**31 December 2022**
Current tax expense	(191,230)	(178,921)
Deferred tax	28,533	15,316
Total	**(162,697)**	**(163,605)**

The actual tax charge incurred on the Group's profit before income tax differs from the theoretical amount that would arise using the weighted average tax rates applicable to profit before income tax of the consolidated entities as follows:

Reconciliation of effective tax charge

	Year ended	
In thousands of euros	**31 December 2023**	**31 December 2022**
Profit before income tax	699,112	614,246
Income tax calculated at domestic tax rates applicable to profits in the respective countries	(177,983)	(148,079)
Tax effects of:		
(De) recognition tax losses (a)	(296)	(543)
Non-deductible expenses (b)	(5,741)	(204)
Other tax exempt income (c)	25,025	(15)
Over/(under) provided in prior years (d)	(811)	(4,450)
Other (e)	(2,891)	(10,314)
Total	**(162,697)**	**(163,605)**

(a) *De-recognition of tax losses relates to tax losses in Singapore as it is not considered probable at this moment that these deferred tax assets can be used to offset future taxable income.*

(b) *In 2023 non-deductible expenses mainly relate to substitute tax paid in Italy relating to a goodwill step up, Italian tax on dividends of €2.1 million (2022: 3.1 million) and miscellaneous non-deductible expenses in the various jurisdictions.*

(c) *In 2023 other tax exempt income mainly relates to dividends and sales proceeds from investments as well as the Italian notional interest deduction of €2.6 million (2022: 2.3 million).*

(d) *In 2023 and 2022, 'over/(under) provided in prior years' relates to adjustments to tax following the filing of tax returns.*

(e) *In 2023, Other includes tax surcharges of €2.0 million (in 2022: €2.3 million) in Portugal and France. As from 2023, Italian local taxes (IRAP) of €12.4 million (2022: 9.1 million) are reflected in the statutory tax rate, whereas in 2022 they were reported in 'Other'. Furthermore, the line 'Other' includes an R&D credit of €1.2 million (2022: €1.0 million).*

The effective tax rate decreased from 26.6% for the year ended 31 December 2022 to 23.3% for the year ended 31 December 2023.

OECD Pillar Two model rules

The Group is within the scope of the OECD Pillar Two model rules. Pillar Two legislation was enacted in the Netherlands, the jurisdiction in which Euronext N.V. is incorporated, and will come into effect from 1 January 2024. Since the Pillar Two legislation was not effective at the reporting date, the group has no related current tax exposure.

The Group applies the exception to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes, as provided in the amendments to IAS 12 issued in May 2023.

Under the legislation, the Group is liable to pay a top-up tax for the difference between their GloBE effective tax rate per jurisdiction and the 15% minimum rate.

The Group has assessed its exposure to the Pillar Two legislation for when it comes into effect. The Group expects to apply the safe harbour provisions in all countries in which it operates, with the exception of Ireland. Ireland has a statutory tax rate of 12.5% and a qualifying domestic top up tax is expected to be due. However, this is not expected to be material. Therefore the overall assessment indicates that Pillar 2 is not expected to have a material impact on the Group in the foreseeable future.

Note 16. Property, plant and equipment

In thousands of euros	Land & Buildings	Hardware & IT	Other Equipment (a)	Total
As at 31 December 2021				
Cost	57,025	143,246	76,140	276,411
Accumulated depreciation and impairment	(14,811)	(108,099)	(55,921)	(178,831)
Net book amount	**42,214**	**35,147**	**20,219**	**97,580**
As at 1 January 2022 net book amount	**42,214**	**35,147**	**20,219**	**97,580**
Exchange differences	(1,079)	(17)	(66)	(1,162)
Additions	9,783	13,818	8,266	31,867
Disposals & other	(1,189)	3,228	(2,116)	(77)
Transfers	—	12,301	(12,301)	—
Acquisitions of subsidiaries	—	—	—	—
Depreciation charge (Note 10)	(1,230)	(15,106)	(2,483)	(18,819)
As at 31 December 2022 net book amount	**48,499**	**49,371**	**11,519**	**109,389**
As at 31 December 2022				
Cost	60,528	164,215	69,771	294,514
Accumulated depreciation and impairment	(12,029)	(114,844)	(58,252)	(185,125)
Net book amount	**48,499**	**49,371**	**11,519**	**109,389**
As at 1 January 2023 net book amount	**48,499**	**49,371**	**11,519**	**109,389**
Exchange differences	(1,442)	(104)	(51)	(1,597)
Additions	1,115	21,795	4,793	27,703
Disposals & other	—	3	(2)	1
Transfers	—	828	216	1,044
Depreciation charge (Note 10)	(1,409)	(17,514)	(3,244)	(22,167)
As at 31 December 2023 net book amount	**46,763**	**54,379**	**13,231**	**114,373**
As at 31 December 2023				
Cost	59,908	177,670	77,036	314,614
Accumulated depreciation and impairment	(13,145)	(123,291)	(63,805)	(200,241)
Net book amount	**46,763**	**54,379**	**13,231**	**114,373**

(a) Other Equipment includes building fixtures and fitting, lease improvements and work in progress.

In 2023 and 2022, the additions in Property Plant and Equipment were primarily related to the investments made to the Oslo Børs building and purchases of Hardware and IT in relation to the data centre in Bergamo.

The transfer included in the comparative period, of €12.3 million from other equipment to hardware & IT mainly related to work in progress that was put into use at the go-live of the data centre in Bergamo in June 2022.

Note 17. Leases

The Group leases offices in the various locations from which the Group operates its business, IT-hardware equipment such as data servers, racks and mainframes and leases of other equipment for use by its staff in offices. Leases of offices generally have an average lease term of 4 years, while hardware IT equipment generally have an average lease term of 3 years. Rental contracts are typically made for fixed periods, but may occasionally have extension options. Furthermore, the Group has very limited leases that contain variable lease payments and has no leases that are exposed to residual value guarantees. Payments associated with short-term leases (containing a lease term of 12 months or less) and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss.

17.1 Amounts recognised in the balance sheet

Set out below are the carrying amounts of right-of-use assets recognised and the movements during the period:

In thousands of euros	Right-of-use assets Building	Equipment	Other	Total
At 1 January 2022	**50,190**	**15,978**	**–**	**66,168**
Additions	1,068	1,122	–	2,190
Depreciation charge (see Note 10)	(21,128)	(4,888)	–	(26,016)
Transfers	–	–	–	–
Exchange impacts and other	(11)	(41)	–	(52)
At 31 December 2022	**30,119**	**12,171**	**–**	**42,290**
Additions	37,781	769	–	38,550
Depreciation charge (see Note 10)	(20,007)	(4,958)	–	(24,965)
Transfers	–	–	–	–
Exchange impacts and other	(146)	10	–	(136)
At 31 December 2023	**47,747**	**7,992**	**–**	**55,739**

Set out below are the carrying amounts of lease liabilities and the movements during the period:

In thousands of euros	2023	2022
At 1 January	**50,114**	**71,684**
Additions	37,924	1,904
Acquisition of subsidiary	–	–
Accretion of interest	1,085	733
Payments	(29,508)	(24,150)
Exchange impacts and other	(142)	(57)
At 31 December	**59,473**	**50,114**
Of which are:		
Non-current lease liabilities	37,314	21,648
Current lease liabilities	22,159	28,466

The maturity analysis of the undiscounted lease liabilities are as follows:

In thousands of euros	Less than 1 year	between 1 and 3 years	between 3 and 5 years	More than 5 years	Total
2023					
Lease liabilities	22,865	18,671	11,995	13,069	66,600
2022					
Lease liabilities (a)	28,786	14,924	5,285	2,163	51,158

(a) The figures for the comparative period were adjusted, as these were onerously reflecting 'discounted' lease liabilities, whereas 'undiscounted' lease liabilities should have been disclosed.

17.2 Amounts recognised in the statement of profit or loss

The statement of profit or loss shows the following amounts related to leases:

In thousands of euros	2023	2022
Depreciation charge of right-of-use assets		
Building	(20,007)	(21,127)
Equipment	(4,958)	(4,888)
Other	–	–
Interest expense (included in finance cost)	(1,085)	(733)
Expenses related to short-term leases (included in other operational expenses)	(221)	(289)
Expenses related to leases of low-value asset (included in other operational expenses)	(1,046)	(920)
Total	**(27,317)**	**(27,957)**

The total cash outflow for leases in 2023 was €29.7 million (2022: €24.6 million). The Group’s exposure to potential future cash outflows related to variable lease payments, extension or termination options and residual value guarantees was not material.

Note 18. Goodwill and other intangible assets

In thousands of euros	Goodwill	Internally developed software	Purchased softw. Constr. in Pr. Patents & TrMr	Fair value adjustment Intangible assets recognised on acquisition of subsidiaries: Software	Customer Relations	Brand Names (b)	Total
As at 31 December 2021							
Cost	4,037,560	184,136	220,022	171,228	2,048,011	37,675	6,698,632
Accumulated amortisation and impairment	(54,369)	(108,976)	(198,249)	(42,729)	(71,250)	(7,215)	(482,788)
Net book amount	**3,983,191**	**75,160**	**21,773**	**128,499**	**1,976,761**	**30,460**	**6,215,844**
As at 1 January 2022 net book amount	**3,983,191**	**75,160**	**21,773**	**128,499**	**1,976,761**	**30,460**	**6,215,844**
Exchange differences	(18,425)	(31)	(4)	(1,094)	(7,792)	204	(27,142)
Additions	–	66,348	1,302	–	–	–	67,650
Impairment charge / write off	–	–	–	–	–	–	–
Transfers and other	–	372	295	–	–	–	667
Acquisitions of subsidiaries	60,257	–	–	448	5,621	–	66,326
Sales of subsidiaries	(2,163)	–	–	–	–	–	(2,163)
Amortisation charge (Note 10)	–	(24,922)	(6,871)	(21,540)	(60,276)	(1,747)	(115,356)
As at 31 December 2022 net book amount	**4,022,860**	**116,927**	**16,495**	**106,313**	**1,914,314**	**28,917**	**6,205,826**
As at 31 December 2022							
Cost	4,077,182	268,349	218,380	157,924	2,044,521	31,828	6,798,184
Accumulated amortisation and impairment	(54,322)	(151,422)	(201,885)	(51,611)	(130,207)	(2,911)	(592,358)
Net book amount	**4,022,860**	**116,927**	**16,495**	**106,313**	**1,914,314**	**28,917**	**6,205,826**
As at 1 January 2023 net book amount	**4,022,860**	**116,927**	**16,495**	**106,313**	**1,914,314**	**28,917**	**6,205,826**
Exchange differences	(34,696)	(458)	(65)	(1,426)	(13,283)	(420)	(50,348)
Additions	–	74,909	424	–	–	–	75,333
Impairment charge / write off	–	–	–	–	–	–	–
Transfers and other (a)	–	8,329	(10,234)	–	–	–	(1,905)
Acquisitions of subsidiaries (c) (Note 5)	(11,160)	–	–	10,137	3,268	–	2,245
Sales of subsidiaries	–	–	–	–	–	–	–
Amortisation charge (Note 10)	–	(36,976)	(2,468)	(22,239)	(59,569)	(1,747)	(122,999)
As at 31 December 2023 net book amount	**3,977,004**	**162,731**	**4,152**	**92,785**	**1,844,730**	**26,750**	**6,108,152**
As at 31 December 2023							
Cost	4,031,263	477,832	74,783	165,548	2,032,571	31,408	6,813,405
Accumulated amortisation and impairment	(54,259)	(315,101)	(70,631)	(72,763)	(187,841)	(4,658)	(705,253)
Net book amount	**3,977,004**	**162,731**	**4,152**	**92,785**	**1,844,730**	**26,750**	**6,108,152**

a) Following review of the intangible assets related to Borsa Italiana Group, the Group has transferred 'Purchased software' to 'Internally developed software' at a net book value of €10.4 million, as these intangible assets were onerously included as 'Purchased software' when their correct classification is 'Internally developed software'.

b) As per 31 December 2023, brand names include brands with a finite useful live for an amount of €0.9 million (2022: €3.6 million).

c) Includes the impact of the finalisation of the purchase price allocation related to the acquisition of Nexi S.p.A. technology businesses, as explained in Note 5.

In 2023, the additions in internally developed software investments primarily related to the ongoing implementation of Borsa Italiana Group to Euronext's trading platform Optiq®, the expansion of clearing activities to all Euronext markets by Euronext Clearing, the pan-Europeanisation of Euronext CSDs, and several digital ambition projects within the Group. Furthermore, no indicators of impairment of intangible assets with a finite useful life were identified and as such no detailed impairment test was performed. For intangible assets with an indefinite useful life the impairment tests did not lead to an/any impairment.

Goodwill impairment test

Goodwill is monitored and tested for impairment at the lowest CGU Group level of the Group to which goodwill acquired in a business combination is allocated (see Note 3). Following the acquisitions of Euronext FX (former FastMatch Inc.) in 2017 and Nord Pool Holding AS in 2020 and the allocation of goodwill from those transactions to respectively the "FX Trading" CGU and the "Nord Pool" CGU, the Group tests goodwill at the level of three CGUs (Groups): "Euronext", "FX Trading" and "Nord Pool". The acquisition of Borsa Italiana Group is included in the Euronext CGU.

Euronext CGU (Group)

The recoverable value of the "Euronext" CGU Group is based on its fair value less cost of disposal, applying a discounted cash flow approach, and corroborated by observation of Company's market capitalisation. The fair value measurement uses significant unobservable inputs and is therefore categorised as a Level 3 measurement under IFRS 13.

Cash flow projections are derived from the 2024 budget and the business plan for 2025. Key assumptions used by management include third party revenue growth, which factors future volumes of European equity markets, the Group's market share, average fee per transaction, and the expected impact of new product initiatives. These assumptions are based on past experience, market research and management expectation of market developments.

For the impairment test performed as of 31 December 2023, revenues have been extrapolated using a perpetual growth rate of 1.5% (2022: 1.4%) after 2024. The weighted average cost of capital applied was 7.5% (2022: 7.2%).

The annual impairment testing of the "Euronext" CGU Group performed at each year-end did not result in any instance where the carrying value of the operating segment exceeded its recoverable amount. Recoverable amount is sensitive to key assumptions. As of 31 December 2023, a reduction to 0% per year of perpetual growth rate, or an increase by 1% per year in discount rate, which management believes are individually reasonably possible changes to key assumptions, would not result in a goodwill impairment. The sensitivity test on the key assumptions defined in 2023 would not result in a goodwill impairment. Possible correlations between each of these parameters were not considered.

FX Trading CGU

The recoverable value of the "FX Trading" CGU is based on its fair value less cost of disposal, applying a discounted cash flow approach. The fair value measurement uses significant unobservable inputs and is therefore categorised as a Level 3 measurement under IFRS 13.

Cash flow projections are derived from the 2024 budget, the business plan for 2025 and extrapolations for 2026 to 2030. Key assumptions used by management include third party revenue growth, which factors future volumes on global Foreign Exchange trading markets, the Group's market share, average fee per transaction, and the expected impact of new product initiatives. These assumptions are based on past experience, market research and management expectation of market developments.

For the impairment test performed as of 31 December 2023, revenues have been extrapolated using a perpetual growth rate of 2.0% (2022: 2.0%) after 2030. The discount rate applied was 7.5% (2022: 7.5%).

The annual impairment testing of the "FX Trading" CGU performed at each year-end did not result in any instance where the carrying value of the operating segment exceeded its recoverable amount. Recoverable amount is sensitive to key assumptions. As of 31 December 2023, a reduction to 0% per year of perpetual growth rate, or an increase by 1% per year in discount rate, which management believes are individually reasonably possible changes to key assumptions, would not result in a goodwill impairment. The sensitivity test on the key assumptions defined in 2023 would not result in a goodwill impairment. Possible correlations between each of these parameters were not considered.

Nord Pool CGU

The recoverable value of the "Nord Pool" CGU is based on its fair value less cost of disposal, applying a discounted cash flow approach. The fair value measurement uses significant unobservable inputs and is therefore categorised as a Level 3 measurement under IFRS 13.

Cash flow projections are derived from the 2024 budget, the business plan for 2025 and extrapolations for 2026 to 2030. Key assumptions used by management include third party revenue growth, which factors future volumes on day ahead and intraday physical energy markets, the Group's market share, average fee per transaction, and the expected impact of new product initiatives. These assumptions are based on past experience, market research and management expectation of market developments.

For the impairment test performed as of 31 December 2023, revenues have been extrapolated using a perpetual growth rate of 1.4% (2022: 1.3%) after 2030. The discount rate applied was 7.5% (2022: 7.5%).

The annual impairment testing of the "Nord Pool" CGU performed at year-end did not result in any instance where the carrying value of the operating segment exceeded its recoverable amount. Recoverable amount is sensitive to key assumptions. As of 31 December 2023, a reduction to 0% per year of perpetual growth rate, or an increase by 1% per year in discount rate, which management believes are individually reasonably possible changes to key assumptions, would not result in a goodwill impairment. The sensitivity test on the key assumptions defined in 2023 would not result in a goodwill impairment. Possible correlations between each of these parameters were not considered.

Note 19. Deferred income tax

The analysis of deferred tax assets and deferred tax liabilities is as follows:

In thousands of euros	2023	2022
Deferred income tax assets (a)	31,258	18,917
Deferred income tax liabilities (a)	(531,895)	(552,574)
Total net deferred tax assets (liabilities)	**(500,637)**	**(533,657)**

(a) *As shown in the balance sheet, after offsetting deferred tax assets and liabilities related to the same taxable entity.*

In thousands of euros	2023	2022
Deferred tax assets / (liabilities):		
Property, plant and equipment	(477)	(2,384)
Intangible assets (a)	(523,616)	(552,237)
Investments (b)	(31,628)	(28,321)
Provisions and employee benefits	24,232	12,975
Other (c)	30,158	36,272
Loss carried forward (d)	694	38
Deferred tax assets (net)	**(500,637)**	**(533,657)**

(a) *The balance mainly relates to the recognition of a deferred tax liability resulting from the intangible assets recognised upon the acquisition of Borsa Italiana Group in 2021.*
(b) *The investments mainly relate to the valuation of assets measured at fair value through other comprehensive income (FVOCI).*
(c) *The line 'Other' primarily relates to the tax impact from contract liabilities of €15.6m million (2022: €20.2 million), currency movements on intercompany loans (NOK, GBP and USD) of €8.2m million (2022: €7.4 million) and intra group accrued unpaid interest of €5.5 million (2022: €6.9 million).*
(d) *Losses carry forward relate mainly to tax losses carry forward recognised by investments in Italy and Germany.*

With effect from 1 April 2023, the United Kingdom's corporate tax rate increased to 25% (2022: 19%). The deferred tax assets and liabilities have been recognised at prevailing rates in the various countries.

In thousands of euros	2023	2022
Balance at beginning of the year	**(533,657)**	**(554,942)**
Recognised in income statement	28,533	15,316
Reclassifications and other movements (a)	(36)	10,499
Exchange differences and other	3,187	4,921
Charge related to other comprehensive income	1,336	(9,451)
Balance at end of the year	**(500,637)**	**(533,657)**

(a) *In 2022, the line 'Reclassifications and other movements' includes rate impacts that affected the deferred tax liability resulting from the intangible assets recognised upon the acquisition of Borsa Italiana Group in 2021.*

As per 31 December 2023, tax losses totalling €29.4 million (2022: €29.8 million) were not recognised in the UK and Singapore since it is not considered probable, at this moment, that these deferred tax assets can be used to offset future taxable income.

The majority of the net deferred tax asset is expected to be recovered or settled after more than twelve months.

Note 20. Financial assets at fair value through other comprehensive income

In thousands of euros	As at 31 December 2023	As at 31 December 2022
Equity investments		
Euroclear S.A./N.V.	187,577	175,888
Sicovam Holding S.A.	73,483	73,483
Other	1,595	347
Debt investments		
Government bonds	–	28,501
Total	**262,655**	**278,219**

The Group's financial assets at fair value through other comprehensive income include long-term investments in unlisted equity securities, which the Group has irrevocably elected at initial recognition to recognise in this category. In addition, debt securities allocated to the "hold and sell" business model are included in this category. The classification of the measurement within the fair value hierarchy is presented in Note 35.

Euroclear S.A./N.V. and Sicovam Holding S.A.

As of 31 December 2023, the Group holds a 3.53% ownership interest in Euroclear S.A./N.V. (31 December 2022: 3.53%), an unlisted company involved in the settlement of securities transaction and related banking services. The Group also holds a 9.60% ownership interest in Sicovam Holding S.A. (31 December 2022: 9.60%), resulting in an indirect 1.53% interest in Euroclear S.A./N.V. (31 December 2022: 1.53%). The common stock of Sicovam Holding S.A. and Euroclear S.A./N.V. are not listed.

For measuring fair value of its long-term investments in unlisted equity securities in Euroclear S.A/N.V. and Sicovam Holding S.A., the Group applies a weighted approach, using both the Gordon Growth Model (with return on equity and expected dividend growth rate as key non-observable parameters) and recent observed market transactions taking into account an illiquidity discount for the limited number of transactions.

In 2023, this valuation method resulted in a total valuation of Euroclear S.A./N.V. of €5.3 billion (2022: €5.0 billion), and to an increase in fair value of Euronext N.V./S.A.'s direct- and indirect investments of €11.7 million (2022: €42.0 million) in 2023. This revaluation was recorded in Other Comprehensive Income.

Other

In 2023, the Group made an investment in EuroCTP B.V. (incorporated on 23 August 2023), which is a joint initiative of currently 14 European exchanges, respectively exchange groups. EuroCTP B.V. aims to participate in the future selection process for the provision of a consolidated tape (CT) for equities in the European Union.

Government bonds

During 2023, the €28.5 million of long-term investments in secured assets linked to Euronext Clearing's own funds were reclassified to 'other current financial assets' in accordance with their maturity.

These investments consisted of Government Bonds issued by the States of Belgium, France, Ireland, Italy, Holland, Portugal and Spain; and Supranational Securities issued by the European Stability Mechanism and the European Financial Stability Facility, as well as by securities issued by Spanish (Instituto de Credito Oficial) and French (Caisse d'Amortissement de la Dette Sociale) government agencies.

These debt investments were valued at public market prices, with changes in fair value recognised through Other Comprehensive Income.

Note 21. Trade and other receivables

In thousands of euros	2023	2022
Trade receivables	262,975	271,829
Contract receivables	29,259	32,096
Allowance for expected credit losses	(8,585)	(7,348)
Trade and contract receivables net	**283,649**	**296,577**
Tax receivables (excluding income tax)	13,131	8,214
Other receivables	6,735	13,296
Total	**303,515**	**318,087**

Trade receivables are non-interest bearing and generally on terms of 30 to 90 days. Contract receivables represent amounts in respect of unbilled revenue, for which the Group has an unconditional right to consideration (i.e. only the passage of time is required before payment of the consideration is due).

The significant changes in trade and contract receivables are disclosed in Note 8.1.2.

Set out below is the movement in the allowance for expected credit losses of trade and contract receivables:

In thousands of euros	2023	2022
As at 1 January	7,348	4,940
Provision for expected credit losses	1,814	2,844
Receivables written off during the year	(577)	(436)
At 31 December	**8,585**	**7,348**

Management considers the fair value of the trade and other receivables to approximate their carrying value. The significant changes in loss allowance provision are disclosed in Note 8.1.2. The information about the credit exposures of trade and other receivables are disclosed in Note 37.5.1.

Note 22. Other current assets

Other current assets

In thousands of euros	2023	2022
Prepayments	30,128	27,585
Other	–	–
Total	**30,128**	**27,585**

The increase in prepayments mainly related to Borsa Italiana Group.

Note 23. Derivatives financial instruments

The Group may use derivative instruments to manage financial risks relating to its financial positions or risks relating to its ongoing business operations. The Group's risk management strategy and how it is applied to manage risk is further explained in Note 37.

As per 31 December 2023, the derivative financial liability balance includes an impact of €34k (2022: €19k) in Nord Pool related to the effects of foreign exchange spot transactions made to facilitate electricity settlement.

Derivatives designed as hedging instruments

In 2023, the Group had no derivative financial instruments designated as hedging instruments.

Fair value hedge

Until 3 May 2022, the Group had three interest rate swap agreements in place with a total notional amount of €500.0 million whereby the Group received an annual fixed interest rate of 1% and paid a variable rate of six-month EURIBOR, plus a weighted average spread of 0.3825%. The rate applicable to the floating leg of the swap for the aggregated notional amount of €500.0 million was -0.141%. The swaps were being used to reduce the variability of the fair value of the 1% fixed rate Bond (Senior Unsecured note #1) attributable to the change in interest rate, allowing it to transform the fixed rate exposure to floating rate.

There was an economic relationship between the hedged item and the hedging instrument as the terms of the interest rate swaps matched the terms of the fixed rate Bond (i.e., notional amount, maturity, payment and reset dates). The Group had established a hedge ratio of 1:1 for the hedging relationships as the underlying risk of the interest rate swap was identical to the hedged risk component. To assess the hedge effectiveness, the Group compared the changes in the fair value of the hedging instrument against the changes in fair value of the hedged item attributable to the hedged risk.

The hedge ineffectiveness could arise from:

- Different interest rate curve applied to discount the hedged item and hedging instrument
- Differences in timing of cash flows of the hedged item and hedging instrument
- The counterparties' credit risk differently impacting the fair value movements of the hedging instrument and hedged item

On 3 May 2022, the Group terminated its interest rate swap agreements. On termination, the Group cash settled the swap agreements at a carrying amount of €8.9 million and the hedge relationship was discontinued. The accumulated fair value adjustments of €7.7 million will be amortised over the remaining term of the Senior Unsecured Note #1.

During 2023, approximately €2.6 million was amortised, reducing the amount of accumulated fair value adjustments to €3.3 million as at 31 December 2023 (2022: €5.9 million) (see Note 29).

In 2022, the impact of respectively the hedging instrument and the hedged item on the balance sheet immediately before termination of the interest rate swap agreements was as follows:

In thousands of euros	Notional amount	Carrying amount	Line item in the balance sheet	Change in fair value used for measuring ineffectiveness for the period
Interest rate swaps	500,000	(8,886)	Derivative financial instruments	(20,787)

In thousands of euros	Carrying amount	Accumulated fair value adjustments	Line item in the balance sheet	Change in fair value used for measuring ineffectiveness for the period
Senior Unsecured note #1	492,352	(7,648)	Non-current Borrowings	(20,787)

As the hedge was effective, no amounts for ineffectiveness were recognised in 'hedging result' in the Statement of Profit or Loss for the year ended 31 December 2022 (see Note 13).

Impact of hedging on equity

Set out below is the reconciliation of each component of equity and the analysis of Other Comprehensive Income:

In thousands of euros	Foreign currency translation reserve
As at 1 January 2022	**(10,631)**
Changes in fair value of the hedging instrument	–
Foreign exchange forward point excluded from the hedge	–
Foreign currency revaluation of the net foreign operations a)	(26,169)
As at 31 December 2022	**(36,800)**
Changes in fair value of the hedging instrument	–
Foreign exchange forward point excluded from the hedge	–
Foreign currency revaluation of the net foreign operations a)	(50,545)
As at 31 December 2023	**(87,345)**

(a) *The impact was almost fully attributable to foreign currency translations of net foreign operations in NOK*

Note 24. Other current financial assets

In thousands of euros	2023	2022
Deposits > 3 months	32,907	67,242
Government bonds	29,399	69,455
Listed bonds	40,747	26,043
Total	**103,053**	**162,740**

The other current financial assets of the Group consist of short-term deposits with a maturity of more than three months, short-term investments in government bonds including those linked to Euronext Clearing's own funds (see Note 20) and investments in listed bonds held by Euronext Securities Copenhagen.

Note 25. Cash and cash equivalents

Cash and cash equivalents consist of the following:

In thousands of euros	2023	2022
Cash and bank balances	710,327	710,929
Short term investments - deposits / bonds	565,499	183,994
Short term investments - money market funds	172,962	106,159
Total	**1,448,788**	**1,001,082**

Short-term investments are presented as cash and cash equivalents if they have a maturity of three months or less from the date of acquisition and are repayable with 24 hours' notice with no loss of interest. Cash and cash equivalents included an amount of €42.0 million (2021: €47.6 million) for the purpose of the settlement of power purchases at Nord Pool.

The short-term investments in money market funds are measured at fair value with gains and losses arising from changes in fair value included in profit or loss (see Notes 13 and 35).

Note 26. Shareholders' equity

Under the Articles of Association, the Company's authorised share capital amounts to €200,000,001.60 and is divided into 125,000,000 Ordinary Shares and one Priority Share, each with a nominal value of €1.60 per share. All of Euronext's shares have been or will be created under Dutch law.

As of 31 December 2023, the Company's issued share capital amounts to €171,370,070 and is divided into 107,106,294 Ordinary Shares. The Priority Share is currently not outstanding. The fully paid ordinary shares carry one vote per share and rights to dividends, if declared. The Group's ability to declare dividends is limited to distributable reserves as defined by Dutch law.

Number of shares outstanding:

(in numbers of shares)	2023	2022
Issued shares	107,106,294	107,106,294
Treasury shares as at 1 January	**(378,531)**	**(524,629)**
Liquidity contract	–	–
Share buy back	(3,176,382)	–
From share-based payments vesting	114,787	146,098
Treasury shares as at 31 December	**(3,440,126)**	**(378,531)**
Outstanding as at 31 December	**103,666,168**	**106,727,763**

26.1 Reserve own shares

Treasury shares are accounted for at trade date and all held by Euronext N.V.

The movement on the line 'acquisitions of own shares' in the Consolidated Statement of Changes in Equity consists of the impact from transactions by the liquidity provider of €55k gain (2022: €18k loss), minus the impact from transactions under the share repurchase programme, which was €219.1 million in 2023, (2022: nil). Details of these movements are disclosed below at (i) and (ii).

(i) Liquidity provider

Part of the movement in the reserve during the reporting period relates to the transactions in Euronext N.V. shares conducted by the liquidity provider on behalf of the Group under the liquidity contract established (€55k gain in 2023).

The liquidity Agreement (the "Agreement") has been established in accordance with applicable rules, in particular the Regulation (EC) 2273/2003 of the European Commission of 22 December 2003 implementing the directive 2003/6/EC of the European Parliament and Council as regards exemptions for buyback programs and stabilisation of financial instruments, the provisions of article 2:95 of the Book II of Dutch civil code, the provisions of the general regulation of the French Autorité des Marchés Financiers (the "AMF"), the decision of the AMF dated 21 March 2011 updating the Accepted Market Practice n° 2011-07 on liquidity agreements, the Code of Conduct issued by the French Association française des marchés financiers (AMAFI) on 8 March 2011 and approved by the AMF by its aforementioned decision dated 21 March 2011 (the "AMAFI Code") and as the case maybe the relevant Dutch rules applicable to liquidity agreements in particular the regulation on Accepted Market Practices WFT (Regeling gebruikelijke marktpraktijken WFT) dated 4 May 2011 and Section 2.6 of the Book II – General Rules for the Euronext Amsterdam Stock Market (the "Dutch Rules").

As at 31 December 2023, Euronext N.V. holds nil shares under the programme (2022: nil shares).

The movement schedule for the reported years are as follows:

In 2022:

Transaction date	Buy Euronext N.V. shares	Sell Euronext N.V. shares	Average share price	Total value transaction including commissions
(in euro)				
As at 31 December 2021	—			
Purchases January	50,430		€86.20	4,346,842
Sales January		50,430	€86.16	(4,345,058)
Purchases February	42,459		€82.80	3,515,798
Sales February		38,459	€82.87	(3,186,915)
Purchases March	51,553		€83.06	4,282,240
Sales March		47,553	€82.73	(3,933,924)
Purchases April	43,858		€80.92	3,549,208
Sales April		43,858	€81.96	(3,594,457)
Purchases May	61,210		€75.78	4,638,734
Sales May		69,010	€76.23	(5,260,289)
Purchases June	48,782		€77.14	3,763,233
Sales June		48,982	€77.18	(3,780,611)
Purchases July	62,573		€76.92	4,813,310
Sales July		62,523	€77.04	(4,816,844)
Purchases August	57,942		€78.21	4,531,678
Sales August		51,192	€78.35	(4,010,797)
Purchases September	31,960		€69.97	2,236,211
Sales September		25,160	€70.05	(1,762,464)
Purchases October	15,324		€64.12	982,635
Sales October		13,923	€64.70	(900,879)
Purchases November	30,696		€68.35	2,098,224
Sales November		45,197	€68.84	(3,111,330)
Purchases December	36,983		€71.33	2,638,130
Sales December		37,483	€71.37	(2,675,171)
Total buy/sell	**533,770**	**533,770**		**17,501**
Total as at 31 December 2022	**—**			

In 2023:

Transaction date	Buy Euronext N.V. shares	Sell Euronext N.V. shares	Average share price	Total value transaction including commissions
(in euro)				
As at 31 December 2022	–			
Purchases January	66,500		€73.61	4,895,070
Sales January		66,300	€73.70	(4,886,622)
Purchases February	61,534		€75.66	4,655,680
Sales February		58,934	€75.94	(4,475,742)
Purchases March	101,923		€70.39	7,174,022
Sales March		104,723	€70.53	(7,385,685)
Purchases April	53,366		€71.42	3,811,563
Sales April		53,361	€71.44	(3,811,950)
Purchases May	79,555		€68.17	5,422,932
Sales May		70,810	€68.91	(4,879,728)
Purchases June	75,846		€63.90	4,846,407
Sales June		70,596	€63.79	(4,503,436)
Purchases July	68,682		€63.64	4,371,225
Sales July		82,682	€63.76	(5,271,810)
Purchases August	66,277		€67.29	4,459,572
Sales August		63,677	€67.38	(4,290,633)
Purchases September	68,583		€65.19	4,471,029
Sales September		71,083	€65.28	(4,640,341)
Purchases October	62,203		€66.31	4,124,409
Sales October		58,303	€66.21	(3,860,215)
Purchases November	131,049		€72.95	9,559,399
Sales November		135,049	€72.83	(9,835,000)
Purchases December	209,256		€77.89	16,298,419
Sales December		209,256	€77.91	(16,303,186)
Total buy/sell	**1,044,774**	**1,044,774**		**(54,621)**
Total as at 31 December 2023	**–**			

(ii) Share Repurchase Programmes

The Group has entered into a discretionary management agreement with a bank to repurchase Euronext shares within the limits of relevant laws and regulations (in particular EC regulation 2273/2003) and the Group's articles of association to cover the Group's outstanding obligations resulting from employee shares plans for 2020, 2021, 2022 and 2023. The share repurchase programme aims to hedge price risk arising for granted employee share plans.

In addition, on 27 July 2023, the Group announced a share repurchase programme (the 'Programme') for an amount of €200 million (see Note 2). The Programme will be executed in compliance with applicable rules and regulations, including the Market Abuse Regulation 596/2014 and the Commission Delegated Regulation (EU) 2016/1052, and based on the authority granted by the annual general meeting of shareholders on 17 May 2023.

In 2023, the Group repurchased 3,176,382 shares for a total consideration of €219.1 million. In 2022, the Group repurchased no shares.

The movement schedule for the reported years are as follows:

In 2022:

Transaction date	Buy Euronext N.V. shares	Average share price	Total value transaction including commissions
(in euro)			
Purchases 2022			
Total buy/sell	**–**		**–**
Total as at 31 December 2022	**–**		**–**

In 2023:

Transaction date	Buy Euronext N.V. shares	Average share price	Total value transaction including commissions
(in euro)			
Purchases June	218,500	€64.41	14,073,095
Purchases July	111,500	€62.53	6,971,908
Purchases August	427,018	€67.27	28,726,646
Purchases September	479,649	€65.42	31,377,708
Purchases October	725,987	€66.40	48,205,756
Purchases November	712,401	€71.43	50,890,209
Purchases December	501,327	€77.53	38,869,996
Total buy/sell	**3,176,382**		**219,115,318**
Total as at 31 December 2023	**3,176,382**		**219,115,318**

(iii) Share-based payments vesting

In 2023, the Group delivered 114,787 shares with a cost of €9.8 million to employees for whom share plans had vested (2022: 146,098 shares with a cost of €9.7 million). This movement is disclosed on the line 'Other' in the Consolidated Statement of Changes in Equity.

26.2 Legal reserve

Retained earnings are not freely available for distribution for an amount of €72.9 million (2022: €59.8 million) relating to legal reserves (see Note 53).

26.3 Dividend

On 17 May 2023, the Annual General Meeting of shareholders voted for the adoption of the proposed €2.22 dividend per ordinary share, representing a 50% pay-out ratio of net profit adjusted for the net loss realized on the Euronext Clearing Investment portfolio amounting to €35.3 million. On 25 May 2023, the dividend of €237.2 million was paid to the shareholders of Euronext N.V.

Note 27. Earnings per Share (EPS)

Basic earnings per share is calculated by dividing the profit for the period attributable to the shareholders of the Company by the weighted average number of ordinary shares outstanding during the period.

Diluted earnings per share is calculated by dividing the profit for the period attributable to the shareholders of the Company by the weighted average number of ordinary shares outstanding during the period plus the weighted average number of ordinary shares that would be issued on conversion of all the dilutive potential ordinary shares into ordinary shares.

The following table reflects the income and share data used in the basic and diluted EPS calculations:

In thousands of euros	2023	2022
Profit attributable to the shareholders of the Company	513,567	437,827
In number of shares		
Weighted average number of ordinary shares for basic EPS (a)	**106,051,799**	**106,669,451**
Effects of dilution from:		
Share plans	324,539	231,855
Weighted average number of ordinary shares adjusted for the effect of dilution (a)	**106,376,338**	**106,901,306**

(a) The weighted average number of shares takes into account the weighted average effect of changes in treasury shares during the year.

The impact of share plans is determined by the number of shares that could have been acquired at fair value (determined as the average quarterly market price of Euronext's shares) based on the fair value (measured in accordance with IFRS 2) of any services to be supplied to Euronext in the future under these plans.

There have been no other transactions involving ordinary shares or potential ordinary shares between the reporting date and the date of authorisation of these financial statements.

Note 28. Share-based payments

Euronext Long-Term Incentive Plan 2020 ("LTI Plan 2020")

The Restricted Stock Units (RSUs) granted under LTI Plan 2020 fully cliff-vested in 2023.

Euronext Long-Term Incentive Plans (LTI Plan) 2021, 2022 and 2023

Directors and certain employees of the Group benefited from Restricted Stock Units (RSUs) granted by Euronext N.V. under the LTI Plans on their applicable grant dates. RSUs granted under LTI Plans cliff-vest after 3 years, subject to continued employment and a 'positive EBITDA1' performance condition. These equity awards are measured by reference to the grant-date market price of Euronext's common share (grant-date fair value).

In addition to these RSUs granted to all participants in the LTI Plans, Performance RSUs have been awarded to members of the Managing Board and Senior Leadership team. The vesting of these Performance RSUs is subject to two performance conditions:

- 50% of the performance RSUs vests subject to a Total Shareholder Return (TSR) condition;
- 50% of the performance RSUs vests subject to an EBITDA1-based performance condition.

The grant-date fair value of performance shares with a TSR performance condition was adjusted for the possible outcomes of this condition. This has been assessed by applying a Monte Carlo simulation to model possible share prices of Euronext and its peer companies. At the end of each reporting period, the number of vesting performance shares is reconsidered based on the Group's EBITDA1 performance relative to budgeted EBITDA1 and the total cost for the performance RSUs could be adjusted accordingly. Grant-date fair value of RSUs granted under the LTI Plans 2021, 2022 and 2023 reflect the present value of expected dividends over the vesting period.

Movements in the number of shares granted as awards is as follows:

In 2022:

Plan	Year of grant	1 January 2022	Granted	Adjusted (a)	Vested	Forfeited	31 December 2022	Fair value at grant date per share (in €)
LTI, with performance	2019	72,020	–	66,995	(139,015)	–	–	€68.30
LTI, no performance	2019	50,859	–	–	(48,807)	(2,052)	–	€57.94
LTI, with performance	2020	72,056	–	–	–	(5,413)	66,643	€110.64
LTI, no performance	2020	46,891	–	–	–	(5,101)	41,790	€81.30
LTI, with performance (b)	2021	78,435	–	–	–	(5,080)	73,355	€74.84
LTI, no performance (b)	2021	64,711	–	–	–	(7,239)	57,472	€79.98
LTI, with performance (c)	2021	22,963	–	–	–	(1,462)	21,501	€71.72
LTI, with performance (c)	2021	6,350	–	–	–	(580)	5,770	€86.64
LTI, with performance	2022	–	108,229	–	–	(2,153)	106,076	€78.59
LTI, no performance	2022	–	89,187	–	–	(4,293)	84,894	€72.72
Total		**414,285**	**197,416**	**66,995**	**(187,822)**	**(33,373)**	**457,501**	

(a) *Adjustments related to outperformance.*
(b) *LTI Plan 2021-A, with grant date 17 May 2021.*
(c) *LTI Plan 2021-B, with grant date 18 November 2021.*

In 2023:

Plan	Year of grant	1 January 2023	Granted	Adjusted (a)	Vested	Forfeited	31 December 2023	Fair value at grant date per share (in €)
LTI, with performance	2020	66,643	–	32,059	(98,702)	–	–	€110.64
LTI, no performance	2020	41,790	–	–	(39,945)	(1,845)	–	€81.30
LTI, with performance (b)	2021	73,355	–	–	–	(1,051)	72,304	€74.84
LTI, no performance (b)	2021	57,472	–	–	(10)	(4,911)	52,551	€79.98
LTI, with performance (c)	2021	21,501	–	–	–	(1,192)	20,309	€71.72
LTI, with performance (c)	2021	5,770	–	–	(10)	(550)	5,210	€86.64
LTI, with performance	2022	106,076	–	–	–	(2,786)	103,290	€78.59
LTI, no performance	2022	84,894	–	–	(20)	(6,399)	78,475	€72.72
LTI, with performance	2023	–	138,360	–	–	(1,051)	137,309	€57.21
LTI, no performance	2023	–	119,076	–	–	(2,565)	116,511	€59.99
Total		**457,501**	**257,436**	**32,059**	**(138,687)**	**(22,350)**	**585,959**	

(a) Adjustments related to outperformance.
(b) LTI Plan 2021-A, with grant date 17 May 2021.
(c) LTI Plan 2021-B, with grant date 18 November 2021.

Euronext has taken into consideration the fact that the employees will not receive dividends during the vesting period of 3 years. The fair value has been adjusted taking into account the financial loss for the participants to not receive the payment of the dividends during the vesting period.

Share-based payment expenses recognised in the income statement for shares granted for all plans to directors and selected employees in 2023 amounted to €14.4 million (2022: €14.0 million), see Note 9.

Note 29. Borrowings

In thousands of euros	2023	2022
Non-current		
Borrowings		
Senior Unsecured note #1 (a)	496,640	494,048
Senior Unsecured note #2	750,000	750,000
Senior Unsecured note #3	600,000	600,000
Senior Unsecured note #4	600,000	600,000
Senior Unsecured note #5	600,000	600,000
Discount, premium and issue costs	(21,929)	(21,929)
Amortisation discount, premium and issue costs	6,918	5,042
Other	–	–
Total	**3,031,629**	**3,027,161**
Current		
Borrowings		
Accrued interest	17,286	17,370
Total	**17,286**	**17,370**

(a) The Senior Unsecured Note #1 is carried at amortised cost and was adjusted for fair value movements due to the hedged interest rate risk until 3 May 2022 (see Note 23).

Senior Unsecured Note #1

On 3 May 2022, the Group terminated its interest rate swap agreements which were formally designated and qualified as fair value hedges of Senior Unsecured Note #1. On termination, the Group cash settled the swap agreements and the hedge relationship was discontinued.

As from the moment of discontinuation of the fair value hedge, the accumulated fair value adjustments of Senior Unsecured Note #1 is amortised to profit or loss based on a recalculated Effective Interest Rate over the remaining term of Senior Unsecured Note #1. The accumulated fair value adjustments amounted to a negative €3.3 million as per 31 December 2023 (2022: €5.9 million).

Revolving Credit Facility Agreement

On 12 October 2022, the Group executed its two-year extension option to the revolving credit facility agreement (RCF) of €600.0 million. The RCF allows the Group to apply all amounts borrowed by it towards (i) general corporate and/or working capital purposes of the Group, (ii) satisfaction of the consideration payable for an acquisition and/ or (iii) the payment of fees, costs and expense incurred in relation to an acquisition. The revolving credit facility has a remaining maturity of 4 years (November 2027) and bears an interest rate of EURIBOR plus a margin dependent on rating. As per 31 December 2023, the facility remained undrawn.

In case of a downgrading event of Euronext, below BBB- or equivalent by rating agencies, Euronext shall ensure that the leverage ratio (Euronext total net debt to EBITDA[2]) as defined in the Revolving Credit Facility Agreement would not be greater than 4x.

Note 30. Post-employment benefits

The Group operates defined benefit pension plans for its employees, with the most significant plans being in France, Portugal, Norway and Italy. The Group's plans are funded by contributions from the employees and the relevant Group entities, taking into account applicable government regulations and the recommendations of independent, qualified actuaries. The majority of plans have plan assets held in trusts, foundations or similar entities, governed by local regulations and practice in each country. The assets for these plans are generally held in separate trustee administered funds. The benefits provided to employees under these plans are based primarily on years of service and compensation levels.

The French plans relate almost completely to retirement indemnities. French law stipulates that employees are paid retirement indemnities in form of lump sums on the basis of the length of service at the retirement date and the amount is prescribed by collective bargaining agreements.

The Portuguese plan is for both Euronext Lisbon and Interbolsa and is managed by CGD Pensoes – Sociedade Gestora de Fundos de Pensoes SA. The plan was defined benefit based on final pay. The funds covered payment of pensions to employees with a minimum of 5 year service. Annual contributions were based on actuarial calculations. In 2017, the Portuguese defined benefit plan was frozen and replaced by a new defined contribution plan, with an retroactive impact as from 1 January 2017. The old arrangement remains a defined benefit plan, and is disclosed as such in this Note.

The Norwegian plans relate to Oslo Børs VPS and Nord Pool. The plan in Oslo Børs VPS comprises both defined benefit schemes and defined contribution schemes. The general pension plan for employees in Norway is a defined contribution scheme. The defined benefit schemes are mainly related to lifetime pensions for former CEOs of Oslo Børs and VPS, as well as a voluntary early retirement scheme for Oslo Børs which was closed in 2003. Nord Pool has a defined benefit pension plan involving two former employees for which contributions are made in accordance with actuarial calculations. The Norwegian pension plans are in compliance with the Mandatory Occupational Pensions Act.

The Italian plan relates to the Borsa Italiana Group. Following the entry into force of the 2007 Finance Act and related decrees, the severance indemnity (TFR), maturing 1st January 2007 can no longer be retained by the companies that employ more than 50 employees but must be paid to a pension fund or, alternatively, into an open treasury fund opened at the 'National Institute for Social Security' (INPS), according to the option exercised by the employees themselves. This implies that accruals calculated after 1st January 2007 are part of a defined contribution plan because the company's obligation is satisfied by the payment of contributions to pension funds or INPS. The liability regarding the severance indemnity prior to the date mentioned above shall instead continue to represent a defined benefit plan to be valued applying the actuarial method based on the provisions set forth in IAS 19 and is disclosed as such in this Note.

The movement in the defined obligation over the years presented is as follows:

In thousands of euros	Present value of obligation	Fair value of plan assets	Total
As at 1 January 2022	**56,112**	**(23,989)**	**32,123**
(Income) / expense:			
Current service cost	1,431	–	1,431
Interest expense / (income)	730	(306)	424
	2,161	**(306)**	**1,855**
Remeasurements:			
– Return on plan assets, excluding amounts included in interest expense / (income)	–	2,331	2,331
– (Gain) / loss from change in financial assumptions	(12,768)	–	(12,768)
– Experience (gains) / losses	(959)	–	(959)
– Effect of changes in foreign exchange rates and other	(509)	9	(500)
	(14,236)	**2,340**	**(11,896)**
Payments and other significant events:			
– Employer contributions	(1,796)	–	(1,796)
– Benefit payments	(415)	282	(133)
– Acquired in business combination	–	–	–
– Reclassifications and other	(522)	–	(522)
As at 31 December 2022	**41,304**	**(21,673)**	**19,631**
(Income) / expense:			
Current service cost	2,491	–	2,491
Interest expense / (income)	1,515	(857)	658
	4,006	**(857)**	**3,149**
Remeasurements:			
– Return on plan assets, excluding amounts included in interest expense / (income)	–	(1,131)	(1,131)
– (Gain) / loss from change in financial assumptions	1,804	–	1,804
– Experience (gains) / losses	661	–	661
– Effect of changes in foreign exchange rates and other	(12)	44	32
	2,453	**(1,087)**	**1,366**
Payments and other significant events:			
– Employer contributions	(1,666)	–	(1,666)
– Benefit payments	(301)	228	(73)
– Acquired in business combination	700	222	922
– Reclassifications and other	(652)	–	(652)
As at 31 December 2023	**45,844**	**(23,167)**	**22,677**

The defined benefit obligation and plan assets are composed by country as follows:

In thousands of euros	2023 Belgium	Portugal	France	Norway	Italy	Total
Present value of obligation	25	18,825	9,481	11,427	6,086	45,844
Fair value of plan assets	–	(18,689)	(4,087)	(391)	–	(23,167)
Total	**25**	**136**	**5,394**	**11,036**	**6,086**	**22,677**

In thousands of euros	2022 Belgium	Portugal	France	Norway	Italy	Total
Present value of obligation	24	16,762	7,630	12,332	4,556	41,304
Fair value of plan assets	–	(17,145)	(3,912)	(616)	–	(21,673)
Total	**24**	**(383)**	**3,718**	**11,716**	**4,556**	**19,631**

The significant actuarial assumptions were as follows:

	2023 Belgium	Portugal	France	Norway	Italy
Discount rate	3.4%	3.6%	3.5%	3.7%	3.4%
Salary growth rate	0.0%	2.0%	2.5%	0.8%	3.0%
Pension growth rate	0.0%	2.0%	0.0%	3.2%	0.0%

	2022 Belgium	Portugal	France	Norway	Italy
Discount rate	3.5%	4.0%	4.0%	3.6%	3.9%
Salary growth rate	0.0%	2.0%	2.5%	0.7%	3.0%
Pension growth rate	0.0%	0.0%	0.0%	3.0%	0.0%

The Group derives the discount rate used to determine the defined benefit obligation from yields on high quality corporate bonds of the duration corresponding to the liabilities.

As of 31 December 2023, the sensitivity of the defined benefit obligation to changes in the weighted principal assumptions were:

		Impact on defined benefit obligation	
	Change in assumption	**Increase in assumption**	**Decrease in assumption**
Discount rate	0.25%	-3.1%	3.2%
Salary growth rate	0.50%	1.3%	-1.2%
Pension growth rate	0.50%	3.4%	-3.1%

The pension plan assets allocation differs per plan. On a weighted average basis, the allocation was as follows:

	2023		2022	
Plan assets	**Fair value of plan assets** *in thousands of euros*	**Fair value of plan assets** *in percent*	**Fair value of plan assets** *in thousands of euros*	**Fair value of plan assets** *in percent*
Equity securities	5,399	23.3%	7,189	33.2%
Debt securities	16,899	72.9%	13,362	61.7%
Property	423	1.8%	401	1.9%
Investment funds	392	1.7%	619	2.9%
Cash	54	0.2%	102	0.5%
Total	**23,167**	**100%**	**21,673**	**100%**

The maturity of expected benefit payments over the next ten years is as follows:

As at 31 December 2023	Less than a year	Between 1-2 year	Between 2-5 year	Between 5-10 year	Total
Pension benefits	1,952	2,015	5,489	14,164	**23,620**

The weighted average duration of the defined benefit obligation for retirement plans is 14 years at 31 December 2023.

For 2024, the expected obligations contributions are approximately €1.6 million.

Note 31. Provisions

In thousands of euros	Restructuring	Leases	Jubilee	Legal claims	Plan Agents	Others	Total
Changes in provisions							
As at 1 January 2023	**267**	**1,971**	**1,559**	**1,642**	**819**	**1,450**	**7,708**
Additional provisions charged to income statement	4,879	434	109	111	1	485	6,019
Used during the year	(150)	–	(42)	–	(5)	(383)	(580)
Unused amounts reversed	(23)	–	(178)	(219)	–	(91)	(511)
Acquisition of subsidiary	–	–	–	–	–	(87)	(87)
Reclassifications and other	–	–	–	8	–	(8)	–
Exchange differences	(18)	2	–	–	–	(69)	(85)
As at 31 December 2023	**4,955**	**2,407**	**1,448**	**1,542**	**815**	**1,297**	**12,464**
Composition of provisions							
Current	4,820	–	–	20	–	329	5,169
Non Current	135	2,407	1,448	1,522	815	968	7,295
Total	**4,955**	**2,407**	**1,448**	**1,542**	**815**	**1,297**	**12,464**

Restructuring
The restructuring provision relates to employee termination benefits that have an uncertain character. The increase during the year is mostly related to employee termination benefits for leavers in various Euronext entities, with the main impact at Borsa Italiana Group.

Leases
The leases provision relates to estimated future dismantling or removing costs, primarily for the lease of its 'Praetorium' office in Paris.

Jubilee
The Jubilee provision decreased, mainly due to the increase in discount rates.

Legal claims
The legal claims provision relates to individual litigation settlement cases.

Plan Agents
The provision for Plan Agents relates to a retirement allowance for retired stockbrokers in Belgium, which is determined using actuarial assumptions. No cash outflows are expected for 2024.

Others
The 'Others' provision primarily relates to a compensation scheme in Oslo, that gives employees compensation for a change in their historical DB pension arrangements.

Note 32. Trade and other payables

In thousands of euros	2023	2022
Trade payables	149,416	162,482
Social security and other taxes (excluding income tax)	52,630	42,524
Employees' entitlements (a)	92,642	92,417
Accrued expenses	118,377	97,614
Other payables	2,778	1,250
Total	**415,843**	**396,287**

(a) Amounts include salaries payable, bonus accruals, severance (signed contracts) and vacation accruals.

The carrying values of current trade and other payables are reasonable approximations of their fair values. These balances do not bear interest.

Trade payables included an impact of €118.3 million (2022: €116.3 million) related to Nord Pool power purchases.

Note 33. Contract liabilities

In thousands of euros	2023	2022
Listing admission fees	105,002	107,427
Bond lifetime fees	9,268	9,887
Other (a)	25,029	21,669
Total	**139,299**	**138,983**
Current	79,270	75,198
Non Current	60,029	63,785
Total	**139,299**	**138,983**

(a) Includes contract liabilities related to Indices licenses, software maintenance & hosting and corporate services

The contract liabilities primarily relate to received consideration (or an amount of consideration is due) from customers for the initial (or subsequent) listing of equity securities, bond lifetime fees, indices licenses, software maintenance & hosting and corporate services. Contract liabilities are recognised as revenue when the Group performs under the contract.

The significant changes in contract liabilities are disclosed in Note 8.1.2.

Note 34. Geographical information

The geographical information of the Group's revenue from contracts with customers is disclosed in Note 8.1.1. Other geographical information is disclosed below.

In thousands of euros	France	Italy	Netherlands	United Kingdom	Belgium	Portugal	Ireland	United States	Norway	Sweden	Denmark	Finland	Germany	Total
2023														
Property, plant and equipment	8,224	36,528	12,971	1,055	226	11,758	17,236	678	23,887	8	1,501	–	301	114,373
Intangible assets other than Goodwill (a)	646	1,741,845	73,980	3,210	2	2,812	15,758	30,530	198,726	112	63,482	45	–	2,131,148
2022														
Property, plant and equipment	8,068	26,702	19,551	376	238	9,723	17,928	921	24,551	–	1,331	–	–	109,389
Intangible assets other than Goodwill (a)	1,174	1,772,795	61,647	4,512	4	3,779	17,452	34,287	223,302	303	63,579	132	–	2,182,966

(a) Goodwill is monitored at the Group level and therefore not allocated by country.

Note 35. Financial instruments

35.1 Financial instruments by category

The financial instruments held by the Group are set out below.

	As at 31 December 2023				
In thousands of euros	Amortised cost	FVOCI equity instruments	FVOCI debt instruments	FVPL	Total
Financial assets					
CCP trading assets at fair value	–	–	–	14,019,233	14,019,233
Assets under repurchase transactions	144,640,320	–	–	–	144,640,320
Other financial assets traded but not yet settled	–	–	–	2,703,024	2,703,024
Debt instruments at fair value through OCI	–	–	116,286	–	116,286
Other instruments held at fair value	–	–	–	119,746	119,746
Other receivables from clearing members	6,121,477	–	–	–	6,121,477
Cash and cash equivalents of clearing members	15,995,132	–	–	–	15,995,132
Total financial assets of the CCP clearing business	**166,756,929**	**–**	**116,286**	**16,842,003**	**183,715,218**
Financial assets at fair value through OCI	–	262,655	–	–	262,655
Financial assets at amortised cost	3,452	–	–	–	3,452
Trade and other receivables	303,515	–	–	–	303,515
Derivative financial instruments	–	–	–	–	–
Other current financial assets	32,907	–	70,146	–	103,053
Cash and cash equivalents	1,275,826	–	–	172,962	1,448,788
Total	**168,372,629**	**262,655**	**186,432**	**17,014,965**	**185,836,681**
Financial liabilities					
CCP trading liabilities at fair value	–	–	–	14,019,233	14,019,233
Liabilities under repurchase transactions	144,640,320	–	–	–	144,640,320
Other financial liabilities traded but not yet settled	–	–	–	2,703,024	2,703,024
Other payables to clearing members	22,469,668	–	–	–	22,469,668
Total financial liabilities of the CCP clearing business	**167,109,988**	**–**	**–**	**16,722,257**	**183,832,245**
Borrowings (non-current)	3,031,629	–	–	–	3,031,629
Borrowings (current)	17,286	–	–	–	17,286
Derivative financial instruments	–	–	–	34	34
Other current financial liabilities	–	–	–	–	–
Trade and other payables	415,843	–	–	–	415,843
Total	**170,574,746**	**–**	**–**	**16,722,291**	**187,297,037**

The nature and composition of the CCP clearing business assets and liabilities are explained in the accounting policies section in Note 3.

In thousands of euros	As at 31 December 2022 Amortised cost	FVOCI equity instruments	FVOCI debt instruments	FVPL	Total
Financial assets					
CCP trading assets at fair value	–	–	–	7,486,731	7,486,731
Assets under repurchase transactions	134,172,307	–	–	–	134,172,307
Other financial assets traded but not yet settled	–	–	–	8,296	8,296
Debt instruments at fair value through OCI	–	–	1,753,811	–	1,753,811
Other instruments held at fair value	–	–	–	12,315	12,315
Other receivables from clearing members	9,795,350	–	–	–	9,795,350
Cash and cash equivalents of clearing members	13,613,729	–	–	–	13,613,729
Total financial assets of the CCP clearing business	**157,581,386**	**–**	**1,753,811**	**7,507,342**	**166,842,539**
Financial assets at fair value through OCI	–	249,718	28,501	–	278,219
Financial assets at amortised cost	2,312	–	–	–	2,312
Trade and other receivables	318,087	–	–	–	318,087
Derivative financial instruments	–	–	–	–	–
Other current financial assets	67,242	–	95,498	–	162,740
Cash and cash equivalents (a)	894,923	–	–	106,159	1,001,082
Total	**158,863,950**	**249,718**	**1,877,810**	**7,613,501**	**168,604,979**
Financial liabilities					
CCP trading liabilities at fair value	–	–	–	7,486,731	7,486,731
Liabilities under repurchase transactions	134,172,307	–	–	–	134,172,307
Other financial liabilities traded but not yet settled	–	–	–	8,296	8,296
Other payables to clearing members	25,191,350	–	–	–	25,191,350
Total financial liabilities of the CCP clearing business	**159,363,657**	**–**	**–**	**7,495,027**	**166,858,684**
Borrowings (non-current)	3,027,161	–	–	–	3,027,161
Borrowings (current)	17,370	–	–	–	17,370
Derivative financial instruments	–	–	–	19	19
Trade and other payables	396,287	–	–	–	396,287
Total	**162,804,475**	**–**	**–**	**7,495,046**	**170,299,521**

(a) The portion of cash and cash equivalents held in Money Market Funds, which are correctly measured at fair value with gains and losses recognised through profit or loss as per 31 December 2022, have been onerously presented as amortised cost in the above table. As a result, this portion of cash and cash equivalents has been amended to be reflected in the correct column that agrees to the classification of such cash and cash equivalents.

The Group's exposure to various risks associated with the financial instruments is discussed in Note 37. The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial assets mentioned above.

35.2 Fair value measurement

35.2.1 Fair value hierarchy

The table below analyses financial instrument carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1: quoted prices in active markets for identical assets or liabilities
- Level 2: inputs that are based on observable market data, directly or indirectly
- Level 3: unobservable inputs

In thousands of euros	Level 1	Level 2	Level 3	Total
As at 31 December 2023				
Assets				
Financial assets at FVOCI				
Unlisted equity securities	–	–	262,655	262,655
Quoted debt instruments	70,146	–	–	70,146
Quoted debt instruments of CCP clearing business	116,286	–	–	116,286
Financial assets at FVPL				
Derivative instruments of CCP clearing business	14,019,233	–	–	14,019,233
Other instruments of CCP clearing business	2,822,770	–	–	2,822,770
Money market funds	172,962	–	–	172,962
Total assets	**17,201,397**	**–**	**262,655**	**17,464,052**
Liabilities				
Financial liabilities at FVPL				
Derivative instruments of CCP clearing business	14,019,233	–	–	14,019,233
Other instruments of CCP clearing business	2,703,024	–	–	2,703,024
Other derivative instruments (a)	–	34	–	34
Total liabilities	**16,722,257**	**34**	**–**	**16,722,291**

(a) Including foreign exchange spot transactions of €34k in Nord Pool

In thousands of euros	Level 1	Level 2	Level 3	Total
As at 31 December 2022				
Assets				
Financial assets at FVOCI				
Unlisted equity securities	–	–	249,718	249,718
Quoted debt instruments	123,999	–	–	123,999
Quoted debt instruments of CCP clearing business	1,753,811	–	–	1,753,811
Financial assets at FVPL				
Derivative instruments of CCP clearing business	7,486,731	–	–	7,486,731
Other instruments of CCP clearing business	20,611	–	–	20,611
Money market funds (a)	106,159	–	–	106,159
Total assets	**9,491,311**	**–**	**249,718**	**9,741,029**
Liabilities				
Financial liabilities at FVPL				
Derivative instruments of CCP clearing business	7,486,731	–	–	7,486,731
Other instruments of CCP clearing business	8,296	–	–	8,296
Other derivative instruments (b)	–	19	–	19
Total liabilities	**7,495,027**	**19**	**–**	**7,495,046**

(a) The portion of cash and cash equivalents held in Money Market Funds, which are correctly measured at fair value with gains and losses recognised through profit or loss as per 31 December 2022, have been onerously presented as amortised cost in the above table. As a result, this portion of cash and cash equivalents has been amended to be reflected in the correct column that agrees to the classification of such cash and cash equivalents.

(b) Including foreign exchange spot transactions of €19k in Nord Pool.

The Group's policy is to recognise transfers into and transfers out of fair value hierarchy levels at the end of the reporting period. There were no transfers between the levels of fair value hierarchy in 2023 and 2022. The Group did not measure any financial assets or financial liabilities at fair value on a non-recurring basis as at 31 December 2023.

35.2.2. Fair value measurements using quoted prices in active markets for identical assets or liabilities (level 1)

The quoted debt instruments primarily relate to investments in listed bonds held by Euronext Securities Copenhagen and Euronext Clearing's own fund investments in government bonds.

The quoted debt instruments of CCP clearing business represent an investment portfolio in predominantly government bonds funded by the margins and default funds deposited by members of the CCP clearing business.

The derivative instruments of CCP clearing business comprise open transactions not settled at the reporting date on the derivatives market in which Euronext Clearing operates as a central counterparty. The other instruments of CCP clearing business include clearing member trading balances for equity and debt instruments that are marked to market on a daily basis.

Investments in funds are solely composed of money market funds which are redeemed within a three-month cycle after acquisition and have contractual cash flows that do not represent solely payments of principal and interest.

Fair values of the instruments mentioned above are determined by reference to published price quotations in an active market.

35.2.3. Fair value measurements using observable market data, directly or indirectly (level 2)

Foreign exchange spot transactions comprises agreements between two parties to buy one currency against selling another currency at an agreed price for settlement on the spot date. Fair value is based on the foreign exchange rates at the balance sheet date.

35.2.4. Fair value measurements using unobservable inputs (level 3)

The following table presents the changes in level 3 instruments for the period ended 31 December 2023, which are recognised in the line item 'Financial assets at fair value through other comprehensive income' in the balance sheet. Revaluations are reflected in the line 'Change in value of equity investments at fair value through other comprehensive income' in the statement of comprehensive income:

In thousands of euros	Unlisted equity securities	Contingent consideration payables	Redemption liability	Total
As at 31 December 2021	**207,693**	**—**	**—**	**207,693**
Revaluations recognised in OCI	42,054	—	—	42,054
Revaluations recognised in P&L	—	—	—	—
Additions / (disposals)	—	—	—	—
Payments	—	—	—	—
Acquisitions / (incurrences)	—	—	—	—
Exchange differences and other	(29)	—	—	(29)
As at 31 December 2022	**249,718**	**—**	**—**	**249,718**
Revaluations recognised in OCI	11,865	—	—	11,865
Revaluations recognised in P&L	—	—	—	—
Additions / (disposals)	1,214	—	—	1,214
Payments	—	—	—	—
Acquisitions / (incurrences)	—	—	—	—
Exchange differences and other	(142)	—	—	(142)
As at 31 December 2023	**262,655**	**—**	**—**	**262,655**

Valuation process

Concerning the valuation process for fair value measurement categorised within level 3 of the fair value hierarchy, the Group's central treasury department collects and validates the available level 3 inputs and performs the valuation according to the Group's valuation methodology for each reporting period. The fair value estimates are discussed with-, and challenged by the Group Finance Director and the Chief Financial Officer. Periodically the values of investments categorised in "level 3" are validated by staff with extensive knowledge of the industry in which the invested companies operate. Although valuation techniques are applied consistently as a principle, Management, upon advice from the Group's valuation experts, may decide to replace a valuation technique if such a change would improve the quality or the reliability of the valuation process.

Unlisted equity securities in Euroclear S.A./N.V. and Sicovam Holding S.A.

For measuring fair value of its long-term investments in unlisted equity securities in Euroclear S.A/N.V. and Sicovam Holding S.A., the Group applied a weighted approach, using both the Gordon Growth Model (with return on equity and expected dividend growth rate as key non-observable parameters) and recent observed market transactions taking into account an illiquidity discount for the limited number of transactions.

In 2023, the high interest rates environment led to a sharp increase of net interest earnings at Euroclear, which is predominantly driven by interests linked to frozen assets as a result of Russian sanctions and countermeasures.

The European Commission is contemplating various options to use the profits generated by sanctioned amounts held by financial institutions, including Euroclear, for the financing of Ukraine's reconstruction.

Since considerable uncertainties persist, Euroclear considers it necessary to separate the estimated sanction-related earnings from the 'underlying' financial results when assessing the company's performance and resources.

For this reason, the Group used the 'underlying' financial results published by Euroclear (i.e. excluding Russian-sanctions related assets/earnings), as an input for its primary valuation technique.

In addition, for measuring the fair value of Sicovam Holding S.A, the Group applied an illiquidity discount as an unobservable input for which a sensitivity impact of +10%/(-10%) would amount to a decrease or (increase) of €8.2 million in the fair value (2022: €8.2 million). More information on the investments is further disclosed in Note 20.

The key assumptions used in the Gordon Growth Model valuation model are shown in the tables below. The sensitivity analysis shows the impact on fair value using the most favorable combination (increase), or least favorable combination (decrease) of the unobservable inputs per investment in unlisted equity securities.

2023:

In thousands of euros	Fair value at 31 December 2023	Unobservable inputs *)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value	
				Increase	decrease
Euroclear S.A./N.V.	187,577	Return on equity	9.7% - 10.7% (10.2%)	5,668	(5,004)
		Expected dividend growth rate	1.0% - 2.0% (1.5%)		
Sicovam Holding S.A.	73,483	Return on equity	9.7% - 10.7% (10.2%)	2,043	(2,107)
		Expected dividend growth rate	1.0% - 2.0% (1.5%)		

**) There were no significant inter-relationships between unobservable inputs that materially affect fair value*

2022:

In thousands of euros	Fair value at 31 December 2022	Unobservable inputs *)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value	
				Increase	decrease
Euroclear S.A./N.V.	175,888	Return on equity	9.2% - 10.2% (9.7%)	4,563	(5,039)
		Expected dividend growth rate	0.5% - 1.5% (1.0%)		
Sicovam Holding S.A.	73,483	Return on equity	9.2% - 10.2% (9.7%)	1,775	(1,960)
		Expected dividend growth rate	0.5% - 1.5% (1.0%)		

**) There were no significant inter-relationships between unobservable inputs that materially affect fair value*

35.2.5. Fair values of other financial instruments

The Group also has a number of financial instruments which are not measured at fair value in the balance sheet. For these instruments the fair values approximate their carrying amounts, except for non-current borrowings which fair value amounts to €2,683 million as per 31 December 2023 (2022: €2,446 million).

As per 31 December 2023, trade and other receivables included €76.9 million (2022: €70.3 million) of Nord Pool power sales positions and trade and other payables included €118.3 million (2022: €116.3 million) of Nord Pool power purchases positions.

35.3. Net Treasury Income through CCP business by classification

For the year ended 31 December 2023, net treasury income through CCP clearing business is earned from instruments held at amortised cost or fair value as follows:

- A total €44.9 million gain was earned from financial assets and financial liabilities held at amortised cost (€778.4 million from interest income on liabilities held at amortised cost and €733.5 million from interest expenses on assets held at amortized cost). In 2022, a total €55.3 million gain was earned from financial assets and financial liabilities held at amortised cost (€28.6 million from interest income on liabilities held at amortised cost and €26.7 million from interest expenses on assets held at amortized cost).
- A net €1.7 million gain (2022: €11.3 million loss) was incurred from assets held at fair value (€6.6 million income and €4.9 million expense (2022: €32.3 million income and €43.6 million expense)).
- Furthermore in 2022, a revaluation loss of €48.9 million was incurred, following a one-off partial disposal of the debt investment portfolio held at Euronext Clearing. The Group recycled the related loss from Other Comprehensive Income to net treasury income.

35.4. Offsetting within clearing member balances

CCP clearing business financial assets and liabilities are offset and only the net amount is presented in the consolidated balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

The following table shows the offsetting breakdown by products:

In thousands of euros	As at 31 December 2023		
	Gross amounts	Amount offset	Net amount as reported
Derivative financial asset	27,838,819	(13,819,586)	14,019,233
Reverse repurchase agreements	159,532,977	(14,892,657)	144,640,320
Other	5,824,758	(3,121,735)	2,703,023
Total assets	**193,196,554**	**(31,833,978)**	**161,362,576**
Derivative financial liabilities	(27,838,819)	13,819,586	(14,019,233)
Reverse repurchase agreements	(159,532,977)	14,892,657	(144,640,320)
Other	(5,824,758)	3,121,735	(2,703,023)
Total liabilities	**(193,196,554)**	**31,833,978**	**(161,362,576)**

In thousands of euros	As at 31 December 2022		
	Gross amounts	Amount offset	Net amount as reported
Derivative financial asset	22,371,041	(14,884,310)	7,486,731
Reverse repurchase agreements	145,460,677	(11,288,370)	134,172,307
Other	17,777	(9,481)	8,296
Total assets	**167,849,495**	**(26,182,161)**	**141,667,334**
Derivative financial liabilities	(22,371,041)	14,884,310	(7,486,731)
Reverse repurchase agreements	(145,460,677)	11,288,370	(134,172,307)
Other	(17,777)	9,481	(8,296)
Total liabilities	**(167,849,495)**	**26,182,161**	**(141,667,334)**

Note 36. Related parties

36.1. Transactions with related parties

The Group has related party relationships with its associates and joint ventures (as described in Note 7). Transactions with associates and joint ventures are generally conducted with terms equivalent to arm's length transactions. Transactions between subsidiaries are not included in the description as these are eliminated in the Consolidated Financial Statements. The interests in Group Companies are set out in Note 4.

Substantially all transactions with related parties and outstanding year-end balances reflect the positions with associate LCH SA and are reported in the tables below:

In thousands of euros	2023	2022
Sales to related parties	36,889	83,515
Purchases from related parties	19,456	36,818

In thousands of euros	As at 31 December 2023	As at 31 December 2022
Receivables from related parties	260	3,925
Payables to related parties	918	600

On 6 July 2023, the Group sold its 11.1% interest in associate LCH SA to LCH Group Ltd.

Therefore, as from the sale of the investment, the transactions with LCH SA do not qualify as "related party transactions" under IAS 24. Consequently the related party note reflects the transactions with LCH SA up to 6 July 2023.

36.2. Key management remuneration

The other related parties disclosure relates entirely to the key management of Euronext, being represented by the company's Managing Board and Supervisory Board.

The compensation expense recognised for key management is as follows:

In thousands of euros	2023 Managing Board	Supervisory Board	Total
Short term benefits	(7,480)	(1,244)	(8,724)
Share-based payment costs (a)	(4,121)	–	(4,121)
Post-employment benefits	(179)	–	(179)
Termination benefits	(862)	–	(862)
Total benefits	**(12,642)**	**(1,244)**	**(13,886)**

(a) Share based payments costs are recognised in accordance with IFRS 2.

In thousands of euros	2022 Managing Board	Supervisory Board	Total
Short term benefits	(6,947)	(1,245)	(8,192)
Share-based payment costs (a)	(3,810)	–	(3,810)
Post-employment benefits	(180)	–	(180)
Termination benefits	–	–	–
Total benefits	**(10,937)**	**(1,245)**	**(12,182)**

(a) Share based payments costs are recognised in accordance with IFRS 2.

Note 37. Financial risk management

As a result of its operating and financing activities, the Group is exposed to market risks such as interest rate risk, currency risk and credit risk. The Group has implemented policies and procedures designed to measure, manage, monitor and report risk exposures, which are regularly reviewed by the appropriate management and supervisory bodies. The Group's central treasury team is charged with identifying risk exposures and monitoring and managing such risks on a daily basis. To the extent necessary and permitted by local regulation, the Group's subsidiaries centralise their cash investments, report their risks and hedge their exposures in coordination with the Group's central treasury team. The Group performs sensitivity analyses to determine the effects that may result from market risk exposures. The Group uses derivative instruments solely to hedge financial risks related to its financial position or risks that are otherwise incurred in the normal course of its commercial activities. The Group does not use derivative instruments for speculative purposes.

37.1 Liquidity risk

The Group would be exposed to a liquidity risk in the case where its short-term liabilities become, at any date, higher than its cash, cash equivalents, short-term financial investments and available bank facilities and in the case where the Group is not able to refinance this liquidity deficit, for example, through new banking lines.

Cash, cash equivalents and short-term financial investments are managed as a global treasury portfolio invested in non-speculative financial instruments, readily convertible to cash, such as bank balances, money market funds, overnight deposits, term deposits and other money market instruments, thus ensuring a very high liquidity of the financial assets. The Group's policy is to ensure that cash, cash equivalents and available bank facilities allow the Group to repay its financial liabilities at all maturities, even disregarding incoming cash flows generated by operational activities, excluding the related party loans granted by the Group's subsidiaries to its Parent.

The net position of current financial assets, financial liabilities and available credit facilities, excluding working capital items, as of 31 December, 2023 and 2022 is described in the table below:

In thousands of euros	2023	2022
Cash cash equivalents and short term investments	1,551,841	1,163,822
Available revolving credit facility (RCF)	600,000	600,000
Financial debt (long term and short term borrowings)	(3,048,915)	(3,044,531)
Net position	**(897,074)**	**(1,280,709)**

The Group has a €600 million revolving credit facility (2022: €600 million) that can be used for general corporate or M&A purposes (see Note 29). As of 31 December 2023, the Group did not have any amounts drawn under the facility.

The Group reviews its liquidity and debt positions on an ongoing basis, and subject to market conditions and strategic considerations, may from time to time re-examine the debt structure of its debt and modify the maturity profile and the sources of financing. The Group is able to support short term liquidity and operating needs through existing cash balance and its strong ability to generate adequate cash flow. The Group has generally access to debts markets, including bank facilities, and may be able to obtain additional debt or other sources of financing to finance its strategic development, provided that its financial risk profile allows it to do so.

The table below summarises the maturity profile of the Group's financial liabilities based on contractual undiscounted payments, including principal - and interest amounts, expected throughout the life of the obligations:

In thousands of euros	Maturity < 1 year	Maturity between 1 and 5 years	Maturity > 5 years	Total
2023				
Trade and other payables	415,843	—	—	415,843
Borrowings	27,688	1,194,250	2,088,938	3,310,876
Lease liabilities	22,865	30,666	13,069	66,600
2022				
Trade and other payables	396,287	—	—	396,287
Borrowings	27,688	1,191,562	2,119,313	3,338,563
Lease liabilities (a)	28,786	20,208	2,163	51,157

(a) The figures for the comparative period were adjusted, as these were onerously reflecting 'discounted' lease liabilities, whereas 'undiscounted' lease liabilities should have been disclosed.

Liquidity risk - CCP clearing business

The Group's CCP must maintain a level of liquidity (consistent with regulatory requirements) to ensure the smooth operation of its respective markets and to maintain operations in the event of a single or multiple market stress event or member failure. This includes the potential requirement to liquidate the position of a clearing member under a default scenario including covering the associated losses and the settlement obligations of the defaulting member.

The Group's CCP maintains sufficient cash and cash equivalents and has access to intraday central bank refinancing (collateralized with ECB eligible bonds) along with commercial bank credit lines to meet in a timely manner its payment obligations. As at 31 December 2023, the Group's CCP had €440 million (2022: €420 million) credit lines granted by commercial banks serving as liquid recourse to mitigate liquidity risks according to EMIR regulation. None of the credit lines had been used as of 31 December 2023.

Revised regulations requires the CCP to ensure that appropriate levels of back-up liquidity are in place to underpin the dynamics of a largely secured cash investment requirement, ensuring that the maximum potential outflow under extreme market conditions is covered (see credit risk section). The Group's CCP monitors its liquidity needs daily under normal and stressed market conditions. Where possible, the Group employs guaranteed delivery versus payment settlement techniques and manages CCP margin and default fund flows through central bank or long-established, bespoke commercial bank settlement mechanisms. Monies due from clearing members remain the clearing members' liability if the payment agent is unable to effect the appropriate transfer. In addition, the Group's CCP maintains operational facilities with commercial banks to manage intraday and overnight liquidity.

In line with the investment policy and the regulatory requirements, the Group's CCP has deposited the default funds and margin mainly at the Central Bank of Italy as per 31 December 2023. As per 31 December 2022 the default funds and margin were partially invested in Government bonds with an average maturity of less than 12 months. Even though these financial assets are generally held to maturity, a forced liquidation of the investment portfolio could lead to losses and lack of required liquidity.

In thousands of euros	Maturity < 1 year	Maturity between 1 and 2 years	Maturity between 2 and 3 years	Total
2023				
Investment portfolio	116,286	—	—	116,286
2022				
Investment portfolio	1,753,811	—	—	1,753,811

The table below analyses the Group's CCP financial liabilities into relevant maturity groupings based on the remaining period from the balance sheet date to the contractual maturity date. The amounts disclosed in the table reflect the contractual undiscounted cash flows.

In thousands of euros	Maturity < 1 year	Maturity between 1 and 5 years	Maturity > 5 years	Total
2023				
CCP clearing member liabilities	183,832,245	—	—	183,832,245
2022				
CCP clearing member liabilities	166,858,684	—	—	166,858,684

37.2 Interest rate risk

Substantially all interest-bearing financial assets and liabilities of the Group are either based on floating rates or based on fixed rates with an interest term of less than one year, except for the fixed rated Bonds #1 to #5, which have maturities between 5 and 20 years (see Note 29). Until 3 May 2022, the Group had entered into interest rate swap contracts in order to hedge the interest rate risk inherent to the fixed rate Bond #1. As a result, the Group was exposed to fair value risk affecting fixed-rate financial assets and liabilities through its remaining fixed rate Bonds #2 to #5. On 3 May 2022, the Group terminated its fixed-to-floating interest rate swap agreements (at an aggregated notional of €500 million) in relation to the fair value hedge of the €500 million Bond #1 (see Note 23).

As at 31 December 2023 and 2022 the interest rate exposure of the Company was as follows:

Currency	**Position in EUR**		**Positions in GBP**		**Positions in USD**		**Positions in NOK**		**Positions in DKK**	
Type of rate and maturity *In thousands of euro*	**Floating rate with maturity < 1 year**	**Floating rate with maturity > 1 year**	**Floating rate with maturity < 1 year**	**Floating rate with maturity > 1 year**	**Floating rate with maturity < 1 year**	**Floating rate with maturity > 1 year**	**Floating rate with maturity < 1 year**	**Floating rate with maturity > 1 year**	**Floating rate with maturity < 1 year**	**Floating rate with maturity > 1 year**
2023										
Interest bearing financial assets (a)	437,656	170	36,549	—	22,191	—	134,316	—	34,937	—
Interest bearing financial liabilities	—	—	—	—	—	—	—	—	—	—
Net position before hedging	437,656	170	36,549	—	22,191	—	134,316	—	34,937	—
Net position after hedging	437,656	170	36,549	—	22,191	—	134,316	—	34,937	—
2022										
Interest bearing financial assets (a)	620,734	216	44,557	—	23,749	—	100,312	—	40,540	—
Interest bearing financial liabilities	(8)	—	—	—	—	—	—	—	—	—
Net position before hedging	—	216	44,557	—	23,749	—	100,312	—	40,540	—
Net position after hedging	620,726	216	44,557	—	23,749	—	100,312	—	40,540	—

Currency	**Position in EUR**		**Positions in GBP**		**Positions in USD**		**Positions in NOK**		**Positions in DKK**	
Type of rate and maturity ***In thousands of euro***	**Fixed rate with maturity < 1 year**	**Fixed rate with maturity > 1 year**	**Fixed rate with maturity < 1 year**	**Fixed rate with maturity > 1 year**	**Fixed rate with maturity < 1 year**	**Fixed rate with maturity > 1 year**	**Fixed rate with maturity < 1 year**	**Fixed rate with maturity > 1 year**	**Fixed rate with maturity < 1 year**	**Fixed rate with maturity > 1 year**
2023										
Interest bearing financial assets (a)	734,777	—	13,649	—	33,661	—	44,186	—	31,239	—
Interest bearing financial liabilities	17,355	3,031,629	—	—	—	—	—	—	—	—
Net position before hedging	717,422	(3,031,629)	13,649	—	33,661	—	44,186	—	31,239	—
Net position after hedging	717,422	(3,031,629)	13,649	—	33,661	—	44,186	—	31,239	—
2022										
Interest bearing financial assets (a)	248,226	—	5,657	—	29,105	—	57,242	—	25,953	—
Interest bearing financial liabilities	17,362	3,027,161	—	—	—	—	—	—	—	—
Net position before hedging	230,864	(3,027,161)	5,657	—	29,105	—	57,242	—	25,953	—
Net position after hedging	230,864	(3,027,161)	5,657	—	29,105	—	57,242	—	25,953	—

(a) Includes cash and cash equivalents and non-current financial assets at amortised cost.

The Group is exposed to cash-flow risk arising from net floating-rate positions.

The Group was a net borrower in Euros exposed to fixed interest rates and a net lender in Euros exposed to floating rates at 31 December 2023 and 2022. Therefore, the sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €2.2 million based on the positions at 31 December 2023 (2022: €3.1 million).

The Group was a net lender in Pound Sterling at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.2 million based on the positions at 31 December 2023 (2022: €0.2 million).

The Group was a net lender in US Dollar at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.1 million based on the positions at 31 December 2023 (2022: €0.1 million).

The Group was a net lender in Norwegian Kroner at 31 December 2023 and 2022. The sensitivity of net interest income to a parallel shift in the interest curves is that a 0.5% increase/decrease of the rate would have resulted in an increase/decrease of net interest income of €0.5 million based on the positions at 31 December 2023 (2022: €0.5 million).

The fluctuation of the DKK against the EUR is set within the bandwidth +/-2.25% as an exchange rate mechanism established by the Denmark's National Bank. Therefore, currency risk sensitivity inherent to the Group exposure to that currency is deemed to be irrelevant.

Interest rate risk - CCP clearing business

The Group's CCP faces interest rate exposure through the impact of changes in the reference rates used to calculate member liabilities versus the yields achieved through their predominantly secured investment activities.

In the Group's CCP, interest bearing assets are generally invested in secured instruments or structures and for a longer term than interest bearing liabilities, whose interest rate is reset daily. This makes investment revenue vulnerable to volatility in overnight rates and shifts in spreads between overnight and term rates. On daily basis the interest rate risk associated to investments is monitored via capital requirements.

The Group's CCP has an investment policy, mitigating market risks. The Group's CCP investments have an average duration of around one year and are generally held until maturity. Losses will not materialise unless the investment portfolio is liquidated before maturity or in an event of portfolio rebalancing before maturity. In case of a forced liquidation of the CCP's financial investment portfolio before maturity to provide necessary liquidity, the CCP may face higher interest rate exposure on its financial investment portfolio. The interest rate exposure of the investment portfolio is predominantly at fixed rates (only a negligible part is at floating rates) at the amounts and maturities as disclosed in Note 37.1. As per 31 December 2023, an increase/decrease of the rate by 100 basis points would have an increasing/ decreasing impact on the investment portfolio market value of €0.5 million or 0.20% (2022: €3.8 million or 0.20%).

37.3 Currency risk

Foreign currency translation risk:

The Group's net assets are exposed to the foreign currency risk arising from the translation of assets and liabilities of subsidiaries with functional currencies other than the euro. The following table summarises the assets and liabilities recorded in respectively GBP, USD and NOK functional currency and the related impact of a 10% in/decrease in the currency exchange rate on balance sheet and profit or loss:

In thousands		2023		2022
Assets	£	89,586	£	71,760
Liabilities	£	(11,759)	£	(12,465)
Net currency position	**£**	**77,827**	**£**	**59,295**
Net currency position after hedge	**£**	**77,827**	**£**	**59,295**
Absolute impact on equity of 10% in/decrease in the currency exchange rate	**€**	**8,977**	**€**	**6,697**
Absolute impact on profit for the period of 10% in/decrease in the currency exchange rate		**Not Material**		**Not Material**

In thousands		2023		2022
Assets	$	198,636	$	203,405
Liabilities	$	(8,502)	$	(11,231)
Net currency position	**$**	**190,134**	**$**	**192,174**
Absolute impact on equity of 10% in/decrease in the currency exchange rate	**€**	**17,224**	**€**	**17,952**
Absolute impact on profit for the period of 10% in/decrease in the currency exchange rate	**€**	**520**	**€**	**921**

In thousands		2023		2022
Assets	kr	11,094,389	kr	10,753,715
Liabilities	kr	(2,527,631)	kr	(2,493,787)
Net currency position	**kr**	**8,566,758**	**kr**	**8,259,928**
Absolute impact on equity of 10% in/decrease in the currency exchange rate	**€**	**76,326**	**€**	**78,670**
Absolute impact on profit for the period of 10% in/decrease in the currency exchange rate	**€**	**1,469**	**€**	**1,780**

Most operating revenue and expenses in the various subsidiaries of the Group are denominated in the functional currency of each relevant subsidiary. The Group's consolidated income statement is exposed to foreign currency risk arising from receivables and payables denominated in currencies different from the functional currency of the related entity.

The Group's general policy is not to hedge foreign exchange risk related to its net investments in foreign currency. However, the Group may use derivatives instruments designated as hedge of net investment or foreign denominated debt to manage its net Investment exposures. The decision to hedge the exposure is considered on a case by case basis since the Group is generally exposed to major, well established and liquid currencies. The Group would, by the same token, hedge transaction risk arising from cash flows paid or received in a currency different from the functional currency of the group contracting entity on a case by case basis.

37.4. Equity Market risk

The Group's investment in publicly traded equity securities was insignificant in 2023 and 2022. The Group's investments in non-publicly traded equity securities are disclosed in Note 20.

37.5. Credit risk

The Group is exposed to credit risk in the event of a counterparty's default. The Group is exposed to credit risk from its operating activities (primarily trade receivables), from its financing activities and from the investment of its cash and cash equivalents and short-term financial investments. The Group limits its exposure to credit risk by rigorously selecting the counterparties with which it executes agreements. Most customers of the Group are leading financial institutions that are highly rated. Investments of cash and cash equivalents in bank current accounts and money market instruments, such as short-term fixed and floating rate interest deposits, are governed by rules aimed at reducing credit risk: maturity of deposits strictly depends on credit ratings, counterparties' credit ratings are permanently monitored and individual counterparty limits are reviewed on a regular basis. In addition to the intrinsic creditworthiness of counterparties, the Group's policies also prescribe the diversification of counterparties (banks, financial institutions, funds) so as to avoid a concentration of risk. Derivatives are negotiated with leading high-grade bank.

Credit risk - CCP clearing business

In its role as CCP clearer to financial market participants, the Group's CCP guarantees final settlement of transactions acting as buyer towards each seller and as seller towards each buyer. It manages substantial credit risks as part of its operations including unmatched risk positions that might arise from the default of a party to a cleared transaction.

Clearing membership selection is based upon supervisory capital, technical and organisational criteria. Each member must pay margins, computed and collected at least daily, to cover the exposures and theoretical costs which the CCP might incur in order to close out open positions in the event of the member's default. Margins are calculated using established and internationally acknowledged risk models and are debited from participants' accounts through central bank accounts and via commercial bank payment systems. Minimum levels of cash collateral are required. Non-cash collateral is revalued daily but the members retain title of the asset and the Group only has a claim on these assets in the event of a default by the member.

Clearing members also contribute to default funds managed by the CCP to guarantee the integrity of the markets in the event of multiple defaults in extreme market circumstances. Amounts are determined on the basis of the results of periodic stress testing examined by the risk committees of the CCP. Furthermore, the Group's CCP reinforces its capital position to meet the most stringent relevant regulatory requirements applicable to it, including holding a minimum amount of dedicated own resources to further underpin the protective credit risk framework in the event of a significant market stress event or participant failure.

An analysis of the aggregate clearing member contributions of margin and default funds across the CCP is shown below:

In thousands of euros	31 December 2023	31 December 2022
Total collateral pledged		
Margin received in cash	15,381,233	17,777,769
Margin received by title transfer	987,595	625,779
Default fund total	5,154,917	5,909,844
Total on balance sheet collateral (a)	**21,523,745**	**24,313,392**
Total member collateral pledged	**21,523,745**	**24,313,392**

(a) The counterbalance of the total on balance sheet collateral is included in the line 'other payables to clearing members' in the table at Note 35.1

Investment counterparty risk for CCP margin and default funds is managed by investing the cash element in instruments or structures deemed 'secure', including through direct investments in highly rated, 'regulatory qualifying' sovereign bonds and supra-national debt, investments in tri-party and bilateral reverse repos (receiving high-quality government securities as collateral) in certain jurisdictions and deposits with the central bank of Italy. As per December 2023 the margin and default funds were mainly deposited with the Central Bank of Italy. The small proportion of cash that is invested unsecured is placed for short durations with highly rated counterparties where strict limits are applied with respect to credit quality, concentration and tenor.

In thousands of euros	31 December 2023	31 December 2022
Investment portfolio	116,286	1,753,811
CCP other financial assets (a)	**116,286**	**1,753,811**
Clearing member cash equivalents - short term deposits	10,084	10,011
Clearing member cash - central bank deposits	15,983,047	13,601,918
Clearing member cash - other banks	2,001	1,800
Total clearing member cash (b)	**15,995,132**	**13,613,729**

(a) The CCP other financial assets are included in the line 'Debt instruments at fair value through other comprehensive income' in the table at Note 35.1.
(b) The total clearing member cash is included in the line 'Cash and cash equivalents of clearing members" in the table at Note 35.1.

Distress can result from the risk that certain governments may be unable or find it difficult to service their debts. This could have adverse effects, particularly on the Group's CCP, potentially impacting cleared products, margin collateral, investments, the clearing membership and the financial industry as a whole.

Specific risk frameworks manage country risk for both fixed income clearing and margin collateral and all clearing members' portfolios are monitored regularly against a suite of sovereign stress scenarios. Investment limits and counterparty and clearing membership monitoring are sensitive to changes in ratings and other financial market indicators, to ensure the Group's CCP is able to measure, monitor and mitigate exposures to sovereign risk and respond quickly to anticipated changes. Risk Committees maintain an ongoing watch over these risks and the associated policy frameworks to protect the Group against potentially severe volatility in the sovereign debt markets. The Group's sovereign exposures at the end of the financial reporting period were:

In thousands of euros	31 December 2023	31 December 2022
Sovereign investments		
Italy	14,899	392,962
Spain	25,889	609,319
EU Central (a)	—	144,737
Portugal	—	389,740
France	29,915	166,099
Germany	26,810	14,950
Ireland	—	—
Netherlands	—	16,112
Belgium	28,857	29,903
Total for all countries (b)	**126,370**	**1,763,822**

(a) 'EU Central' consists of supra-national debts.
(b) The total sovereign investments include the investment portfolio of CCP clearing business assets as disclosed in the line 'Debt instruments at fair value through other comprehensive income' in the table at Note 35.1.

37.5.1 Impairment of financial assets

The Group's trade and contract receivables and other debt financial assets at amortised cost or FVOCI (including CCP clearing business) are subject to the expected credit loss model. While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was considered immaterial.

Trade and contract receivables

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade and contract receivables.

To measure expected credit losses, trade and contract receivables have been grouped based on shared credit risk characteristics and the days past due. The historical loss rates are based on the payment profiles of the sales over a period of 24 months before reporting date and the corresponding historical credit losses experience within this period. The historical loss rates are adjusted to reflect current and forward-looking factors specific to the debtors and economic environment. Generally trade receivables are written-off when there is no reasonable expectation of recovery. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note 21. The Group evaluates the concentration of credit risk with respect to trade and contract receivables as low, as most of its customers are leading financial institutions that are highly rated.

Set out below is the information about the credit risk exposure on the Group's trade and contract receivables using a provision matrix as at 31 December 2023 and 2022:

31 December 2023:

		Trade receivables				
In thousands of euros	Contract Receivables	Current	30-60 days past due	61-90 days past due	> 91 days past due	Total
Expected credit loss rate	0.06 %	0.06 %	0.23 %	0.50 %	1.32 %	
Collectively assessed receivables	29,100	185,707	36,154	12,249	20,825	284,035
Expected credit loss collective basis	**17**	**107**	**84**	**62**	**275**	**545**
Expected credit loss rate	—	—	—	—	100.0 %	
Individually assessed receivables	—	—	—	—	8,040	8,040
Expected credit loss individual basis	**—**	**—**	**—**	**—**	**8,040**	**8,040**
Total expected credit loss	**17**	**107**	**84**	**62**	**8,315**	**8,585**

31 December 2022:

In thousands of euros	Contract Receivables	Trade receivables: Current	30-60 days past due	61-90 days past due	> 91 days past due	Total
Expected credit loss rate	0.07 %	0.07 %	0.28 %	0.67 %	1.78 %	
Collectively assessed receivables	32,096	175,477	35,980	14,215	39,853	297,621
Expected credit loss collective basis	**21**	**115**	**102**	**96**	**710**	**1,044**
Expected credit loss rate	—	—	—	—	100.0 %	
Individually assessed receivables	—	—	—	—	6,304	6,304
Expected credit loss individual basis	**—**	**—**	**—**	**—**	**6,304**	**6,304**
Total expected credit loss	**21**	**115**	**102**	**96**	**7,014**	**7,348**

In 2023, the increase in loss allowance provision for individually assessed receivables related to an increase of specific debtors, which showed a significant increase in credit risk. This increase is partly offset by a decrease of the loss allowance provision for collectively assessed receivables, which was due to a lower customer base in the highest category of days outstanding and a mathematical reduction in historical loss rates (caused by a decrease in historical credit losses).

Other debt financial assets at amortised cost or FVOCI (including CCP clearing business)

The other debt financial assets comprise i) debt investments at amortised cost, which include short-term deposits with a maturity over three months, ii) debt investments at FVOCI, which include investments in listed bonds and government bonds and iii) CCP clearing business financial assets at amortised cost or FVOCI.

The other debt financial assets at amortised cost or FVOCI (including CCP clearing business) are considered to have low credit risk, as the issuers of the instruments have a low risk of default evidenced by their strong capacity to meet their contractual cash flow obligations in the near term. The Group closely monitors its CCP investment portfolio and invests only in government debt and other collateralised instruments where the risk of loss is minimal. There was no increase in credit risk in the year and none of the assets are past due. The loss allowance recognised during the period was therefore limited to 12 months expected credit losses. The Group did not recognise any material provision for expected credit losses on its other debt financial assets at amortised cost or FVOCI (including CCP clearing business) as per 31 December 2023 (2022: not material). The amount of credit-impaired financial assets is considered not significant.

37.6 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, to comply with regulatory requirements and to maintain an optimal capital structure to reduce the cost of capital and provide return to shareholders. Certain entities of the Group are regulated as Exchanges, as Central Securities Depository (CSD) or as Clearing House and are subject to certain statutory regulatory requirements based on their local statutory financial statements and risks. In general, the financial ratios of the Group's subsidiaries significantly exceed the regulatory requirements and they maintain a safety cushion in order to avoid any concern from the regulators.

Euronext N.V. must comply with prudential requirements, as a result of an agreement reached with the Dutch Finance Ministry in May 2016, which are set forth in three pillars:

- A minimum Total Equity level equal of at least € 250 million; and
- The Group shall take care of stable financing. Long-term assets of the Group will be financed with shareholders equity and long term liabilities, to the satisfaction of the AFM; and
- The Group shall have a positive regulatory capital on a consolidated basis. The regulatory capital is calculated according to the following formula: the paid up share capital plus the freely available reserves less the items listed in section 36 of Regulation (EU) no. 575/201. In deviation to mentioned formula, the value of the intangible fixed assets in connection with Mergers and Acquisitions will be deducted in 10 (default) or more (20 for Oslo Børs ASA) equal instalments (grow in period) from the regulatory capital. Considering a consistent dividend policy, the grow in period can be extended if the P/E ratio would exceed 10 times. If the grow in period and the related dividend policy provide for a negative a regulatory capital for a limited number of years of the gown-in period, then this fact will not prevent the execution of the consistent and prudent dividend policy of the Group in those years.

As per 31 December 2023, Euronext N.V. complied with these requirements.

Euronext Amsterdam N.V. is subject to a minimum statutory capital requirement of €730 thousand, shall have a regulatory capital in the amount of 50% of the direct fixed cost of Euronext Amsterdam N.V. during the preceding financial year and in addition the cash and cash equivalents shall be higher than the required minimum regulatory capital to operate as an exchange in the Netherlands. As per 31 December 2023, Euronext Amsterdam N.V. was in compliance with these requirements.

Euronext Brussels SA/NV shall maintain adequate financial resources at its disposal to ensure orderly functioning of the market. The law mentions that FSMA may, by a regulation, set financial ratios for market operators and determine which financial information they are required to provide. At this date, no quantitative requirements has ever been set either by a regulation or by the Financial Authority FSMA.

Euronext Dublin shall at all time hold a minimum level of capital based on the Basic Capital Requirement and the

Systematic Capital Add-on and maintain liquid financial assets at least equal to the sum of these two amounts of required capital. As per 31 December 2023, Euronext Dublin complied with these requirements.

Euronext Lisbon S.A. shall maintain minimum statutory share capital of €3.0 million and shall maintain minimum statutory equity of €6.0 million. In addition, Euronext Lisbon's liabilities must not exceed its own funds (basically the amount of equity). As per 31 December 2023, Euronext Lisbon complied with these requirements.

Euronext Paris S.A. shall maintain statutory regulatory equity at no less than 50% of its yearly expenses and a solvency ratio on operational risks at no less than 8%. As per 31 December 2023, Euronext Paris S.A. complied with these requirements.

Interbolsa S.A. shall maintain minimum statutory share capital of €2.75 million and shall maintain minimum statutory equity of €5.5 million. In addition, as a CSD, Interbolsa S.A. shall hold an amount of capital, including retained earnings and reserves, higher or equal to the sum of CSD'S capital requirements. As per 31 December 2023, Interbolsa S.A. complied with these requirements.

VPS ASA shall comply with the capital requirement regulation for CSDs. As such, it shall hold an amount of capital, including retained earnings and reserves, higher or equal to the sum of CSD's capital requirements. As per 31 December 2023, VPS ASA complied with this requirement.

Oslo Børs ASA must maintain an adequate level of primary capital. In this context, primary capital comprises equity after deducting items including intangible assets such as system development costs and deferred tax assets. Although the Norwegian legislation does not stipulate any specific quantitative level of capital requirements, Oslo Børs ASA maintains at all times sufficient liquid assets and capital resources. As per 31 December 2023, Oslo Børs ASA complied with these requirements.

Euronext Markets Singapore Pte Ltd. shall maintain a minimum regulatory capital requirement (a) 18% of its annual operating revenue, (b) 50% of its annual operating costs, and (c) $500,000 restricted cash deposit. As per 31 December 2023, Euronext Markets Singapore Pte Ltd. complied with these requirements.

VP Securities AS shall comply with the capital requirement regulation for CSDs. As such, it shall hold an amount of capital, including retained earnings and reserves, higher or equal to the sum of CSD's capital requirements. As per 31 December 2023, VP Securities AS complied with this requirement.

Borsa Italiana S.p.A must comply with Article 3 of the Italian CONSOB Markets Regulation. As such, it shall maintain 1) a net equity (share capital, reserves and undistributed profits) at least equal to operating costs necessary to cover six months based on the latest audited Financial statements and 2) an amount of liquid assets sufficient to cover estimated potential losses in stressed but plausible market conditions calculated using a risk-based approach which considers operational risks as well as other risks to which the regulated operator might be exposed to. As per 31 December 2023 Borsa Italiana S.p.A. complied with these requirements.

Monte Titoli S.p.A. shall comply with article 47 of the CSDR regulation. As such, it shall hold capital (inclusive of undistributed profits and "Total Capital Requirement" reserves) which, at any time, is sufficient to guarantee that the CSD is adequately protected against operational, legal, custody, investment and commercial risks, so that it may continue to provide services; ensure a liquidation or an orderly restructuring of the activities of the CSD in an adequate period of at least 6 months, in the context of a series of stress scenarios. The capital thus identified must be invested in secured assets in order to comply with the provisions of Article 46 paragraph 4 of the CSDR Regulation. As per 31 December 2023, Monte Titoli S.p.A. complied with this requirement.

Cassa di Compensazione e Garanzia S.p.A. must comply with Article 2 of EMIR based on which it must have capital (including undistributed profits and reserves) which at all times is sufficient to cover the total exposure to the following risks:

- risks relating to the liquidation or restructuring of assets,
- credit, counterparty's and market risks,
- operational and legal risks, and
- business risks.

The capital thus identified must be invested in secured assets for the purpose of complying with Article 47 of EMIR. As per 31 December 2023, Cassa di Compensazione e Garanzia S.p.A. complied with these requirements.

MTS S.p.A. must comply with Article 3 of the Italian CONSOB Markets Regulation. As such, it shall maintain 1) a net equity (share capital, reserves and undistributed profits) at least equal to operating costs necessary to cover six months based on the latest audited Financial statements and 2) an amount of liquid assets sufficient to cover estimated potential losses in stressed but plausible market conditions calculated using a risk-based approach which considers operational risks as well as other risks to which the regulated operator might be exposed to. As per 31 December 2023, MTS S.p.A. complied with these requirements.

37.7 Changes in liabilities arising from financing activities

The changes in liabilities arising from the Group's financing activities in 2023 and 2022 were as follows:

In thousands of euros	Borrowings due within 1 year	Borrowings due after 1 year	Leases due within 1 year	Leases due after 1 year	Total liabilities from financing activity
As at 1 January 2022	**17,359**	**3,044,391**	**20,993**	**50,691**	**3,133,434**
Cash flows	(29,565)	–	(23,417)	–	(52,982)
Acquisitions	–	–	–	–	–
Additions (a)	–	–	–	1,904	1,904
Fair Value adjustments	–	(19,091)	–	–	(19,091)
Accrued interest	29,576	–	733	–	30,309
Amortisation and transfer of issue costs	–	1,861	–	–	1,861
Foreign exchange impacts	–	–	(87)	29	(58)
Other (a)	–	–	30,244	(30,976)	(732)
As at 31 December 2022	**17,370**	**3,027,161**	**28,466**	**21,648**	**3,094,645**
Cash flows	(28,711)	–	(28,423)	–	(57,134)
Acquisitions	–	–	–	–	–
Additions	–	–	–	37,924	37,924
Fair Value adjustments	–	2,592	–	–	2,592
Accrued interest	28,627	–	1,085	–	29,712
Amortisation and transfer of issue costs	–	1,876	–	–	1,876
Foreign exchange impacts	–	–	(64)	(77)	(141)
Other	–	–	21,095	(22,181)	(1,086)
As at 31 December 2023	**17,286**	**3,031,629**	**22,159**	**37,314**	**3,108,388**

(a) *For the lines 'Additions' and 'Other' the figures in the comparative period were adjusted, as the additions should all have been reflected in leases due after 1 year. The line 'Other' was adjusted in accordance as this line embeds the effect of reclassification of non-current portion of lease liabilities to current due to the passage of time.*

The line 'Other' includes the effect of reclassification of non-current portion of lease liabilities to current due to the passage of time.

Note 38. Contingencies

The Group is involved in a number of legal proceedings or activities in the ordinary course of our business where risks have arisen which are not reflected in whole or in part in the consolidated financial statements. Other than as discussed below, management does not expect these pending or threatening legal proceedings to have a significant effect on the Group's financial position or profitability. The outcome of legal proceedings, however, can be extremely difficult to predict and the final outcome may be materially different from managements' expectation.

Euronext Amsterdam Pension Fund

In the court case between Euronext Amsterdam and approximately 120 retired and/or former Euronext Amsterdam employees, united in an association ("VPGE"), the Higher Court ordered Euronext to restore the pension reduction to the VPGE members and to pay for indexation of the VPGE member's pensions on 28 July 2020. Euronext lodged an appeal in Cassation before the Supreme Court on 23 October 2020.

On 29 October 2021, the Attorney General ("Advocaat-Generaal") advised the Supreme Court to annul the decision of the Higher Court and to reject the cross-appeal filed by VPGE. On 23 September 2022, the Supreme Court has overturned the verdict of the Higher Court. The Supreme Court agreed with Euronext's position on all points raised.

In accordance with Dutch procedural rules, the case will now be reverted back to the Higher Court that has to take the final decision, taking into account the verdict of the Supreme Court. The final verdict is expected in May 2024.

No provision has been booked in connection with this case.

Note 39. Commitments

39.1 Capital commitments

As of 31 December, capital expenditures contracted but not yet incurred were as follows:

In thousands of euros	2023	2022
No later than one year	3,814	3,004
Later than 1 year and no later than 5 years	2,450	3,264
Later than 5 years	–	–
Total	**6,264**	**6,268**

39.2 Guarantees given

As per 31 December 2023, Euronext N.V. participates in a number of guarantees within the Group (see Note 59).

39.3 Securities held as custodian

In Portugal, Norway, Denmark and Italy, the Group acts as a National Central Securities Depository, operated by respectively Euronext Securities Lisbon (Interbolsa), Euronext Securities Oslo (Verdipapirsentralen ASA), Euronext Securities Copenhagen (VP Securities AS) and Euronext Securities Milan (Monte Titoli S.p.A.).

Euronext Securities Lisbon
As at 31 December 2023, the value of securities kept in custody by Euronext Securities Lisbon amounted to €388 billion (2022: €386 billion) based on the market value of shares and the nominal value of bonds. The procedures of this National Central Securities Depository are focused on the provision of notary services, central maintenance services and settlement securities services, according to the CSDR (Central Securities Depository Regulation). The settlement services, provided through T2S platform, have its risks mitigated mainly by early warning systems. The reconciliation procedures in place mitigate the major risks related to the registration of securities.

Euronext Securities Oslo
As at 31 December 2023, the value of securities kept in custody by Euronext Securities Oslo amounted to €746 billion (2022: €744 billion) based on the market value of shares and the nominal value of bonds.

Under the terms of Section 9-1 the Norwegian Central Securities Depository Act of 15 March 2019, Euronext Securities Oslo is liable for losses that other parties may incur as a result of errors that occur in connection with registration activities. This does not apply if Euronext Securities Oslo is able to demonstrate that the error was outside Euronext Securities Oslo's control. The statutory liability according to Section 9-1, first Paragraph, only applies to direct losses and is limited to NOK 500 million for the same error. For losses that can be attributed to an account operator, Euronext Securities Oslo is jointly and severally liable with the account operator for NOK 50 million per error. Above this amount, the central securities depository is not liable for losses that can be attributed to an account operator.

Euronext Nordics Holding AS has taken out errors and omissions insurance for the parent company and its subsidiaries, with an annual limit of NOK 967 million and a deductible of NOK 10 million per claim. Euronext Securities Oslo shares this insurance with the other companies in the Group up to a limit of NOK 300 million and is the sole insured party for the balance of NOK 667 million. The insurance is subject to a limit of NOK 500 million for any one claim.

Euronext Securities Copenhagen
As at 31 December 2023, the value of securities kept in custody by Euronext Securities Copenhagen amounted to €1,586 billion (2022:€1,443 billion) based on the market value of shares and the nominal value of bonds. The procedures of this National Central Securities Depository are focused on the provision of notary services, central maintenance services and settlement securities services, according to the CSDR (Central Securities Depository Regulation). The settlement services, provided through T2S platform, have its risks mitigated mainly by early warning systems. The reconciliation procedures in place mitigate the major risks related to the registration of securities.

Euronext Securities Milan
As at 31 December 2023, the value of securities kept in custody by Euronext Securities Milan amounted to €3,863 billion (2022:€3,730 billion) based on the market value of shares and the nominal value of bonds. The procedures of this National Central Securities Depository are focused on the provision of notary services, central maintenance services and settlement securities services, according to the CSDR (Central Securities Depository Regulation). The settlement services, provided through T2S platform, have its risks mitigated mainly by early warning systems. The reconciliation procedures in place mitigate the major risks related to the registration of securities.

Note 40. Events after the reporting period

The significant events that occurred between 31 December 2023 and the date of this report that could have a material impact on the economic decisions made based on these financial statements are listed below:

Completion of Share Repurchase Programme
On 3 January 2024, the Group announced that it has completed the share repurchase programme announced on 27 July 2023. Between 31 July 2023 and 3 January 2024, 2,870,787 shares, or approximately 2.7% of Euronext's share capital, were repurchased at an average price of €69.67 per share. This repurchase programme was executed by a financial intermediary in compliance with applicable rules and regulations, including the Market Abuse Regulation 596/2014 and the Commission Delegated Regulation (EU) 2016/1052, and based on the authority granted by the General Meeting of Shareholders 280991 of Euronext on 17 May 2023.

Authorisation of Consolidated Financial Statements

Amsterdam, 28 March 2024

Supervisory Board	**Managing Board**
Piero Novelli *(Chair)*	Stéphane Boujnah *(CEO and Chairman)*
Dick Sluimers	Daryl Byrne
Diana Chan	Delphine d'Amarzit
Rika Coppens	Fabrizio Testa
Alessandra Ferone	Isabel Ucha
Manuel Ferreira da Silva	Øivind Amundsen
Padraic O'Connor	Simone Huis in 't Veld
Nathalie Rachou	Benoît van den Hove
Olivier Sichel	Manuel Bento
Morten Thorsrud	

Euronext N.V.

Company Financial Statements

for the year ended

31 December 2023

Company Income Statement

In thousands of euros	Note	Year ended 31 December 2023	31 December 2022
Net turnover	42	–	–
Other operating expenses	43	(13,852)	(15,029)
Total operating (loss)		**(13,852)**	**(15,029)**
Income from equity investments	44	12,146	9,306
Other interest income and similar income	44	33,191	18,592
Other interest expenses and similar charges	44	(79,724)	(47,862)
Gain on sale of associates	45	53,028	–
Result before tax		**4,789**	**(34,993)**
Tax	46	12,794	5,406
Share in result of participations	47	495,984	467,414
Net result for the year		**513,567**	**437,827**

The above Company Income Statement should be read in conjunction with the accompanying notes.

Company Balance Sheet

(Before appropriation of profit)

In thousands of euros	Note	As at 31 December 2023	As at 31 December 2022
Assets			
Fixed assets			
Investments in consolidated subsidiaries	47	6,197,563	6,237,933
Investments in associates and joint ventures	47	–	70,562
Related party loans	47	460,024	459,408
Financial assets at fair value through OCI	48	178,734	166,349
Other non-current financial and other assets	49	714	1,013
Total financial fixed assets		**6,837,035**	**6,935,265**
Total fixed assets		**6,837,035**	**6,935,265**
Current assets			
Trade and other receivables	50	215,279	250,635
Income tax receivable		31,508	32,383
Related party loans	51	155,105	155,754
Total receivables		**401,892**	**438,772**
Other current financial assets		–	10,000
Total securities	52	**–**	**10,000**
Cash and cash equivalents	52	**429,836**	**258,464**
Total current assets		**831,728**	**707,236**
Total assets		**7,668,763**	**7,642,501**
Shareholders' equity and liabilities			
Shareholders' equity			
Issued capital		171,370	171,370
Share premium		2,423,428	2,423,428
Reserve for own shares		(242,117)	(32,836)
Retained earnings		1,014,805	820,358
Legal reserves and other		64,638	93,820
Profit for the year		513,567	437,827
Total shareholders' equity	53	**3,945,691**	**3,913,967**
Long-term liabilities			
Borrowings	54	3,031,629	3,027,161
Deferred tax liabilities		20,894	19,202
Provisions		150	–
Total long-term liabilities		**3,052,673**	**3,046,363**
Short-term liabilities			
Borrowings	54	17,286	17,362
Related party borrowings	55	242,679	241,007
Trade and other payables	56	410,434	423,802
Total short-term liabilities		**670,399**	**682,171**
Total shareholders' equity and liabilities		**7,668,763**	**7,642,501**

The above Company Balance Sheet should be read in conjunction with the accompanying notes.

Notes to the Company Financial Statements

Note 41. Basis of preparation

Euronext N.V. is a Dutch public company with limited liability (*naamloze vennootschap*) which has its registered office in Amsterdam under Chamber of Commerce number 60234520.

The company financial statements of Euronext N.V. (hereafter: the Company) have been prepared in accordance with Part 9, Book 2 of the Dutch Civil Code. In accordance with sub 8 of article 362, Book 2 of the Dutch Civil Code, the company's financial statements are prepared based on the accounting principles of recognition, measurement and determination of profit, as applied in the consolidated financial statements. These principles also include the classification and presentation of financial instruments, being equity instruments or financial liabilities.

In case no other policies are mentioned, refer to the accounting policies as described in the accounting policies in the Consolidated Financial Statements of this Annual report. For an appropriate interpretation, the Company Financial Statements of Euronext N.V. should be read in conjunction with the Consolidated Financial Statements.

Valuation of investments in consolidated subsidiaries
Investments in consolidated subsidiaries are presented at net asset value. Net asset value is based on the measurement of assets, provisions and liabilities and determination of profit based on the principles applied in the consolidated financial statements.

If the valuation of a consolidated subsidiary based on the net asset value is negative, it will be stated at nil. If and insofar the Company can be held fully or partially liable for the debts of the consolidated subsidiary, or has the firm intention of enabling the consolidated subsidiary to settle its debts, a provision is recognised for this. In determining the value of consolidated subsidiaries with a negative equity, any non-current loans, issued to the consolidated subsidiary, that should be seen as part of the net investment are taken into account.

Non-current loans are considered to be part of the net investment if these loans are not expected to be settled in the near future nor planned to be settled in the near future.

Note 42. Net turnover

In thousands of euros	2023	2022
Market Data revenues	200,590	188,899
Recharge of Market Data revenues	(200,590)	(188,899)
Total	**—**	**—**

Euronext N.V. receives market data revenues. The subsidiaries charge Euronext N.V. as market data providers. Euronext N.V. does not charge its subsidiaries a fee for its role of administering the sale of market data to third parties and as such does not recognise a margin on the sales.

Note 43. Other operating expenses

In thousands of euros	2023	2022
Systems and communications	(391)	(57)
Professional services	(6,672)	(3,962)
Other expenses	(6,789)	(11,010)
Total	**(13,852)**	**(15,029)**

In 2023, Professional services included €3.6 million (2022: €1.2 million) of acquisition costs that mainly related to contemplated acquisitions that would increase the perimeter of the Group. Other expenses included €3.1 million of intercompany service recharges (2022: €8.7 million).

Number of employees
Euronext N.V. had no employees during 2023 and 2022. The remuneration of the Supervisory Board is included in other expenses.

Note 44. Financial income and expenses

In thousands of euros	2023	2022
Income from equity investments	12,146	9,306
Interest and similar income	33,191	18,592
Interest and similar expenses	(56,456)	(36,505)
Exchange differences	(23,268)	(11,357)
Total	**(34,387)**	**(19,964)**

In 2023 and 2022, income from equity investments contains the dividend received from Euroclear S.A./ N.V.

The recent evolution of ascending interest rates resulted in an increase of interest and similar income, which is primarily incurred on the Company's outstanding cash balances. The interest rates in the comparative period were at significantly lower levels.

Interest and similar income further includes the interest income on related party loans for €21.5 million in 2023 (2022: €16.6 million).

Interest and similar expenses increased following the evolution of ascending interest rates during the year and includes the interest expenses on related party borrowings and cash pool positions with subsidiaries for in total €22.9 million in 2023 (2022: €3.1 million).

Interest and similar expenses further includes the full year impact of interest expenses on the Senior Unsecured Notes that are held by the Company.

In 2023 and 2022, the exchange differences are mainly triggered by revaluations of the related party loans to Euronext Nordics Holding AS, Euronext UK Holdings Ltd., and Euronext US Inc.

Note 45. Gain on sale of associates

On 6 July 2023, the Group sold its 11.1% investment in associate LCH SA to LCH Group Ltd for consideration of €111.0 million. The investment was held at a carrying amount of €69.4 million, resulting in a gain on disposal of €41.6 million.

On 30 November 2023, the Group sold its 18.93% investment in associate Tokeny S.a.r.l. for an amount of €11.4 million. As the investment was held at a carrying amount of zero million, the full proceeds of the sale were recognised in gain on disposal of associates.

Reference is made to Notes 14 of the Consolidated Financial Statements for more information.

Note 46. Tax

In thousands of euros	2023	2022
Result before tax	4,789	(34,993)
Corporate income tax current financial year	13,339	6,073
Corporate income tax previous financial years	(545)	(667)
Total	**12,794**	**5,406**

The effective tax rate mainly deviates from the applicable tax rate as a result exempt capital gains realized on the sale of LCH SA and Tokeny SarL shares.

For the year 2023, the statutory corporate income tax rate was 25.8%, which will remain stable for 2024. Reference is made to Notes 15 and 19 of the Consolidated Financial Statements for more information on the tax rate changes.

	2023	2022
Effective tax rate	(267%)	15.4%
Applicable tax rate	25.8%	25.0%

Note 47. Investments in consolidated subsidiaries, associates, joint ventures and non-current related party loans

In thousands of euros	Investments in consolidated subsidiaries	Investments in associates and joint ventures	Related party loans	Total
Net book amount as at 1 January 2022	**6,419,938**	**68,476**	**469,869**	**6,958,283**
Investments / (disposals)	(3,282)	—	—	(3,282)
Capital contributions / (settlements)	21,557	—	—	21,557
Exchange differences	(26,173)	—	(10,461)	(36,634)
Share-based payments, subsidiaries	13,994	—	—	13,994
Actuarial gains/ losses IAS 19	10,567	—	—	10,567
Revaluation financial assets at FVOCI	20,352	—	—	20,352
Share in result of participations	458,677	8,737	—	467,414
Dividend received	(662,827)	(6,651)	—	(669,478)
Reclassification	—	—	—	—
Other	(14,870)	—	—	(14,870)
Total movements in book value	**(182,005)**	**2,086**	**(10,461)**	**(190,380)**
Net book amount as at 31 December 2022	**6,237,933**	**70,562**	**459,408**	**6,767,903**
Investments / (disposals)	10	(69,415)	25,000	(44,405)
Capital contributions / (settlements)	—	—	—	—
Exchange differences	(50,588)	—	(24,384)	(74,972)
Share-based payments, subsidiaries	14,378	—	—	14,378
Actuarial gains/ losses IAS 19	(1,176)	—	—	(1,176)
Revaluation financial assets at FVOCI	5,654	—	—	5,654
Share in result of participations	489,372	6,612	—	495,984
Dividend received	(485,631)	(7,759)	—	(493,390)
Reclassification	—	—	—	—
Other	(12,389)	—	—	(12,389)
Total movements in book value	**(40,370)**	**(70,562)**	**616**	**(110,316)**
Net book amount as at 31 December 2023	**6,197,563**	**—**	**460,024**	**6,657,587**

Investments in consolidated subsidiaries

In 2023, no significant investments or capital contributions occurred. In 2022, Euronext N.V. made a capital contribution in Euronext Paris S.A. of €21.6 million.

The line 'Other' includes the cost of employee shares vesting in the subsidiaries for a total of €11.5 million in 2023 (2022: €15.8 million).

Investments in associates and joint ventures

In 2023, the Company sold its investments in associates LCH SA and Tokeny Sarl at proceeds of €111.0 million and €11.4 million respectively. The investments were disposed at a carrying amount of €69.4 million, resulting in a gain on sale of associates of €53.0 million (See Notes 7 and 14 of the Consolidated Financial Statements).

In 2022, the investment in joint venture Liquidshare was impaired by €1.5 million, which negatively impacted 'share in result of participation' (see Note 7 of the Consolidated Financial Statements).

Amounts due from subsidiaries

In 2022, Euronext N.V. entered into a loan agreement with Euronext Holding Italia S.p.A. at a principal amount of €200.0 million, with no outstanding amount at end of last year. As per 31 December 2023, €25.0 million was outstanding and is reflected as 'investments'. This loan has a maturity of three years and bears an interest rate of EURIBOR plus 0.135%.

Euronext N.V. has a loan agreement of NOK 3,500 million entered into with Euronext Nordics Holding AS, to partially finance the acquisition of the share capital and voting rights of Oslo Børs VPS Holding ASA in 2019. This loan has a maturity of five years (to be extended with five years), with a fixed interest rate of 3%.

Furthermore, Euronext N.V. has a loan agreement of £16.3 million entered into with Euronext UK Holdings Ltd. to enable the acquisition of Commcise Software Ltd. in 2018. This loan has a maturity of ten years and bears an interest rate of SONIA plus 0.125%.

In addition, Euronext N.V. has granted three loan agreements to Euronext US Inc. for a total amount of $115.3 million, of which $110.0 million was granted in order to finance the acquisition of FastMatch Inc. in 2017. These loans have a maturity of ten years and bear a weighted average interest rate of 3.36%.

The interest amounts of the above mentioned loans are recognised monthly and are included in Note 51. The long-term loans in foreign currencies are not expected, nor planned, to be settled in the near future. Therefore, these loans are regarded as part of the net investment in the foreign operation.

As at 31 December 2023, the total outstanding amount of non-current related party loans are €460.0 million (2022: €459.4 million).

Note 48. Financial assets at fair value through Other Comprehensive Income

The financial assets at fair value through Other Comprehensive Income of €178.7 million (2022: €166.3 million) represent the direct investments of €177.4 million in Euroclear S.A./N.V. and €1.3 million in EuroCTP B.V. (which was acquired in 2023). For additional information on this investment, reference is made to Note 20 of the Consolidated Financial Statements.

Note 49. Other non-current financial and other assets

As per 31 December 2023 the €0.7 million (2022: €1.0 million) of Other non-current financial and other assets includes the issue costs linked to the revolving credit facility.

Note 50. Trade and other receivables

In thousands of euros	As at 31 December 2023	As at 31 December 2022
Trade receivables	24,794	14,235
Contract receivables	17,164	11,290
Allowance for expected credit losses	(33)	(17)
Trade and contract receivables net	**41,925**	**25,508**
Related party receivables	166,725	220,311
Tax receivables (excluding income tax)	1,987	1,954
Prepayments and accrued income	474	232
Other receivables	4,168	2,630
Total	**215,279**	**250,635**

Trade receivables are non-interest bearing and generally on terms of 30 to 90 days. Contract receivables represent amounts in respect of unbilled revenue, for which the Group has an unconditional right to the consideration (i.e. only the passage of time is required before payment of the consideration is due).

As at 31 December 2023, the related party receivables contain a €148.0 million (2022: €178.0 million) dividend receivable due from Euronext IP & IT Holding B.V.

The fair value of the receivables approximates the book value, due to their short-term character.

Set out below is the movement in the allowance for expected credit losses of trade and contract receivables:

In thousands of euros	2023	2022
As at 1 January	17	22
Provision for expected credit losses	16	(5)
Receivables written off during the year	–	–
At 31 December	**33**	**17**

The Company applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for its trade and contract receivables. Reference is made to Notes 3 and 37.5 of the Consolidated Financial Statements on the inputs used in establishing the provision matrix used to calculate the loss allowance provision.

Set out below is the information on the credit risk exposure on the Company's trade and contract receivables using a provision matrix:

31 December 2023:

		Trade receivables				
In thousands of euros	Contract Receivables	Current	30-60 days past due	61-90 days past due	> 91 days past due	Total
Expected credit loss rate	0.00%	0.00%	0.01%	0.01%	0.02%	
Collectively assessed receivables	17,164	16,686	3,156	1,642	3,282	41,930
Expected credit loss collective basis	**–**	**–**	**–**	**–**	**1**	**1**
Expected credit loss rate	0.00%	0.00%	0.00%	0.00%	100.00%	
Individually assessed receivables	–	–	–	–	32	32
Expected credit loss individual basis	**–**	**–**	**–**	**–**	**32**	**32**
Total expected credit loss	**–**	**–**	**–**	**–**	**33**	**33**

31 December 2022:

In thousands of euros	Contract Receivables	Trade receivables: Current	Trade receivables: 30-60 days past due	Trade receivables: 61-90 days past due	Trade receivables: > 91 days past due	Total
Expected credit loss rate	0.02%	0.02%	0.08%	0.16%	0.38%	
Collectively assessed receivables	11,290	10,452	838	776	2,169	25,525
Expected credit loss collective basis	**2**	**2**	**1**	**1**	**8**	**14**
Expected credit loss rate	0.00%	0.00%	0.00%	0.00%	100.00%	
Individually assessed receivables	–	–	–	–	3	3
Expected credit loss individual basis	**–**	**–**	**–**	**–**	**3**	**3**
Total expected credit loss	**2**	**2**	**1**	**1**	**11**	**17**

Note 51. Current related party loans

In thousands of euros	As at 1 January 2023	Loans advanced / (settled)	Interest accrued / (paid)	As at 31 December 2023
Current				
Euronext Corporate Services B.V.	134,486	–	–	134,486
Finance Web Working SAS	–	–	–	–
Interest receivable on non current intercompany loans	20,601	–	(1,771)	18,830
Interest receivable on current intercompany loans	667	–	1,122	1,789
Total	**155,754**	**–**	**(649)**	**155,105**

In thousands of euros	As at 1 January 2022	Loans advanced / (settled)	Interest accrued / (paid)	As at 31 December 2022
Current				
Euronext Corporate Services B.V.	134,486	–	–	134,486
Finance Web Working SAS	228	(228)	–	–
Interest receivable on non current intercompany loans	26,551	–	(5,950)	20,601
Interest receivable on current intercompany loans	62	–	605	667
Total	**161,327**	**(228)**	**(5,345)**	**155,754**

The fair value of the related party loans receivable approximate their carrying values.

The €134.5 million loan receivable from Euronext Corporate Services B.V. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The interest amounts are paid annually and based on €STER or EURIBOR 3 months reference rates plus 0.125%.

Note 52. Securities and cash and cash equivalents

The other current financial assets consist of deposits with a maturity of more than three months on inception date. In 2023, there were no outstanding positions for such securities (2022: €10.0 million).

Cash and cash equivalents included €356.2 million of deposits with a maturity less than three months on inception date (2022: €191.3 million).

Note 53. Shareholders' equity

The movements in shareholder's equity were as follows:

						Legal reserves and other			
In thousands of euros	Issued capital	Share premium	Reserve for own shares	Retained earnings	Profit for the year	Non-distributable retained earnings and other reserves regarding subsidiaries	Revaluation reserve	Reserve for translation differences	Total
As at 1 January 2022	**171,370**	**2,423,428**	**(42,778)**	**601,051**	**413,344**	**40,349**	**53,038**	**(12,216)**	**3,647,586**
Share based payments	–	–	–	13,976	–	–	–	–	13,976
Appropriation of the result of preceding year	–	–	–	207,359	(413,344)	–	–	–	(205,985)
Net result for the period	–	–	–	–	437,827	–	–	–	437,827
Transfers within equity	–	–	–	(19,406)	–	19,406	–	–	–
Exchange rate differences	–	–	–	–	–	–	–	(26,169)	(26,169)
Revaluation subsidiaries	–	–	–	30,919	–	–	–	–	30,919
Other revaluations	–	–	–	–	–	–	19,412	–	19,412
Purchase of shares	–	–	(18)	–	–	–	–	–	(18)
Other movements	–	–	9,960	(13,541)	–	–	–	–	(3,581)
As at 31 December 2022	**171,370**	**2,423,428**	**(32,836)**	**820,358**	**437,827**	**59,755**	**72,450**	**(38,385)**	**3,913,967**
Share based payments	–	–	–	14,134	–	–	–	–	14,134
Appropriation of the result of preceding year	–	–	–	200,636	(437,827)	–	–	–	(237,191)
Net result for the period	–	–	–	–	513,567	–	–	–	513,567
Transfers within equity	–	–	–	(13,160)	–	13,160	–	–	–
Exchange rate differences	–	–	–	–	–	–	–	(50,545)	(50,545)
Revaluation subsidiaries	–	–	–	4,478	–	–	–	–	4,478
Other revaluations	–	–	–	–	–	–	8,203	–	8,203
Acquisition of NCI subsidiaries	–	–	–	(885)	–	–	–	–	(885)
Purchase of shares	–	–	(219,061)	–	–	–	–	–	(219,061)
Other movements	–	–	9,780	(10,756)	–	–	–	–	(976)
As at 31 December 2023	**171,370**	**2,423,428**	**(242,117)**	**1,014,805**	**513,567**	**72,915**	**80,653**	**(88,930)**	**3,945,691**

For further information to the shareholder's equity, see Note 26 of the Consolidated Financial Statements.

The movements in the shareholder's equity are before the proposed profit appropriation (see Note 59).

The proposed profit appropriation includes the following items: addition to legal reserves for €13.2 million, addition to retained earnings for €243.6 million and proposed dividends of €256.8 million.

Non-distributable retained earnings and other reserves regarding subsidiaries

As at 31 December 2023, retained earnings and other reserves from subsidiaries are not freely available for distribution for an amount of €72.9 million relating to legal reserves (2022: €59.8 million). The amount includes a legal reserve for capitalised development costs in Dutch subsidiaries of €51.9 million (2022: €38.5 million).

Revaluation reserve

The revaluation reserve is maintained for the revaluation for the financial assets at FVOCI, net of tax. This reserve is a non-distributable legal reserve.

Reserve for translation differences

The reserve for translation differences concerns all exchange rate differences arising from the translation of the net investment in foreign entities and the related goodwill. This reserve is a non-distributable legal reserve.

Note 54. Borrowings

For additional information on the borrowing positions, a reference is made to Note 29 of the Consolidated Financial Statements.

Note 55. Related Party Borrowings

In thousands of euros	As at 1 January 2023	Loan settlements made	Loans advanced	Interest accrued/(paid)	As at 31 December 2023
Current					
Euronext Paris S.A.	67,000	–	–	–	67,000
Euronext IP & IT Holding B.V.	84,686	–	–	–	84,686
Euronext Amsterdam N.V.	25,000	–	–	–	25,000
Euronext Brussels S.A./N.V.	60,000	–	–	–	60,000
Euronext Corporate Services B.V.	3,500	–	–	–	3,500
Interest payable on intercompany loan	821	–	–	1,672	2,493
Total	**241,007**	**–**	**–**	**1,672**	**242,679**

In thousands of euros	As at 1 January 2022	Loan settlements made	Loans advanced	Interest accrued/(paid)	As at 31 December 2022
Current					
Euronext Paris S.A.	67,000	–	–	–	67,000
Euronext IP & IT Holding B.V.	84,686	–	–	–	84,686
Euronext Amsterdam N.V.	25,000	–	–	–	25,000
Euronext Brussels S.A./N.V.	60,000	–	–	–	60,000
Euronext Corporate Services B.V.	3,500	–	–	–	3,500
Euronext Lisbon S.A.	30,000	(30,000)	–	–	–
The Irish Stock Exchange Plc.	30,000	(30,000)	–	–	–
Interest payable on intercompany loan	89	–	–	732	821
Total	**300,275**	**(60,000)**	**–**	**732**	**241,007**

The fair value of the related party loans payable approximate their carrying values.

The €67.0 million loan payable to Euronext Paris S.A. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The applicable interest was €STER OIS plus 0.125%, payable annually. The sensitivity of the related party loan payables to changes in the interest rate is that a 0.5% increase/decrease of the interest rate will result in an increase/decrease of the interest income by €0.3 million (2022: €0.3 million).

The €84.7 million loan payable to Euronext IP & IT Holding B.V. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The interest is Euribor 3 months plus 0.125% payable annually on two loans. The sensitivity of the related party loan payables to changes in the Euribor interest rate is that a 0.5% increase/decrease of the interest rate will result in an increase/decrease of the interest income by €0.4million (2022: €0.4 million).

The €25.0 million loan payable to Euronext Amsterdam N.V. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The interest was €STER OIS plus 0.125%, payable annually on one loan. The sensitivity of the related party loan payables to changes in the interest rate is that a 0.5% increase/decrease of the interest rate will result in an increase/decrease of the interest income by €0.1 million (2022: €0.1 million).

The €60.0 million loan payable to Euronext Brussels S.A./N.V. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The interest is Euribor 3 months plus 0.125% payable annually on one loan. The sensitivity of the related party loan payables to changes in the interest rate is that a 0.5% increase/decrease of the interest rate will result in an increase/decrease of the interest income by €0.3 million (2022: €0.3 million).

The €3.5 million loan payable to Euronext Corporate Services B.V. has no maturity and is repayable at lender's or borrower's request upon 48 hours' notice. The interest was €STER OIS plus 0.125%, payable annually on one loan.

In 2022, the Company repaid the €30.0 million loan payable to Euronext Lisbon S.A. and the €30.0 million loan payable to The Irish Stock Exchange Plc.

Note 56. Trade and other payables

In thousands of euros	As at 31 December 2023	As at 31 December 2022
Trade payables	69	59
Amounts due to subsidiaries	408,927	420,773
Other	1,438	2,970
Total	**410,434**	**423,802**

The carrying values of current trade and other payables are reasonable approximations of their fair values. These balances do not bear interest.

As at 31 December 2023, the amounts due to subsidiaries contains a €387.9 million cash pool position with the subsidiaries (2022: €408.4 million).

Note 57. Managing Board and Supervisory Board remuneration

57.1 Managing Board remuneration

	2023					
In thousands of euros	Fixed Benefits	Variable Benefits	Share-based payment costs	Post-employment benefits	Termination payments	Total Benefits
Stéphane Boujnah	1,024	1,425	1,896	–	–	**4,345**
Chris Topple (a)	352	304	324	25	862	**1,867**
Daryl Byrne	293	200	297	32	–	**822**
Delphine d'Amarzit	352	270	219	–	–	**841**
Manuel Bento (b)	257	400	105	–	–	**762**
Isabel Ucha	252	140	150	35	–	**577**
Simone Huis in 't Veld	310	220	268	23	–	**821**
Fabrizio Testa	412	378	264	26	–	**1,080**
Øivind Amundsen	260	201	169	11	–	**641**
Benoît van den Hove (c)	95	100	22	6	–	**223**
Vincent van Dessel (c)	235	–	407	21	–	**663**
Total	**3,842**	**3,638**	**4,121**	**179**	**862**	**12,642**

In thousands of euros	2022 Fixed Benefits	Variable Benefits	Share-based payment costs	Post-employment benefits	Termination payments	Total Benefits
Stéphane Boujnah	880	1,237	1,844	–	–	**3,961**
Chris Topple	431	414	500	30	–	**1,375**
Daryl Byrne	295	220	300	32	–	**847**
Delphine d'Amarzit	348	270	144	–	–	**762**
Georges Lauchard (d)	246	–	–	–	–	**246**
Isabel Ucha	248	160	189	34	–	**631**
Simone Huis in 't Veld	323	220	264	26	–	**833**
Fabrizio Testa (e)	255	378	165	8	–	**806**
Øivind Amundsen	293	227	167	12	–	**699**
Vincent van Dessel	402	100	237	38	–	**777**
Total	**3,721**	**3,226**	**3,810**	**180**	**–**	**10,937**

(a) *Chris Topple decided to resign from his position as Member of the Managing Board of Euronext N.V. as per 8 November 2023.*
(b) *At the Annual General Meeting held on 17 May 2023, Manuel Bento was appointed as a member of the Managing Board of Euronext N.V.*
(c) *At the Annual General Meeting held on 17 May 2023, Benoît van den Hove was appointed as a member of the Managing Board with effect from 1 July 2023, following the retirement of Vincent van Dessel.*
(d) *Georges Lauchard decided to resign from his position as Chief Operating Officer and Member of the Managing Board of Euronext N.V. as per 10 June 2022.*
(e) *At the Annual General Meeting held on 18 May 2022, Fabrizio Testa was appointed as a member of the Managing Board of Euronext N.V.*

The Company has not granted any loans, advanced payments and guarantees to the members of the Managing Board and Supervisory Board.

The fixed compensation components consist of base salary and other benefits in kind like company car and health care insurance, if applicable. These components are linked to the overall job responsibilities of the individual Managing Board member and reflect internal consistency.

The variable salary consists of an annual performance compensation component as a percentage of base salary. The percentages are target percentages of the annual base salary, which are only payable if all objectives are met. Performance criteria are set and reviewed on an annual basis by the Remuneration Committee and the Supervisory Board. For 2023, all bonus targets have been met by the Managing Board.

57.2 Euronext Share plans

2023:

in number of RSU	Plan	Year of Granting	Outstanding as at 1 January 2023	Granted	Performance Adjustment	Forfeited	Vested	Outstanding as at 31 December 2023
Stéphane Boujnah	LTI	2020	15,397	–	7,406	–	(22,803)	–
	LTI	2021	19,275	–	–	–	–	19,275
	LTI	2022	15,684	–	–	–	–	15,684
	LTI	2023	–	22,522	–	–	–	22,522
Manuel Bento	LTI	2020 (a)	1,244	–	598	–	(1,842)	–
	LTI	2021 (a)	1,401	–	–	–	–	1,401
	LTI	2022 (a)	1,520	–	–	–	–	1,520
	LTI	2023	–	4,279	–	–	–	4,279
Fabrizio Testa	LTI	2021 (a)	2,926	–	–	–	–	2,926
	LTI	2022	3,422	–	–	–	–	3,422
	LTI	2023	–	4,054	–	–	–	4,054
Chris Topple	LTI	2020	3,768	–	1,812	–	(5,580)	–
	LTI	2021	3,663	–	–	–	–	3,663
	LTI	2022	4,034	–	–	(4,034)	–	–
	LTI	2023	–	4,669	–	(4,669)	–	–
Daryl Byrne	LTI	2020	2,520	–	1,212	–	(3,732)	–
	LTI	2021	2,365	–	–	–	–	2,365
	LTI	2022	2,566	–	–	–	–	2,566
	LTI	2023	–	3,040	–	–	–	3,040
Delphine d'Amarzit	LTI	2021	2,628	–	–	–	–	2,628
	LTI	2022	2,851	–	–	–	–	2,851
	LTI	2023	–	3,378	–	–	–	3,378
Isabel Ucha	LTI	2020	1,431	–	688	–	(2,119)	–
	LTI	2021	1,343	–	–	–	–	1,343
	LTI	2022	1,457	–	–	–	–	1,457
	LTI	2023	–	1,726	–	–	–	1,726
Øivind Amundsen	LTI	2020	1,531	–	736	–	(2,267)	–
	LTI	2021	1,576	–	–	–	–	1,576
	LTI	2022	1,667	–	–	–	–	1,667
	LTI	2023	–	1,723	–	–	–	1,723
Simone Huis in 't Veld	LTI	2020	2,520	–	1,212	–	(3,732)	–
	LTI	2021	2,365	–	–	–	–	2,365
	LTI	2022	2,566	–	–	–	–	2,566
	LTI	2023	–	3,040	–	–	–	3,040
Benoît van den Hove	LTI	2020 (a)	498	–	240	–	(738)	–
	LTI	2021 (a)	467	–	–	–	–	467
	LTI	2022 (a)	506	–	–	–	–	506
	LTI	2023	–	600	–	–	–	600
Vincent van Dessel	LTI	2020	1,785	–	859		(2,644)	–
	LTI	2021	1,692	–	–	–	–	1,692
	LTI	2022	1,909	–	–	–	–	1,909
	LTI	2023	–	2,513	–	–	–	2,513

(a) Shares not granted in capacity as member of the Managing Board.

2022:

in number of RSU	Plan	Year of Granting	Outstanding as at 1 January 2022	Granted	Performance Adjustment	Forfeited	Vested	Outstanding as at 31 December 2022
Stéphane Boujnah	LTI	2019	12,461	–	12,461	–	(24,922)	–
	LTI	2020	15,397	–	–	–	–	15,397
	LTI	2021	19,275	–	–	–	–	19,275
	LTI	2022	–	15,684	–	–	–	15,684
Fabrizio Testa	LTI	2021(a)	2,926	–	–	–	–	2,926
	LTI	2022	–	3,422	–	–	–	3,422
Chris Topple	LTI	2019	4,722	–	4,722	–	(9,444)	–
	LTI	2020	3,768	–	–	–	–	3,768
	LTI	2021	3,663	–	–	–	–	3,663
	LTI	2022	–	4,034	–	–	–	4,034
Daryl Byrne	LTI	2019	3,479	–	3,479	–	(6,958)	–
	LTI	2020	2,520	–	–	–	–	2,520
	LTI	2021	2,365	–	–	–	–	2,365
	LTI	2022	–	2,566	–	–	–	2,566
Delphine d'Amarzit	LTI	2021	2,628	–	–	–	–	2,628
	LTI	2022	–	2,851	–	–	–	2,851
Georges Lauchard	LTI	2020	3,360	–	–	(3,360)	–	–
	LTI	2021	3,154	–	–	(3,154)	–	–
Isabel Ucha	LTI	2019	1,976	–	1,976	–	(3,952)	–
	LTI	2020	1,431	–	–	–	–	1,431
	LTI	2021	1,343	–	–	–	–	1,343
	LTI	2022	–	1,457	–	–	–	1,457
Øivind Amundsen	LTI	2020	1,531	–	–	–	–	1,531
	LTI	2021	1,576	–	–	–	–	1,576
	LTI	2022	–	1,667	–	–	–	1,667
Simone Huis in 't Veld	LTI	2020	2,520	–	–	–	–	2,520
	LTI	2021	2,365	–	–	–	–	2,365
	LTI	2022	–	2,566	–	–	–	2,566
Vincent van Dessel	LTI	2019	2,419	–	2,419	–	(4,838)	–
	LTI	2020	1,785	–	–	–	–	1,785
	LTI	2021	1,692	–	–	–	–	1,692
	LTI	2022	–	1,909	–	–	–	1,909

(a) Shares not granted in capacity as member of the Managing Board.

For additional information on the value of awards granted to the Managing Board reference is made to Note 28 of the Consolidated Financial Statements.

57.3 Supervisory Board Remuneration

In thousands of euros	2023	2022
Piero Novelli *(Chair)*	249	253
Dick Sluimers *(Vice-Chair)*	179	177
Diana Chan	114	116
Rika Coppens	121	113
Alessandra Ferone	96	90
Manuel Ferreira da Silva	96	98
Padraic O'Connor	96	98
Nathalie Rachou	104	109
Olivier Sichel	78	75
Morten Thorsrud	114	116
Total	**1,244**	**1,245**

During 2023 and 2022, no changes occurred to the composition of the Supervisory Board.

58. Audit fees

In thousands of euros	EY Accountants 2023	EY Accountants 2022
Audit services - group and statutory	3,323	2,911
Other assurance services	132	119
Tax services	—	—
Other non-audit services	—	—
Total	**3,455**	**3,030**

The audit services relate to the financial year to which the financial statements relate, regardless of whether the activities were performed by the external auditor and the audit firm during the financial year. In addition to the performance of the statutory audit of the Group financial statements and other (statutory) financial statements of Euronext N.V. and its subsidiaries, EY provides a number of other assurance services. These other assurance services consist of the review of the half year interim financial statements and work related to the registration document. The comparative figures have been adjusted accordingly, in line with the relevant EU regulation.

The total fees of EY Netherlands, charged to Euronext N.V. and its consolidated group entities amounted to €1.7 million in 2023 (2022: €1.7 million).

59. Commitments and contingencies not included in the balance sheet

Tax group

The Company is the head of a fiscal unity with Euronext Amsterdam NV, Euronext IP & IT Holding BV, Euronext Corporate Services BV, Company Webcast BV and Ibabs BV. Under the standard conditions, the members of the tax group are jointly and severally liable for any taxes payable by the fiscal unity. Each company within the fiscal unity recognises its own tax position on its company balance sheet.

The financial statements of Euronext NV, Euronext Amsterdam NV, Euronext IP & IT Holding BV, Ibabs BV and Euronext Corporate Services BV. recognise a tax liability based on their taxable profit.

Guarantees

The Company participates in a number of guarantees. Within the Group, the Company act in the guarantor for certain liabilities of its subsidiary up to an amount of €7.4 million (2022: €7.6 million). In addition, the Company has provided a 403 statement for the benefit of Euronext Amsterdam NV and Ibabs BV. It should be noted that the Group consistently waives guarantee fees for intergroup guarantees, meaning these transactions are not at arm's length.

60. Appropriation of profit

Proposed profit appropriation

The managing board proposes to appropriate the profit of €513.6 million as follows:

In thousands of euros	2023	2022
Addition/(deduction) to/(from) legal reserves	13,160	19,406
Addition to retained earnings	243,623	181,861
At the disposal of the Annual General Meeting of Shareholders (Dividend)	256,784	236,560
Total	**513,567**	**437,827**

In respect of the year ended 31 December 2023, a dividend representing a 50% pay out ratio on net profit, amounting to a total of €256.8 million is to be proposed to the annual general meeting on 15 May 2024. This represents a dividend of €2.48 per share based on the number of shares outstanding at 31 December 2023.

In respect of the year ended 31 December 2022, a dividend representing a 50% pay out ratio on net profit, (adjusted for the net loss realized on the Euronext Clearing Investment portfolio amounting to €35.3 million) amounting to a total of €236.6 million was proposed to and voted by the annual general meeting on 16 May 2023. This represented a dividend of €2.22 per share based on the number of shares outstanding at 31 December 2022.

In 2023, a total amount of €13.2 million was added to the legal reserves, which related to capitalised development costs in Dutch subsidiaries.

In 2022, a total amount of €19.4 million was added to the legal reserves, which related to capitalised development costs in Dutch subsidiaries.

61. Events after the reporting period

The events occurred between 31 December 2023 and the date of this report that could have a material impact on the economic decisions made based on these financial statements, are described in Note 40 of the Consolidated Financial Statements.

Authorisation of Company Financial Statements

Amsterdam, 28 March 2024

Supervisory Board	**Managing Board**
Piero Novelli *(Chair)*	Stéphane Boujnah *(CEO and Chairman)*
Dick Sluimers	Daryl Byrne
Diana Chan	Delphine d'Amarzit
Rika Coppens	Fabrizio Testa
Alessandra Ferone	Isabel Ucha
Manuel Ferreira da Silva	Øivind Amundsen
Padraic O'Connor	Simone Huis in 't Veld
Nathalie Rachou	Benoît van den Hove
Olivier Sichel	Manuel Bento
Morten Thorsrud	

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9.1 Profit Appropriation Section

Provisions in the Articles of Association relating to profit appropriation

Article 28.2 of the Articles of Association states that from the profits, as they appear from the adopted annual accounts, first, in the event that the priority share has been issued and is held by a party other than the Company, a dividend of ten per cent (10%) of the par value of the priority share will be paid to the holder of the priority share. The profits which remain after application of the first sentence of this Article 28.2 shall be at the free disposal of the General Meeting, provided that there shall be no further distribution on the priority share, and provided that the General Meeting may only resolve on any reservation or distribution of profits pursuant to and in accordance with a proposal thereto of the Supervisory Board or a proposal of the Managing Board, which proposal has been approved by the Supervisory Board.

9.2 Independent Auditor's Report

To: the shareholders and Supervisory Board of Euronext N.V.

Report on the audit of the financial statements 2023 included in the universal registration document

Our opinion

We have audited the financial statements 2023 of Euronext N.V. (hereinafter: Euronext or the company) based in Amsterdam, the Netherlands. The financial statements comprise the consolidated and company financial statements.

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of Euronext as at 31 December 2023 and of its result and its cash flows for 2023 in accordance with International Financial Reporting Standards as adopted in the European Union (EU-IFRSs) and with Part 9 of Book 2 of the Dutch Civil Code
- The accompanying company financial statements give a true and fair view of the financial position of Euronext as at 31 December 2023 and of its result for 2023 in accordance with Part 9 of Book 2 of the Dutch Civil Code

The consolidated financial statements comprise:

- The consolidated balance sheet as at 31 December 2023
- The following statements for 2023: the consolidated statements of profit or loss, comprehensive income, changes in equity and cash flows
- The notes comprising material accounting policy information and other explanatory information

The company financial statements comprise:

- The company balance sheet as at 31 December 2023
- The company income statement for 2023
- The notes comprising a summary of the accounting policies and other explanatory information

Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the Our responsibilities for the audit of the financial statements section of our report.

We are independent of Euronext in accordance with the EU Regulation on specific requirements regarding statutory audit of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information in support of our opinion

We designed our audit procedures in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The following information in support of our opinion and any findings were addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

Our understanding of the business

Euronext is a European market infrastructure group which businesses comprise listing, cash trading, derivatives trading, fixed income trading, spot FX trading, power trading, investor services, advanced data services, post-trade services as well as technology solutions. The main subsidiaries are located in the Netherlands, France, Italy, Belgium, Ireland, Norway, Portugal and Denmark. The FX trading is operated by a subsidiary in New York.

The group is structured in components and we tailored our group audit approach accordingly. We paid specific attention in our audit to a number of areas driven by the operations of the group and our risk assessment.

We determined materiality and identified and assessed the risks of material misstatement of the financial statements, whether due to fraud or error in order to design audit procedures responsive to those risks and to obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Materiality

Materiality	€34 million (2022: €30 million)
Benchmark applied	Approximately 5% of profit before income tax (2022: approximately 5% of profit before income tax)
Explanation	We consider profit before income tax as the most appropriate basis to determine materiality as it is one of the key performance measures for the users of the financial statements.

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the supervisory board that misstatements in excess of € 1.7 million, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Scope of the group audit

Euronext is at the head of a group of entities (components). The financial information of this group is included in the consolidated financial statements.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for the components. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected components for which an audit or review had to be carried out on the complete set of financial information or specific items.

Our group audit mainly focused on significant components of Euronext in the Netherlands, France, Italy, Norway, Ireland, Portugal, Denmark and the United States. We have:

- Performed audit procedures ourselves at the components in the Netherlands and France;
- Used the work of other component auditors from EY Global member firms when auditing the components in Italy, Norway, Ireland, Portugal and Denmark
- Used the work of non-EY auditors for the audit of a component in the United States.

We sent instructions to component auditors, covering the significant areas and the information required to be reported to us. Based on our risk assessment, we determined the level of involvement in component audits. We have visited the component team in Italy. Our site visits encompassed some, or all, of the following activities: reviewing key local working papers and conclusions, meeting with local management teams and obtaining an understanding of key processes. We interacted regularly with the component teams during various stages of the audit and reviewed key working papers of component auditors.
In total, with these procedures we covered 95% of profit before income tax and 99% of the group's total assets.
By performing the procedures mentioned above at components, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion on the consolidated financial statements.

Teaming and use of specialists

We ensured that the audit teams both at group level and at component level included the appropriate skills and competences which are needed for an audit of a listed client in the market infrastructure industry. We included team members with specialized knowledge in the areas of IT audit and forensics and have made use of our own specialists in the areas of valuation of financial investments, employee benefits, income tax, purchase price accounting and impairment analyses of goodwill and other intangibles.

Our focus on climate risks and the energy transition

Climate change and the energy transition are high on the public agenda and lead to significant change for many businesses and society. The managing board of Euronext has reported in chapter 3 'Empower sustainable finance' of the universal registration document how the company is addressing climate-related and environmental risks. Euronext has identified 11 key issues that impact its sustainable development goals that it considers most relevant per impact area: our markets, our partners, our people our society and our environment. We refer to chapter 3.4 "Euronext five ESG impact areas and the sustainable development goals" of the universal registration document where the managing board discloses its progress made against its key ESG issues, supporting Euronext's five material impact areas.

As part of our audit of the financial statements, we evaluated the extent to which climate-related risks and the effects of the energy transition and Euronext's development goals are taken into account in estimates and significant assumptions as well as in the design of relevant internal control measures. Furthermore, we read the universal registration document and considered whether there is any material inconsistency between the non-financial information in chapter 3 "Empower sustainable finance" and the financial statements.

Based on the audit procedures performed, we do not deem climate-related risks to have a material impact on the financial reporting judgements, estimates or significant assumptions as at 31 December 2023.

Our focus on fraud and non-compliance with laws and regulations

Our responsibility

Although we are not responsible for preventing fraud or non-compliance and we cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Our audit response related to fraud risks

We identified and assessed the risks of material misstatements of the financial statements due to fraud. During our audit we obtained an understanding of the company and its environment and the components of the system of internal control, including the risk assessment process and the managing board's process for responding to the risks of fraud and monitoring the system of internal control and how the supervisory board exercises oversight, as well as the outcomes. We refer to chapter 2 "Risk management & control" of the universal registration document of Euronext for the managing board's risk assessment after consideration of potential fraud risks.

We evaluated the design and relevant aspects of the system of internal control and in particular the fraud risk assessment, as well as the code of business conduct and ethics, the Euronext anti-fraud and anti-bribery policies, whistleblower policy and incident registration. We evaluated the design and the implementation and, where considered appropriate, tested the operating effectiveness, of internal controls designed to mitigate fraud risks.

As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption in close co-operation with our forensic specialists. We evaluated whether these factors indicate that a risk of material misstatement due to fraud is present.

We incorporated elements of unpredictability in our audit. We also considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance.

We addressed the risks related to management override of controls, as this risk is present in all companies. For these risks we have performed procedures among other things to evaluate key accounting estimates for management bias that may represent a risk of material misstatement due to fraud, in particular relating to important judgment areas and significant accounting estimates as disclosed in the "critical accounting estimates and judgements" section of the accounting policies in the notes to the financial statements. We have also used data analysis to identify and address high-risk journal entries and evaluated the business rationale (or the lack thereof) of significant extraordinary transactions, including those with related parties.

Additionally, as described in our key audit matter related to the "Recognition of internally developed software", given the amount of capitalized software development expenses during the year, we specifically considered whether management's judgment involved in determining whether IAS 38 "Intangible assets" capitalization criteria have been met indicates a management bias that may represent a risk of material misstatement due to fraud.

When identifying and assessing fraud risks we presumed that there are risks of fraud in revenue recognition. We evaluated that revenues for the access to Euronext's market data information services as part of the revenues from advance data services in particular give rise to this fraud risk, given inherent limitations in Euronext's revenue calculation system. We designed and performed our audit procedures relating to revenue recognition responsive to this presumed fraud risk and we sent out confirmations to customers and used data analysis procedures to recalculate the advanced data services revenue.

We considered available information and made enquiries of the managing board, relevant executives, internal audit, legal, compliance, risk management and the supervisory board.

The fraud risks we identified, enquiries and other available information did not lead to specific indications for fraud or suspected fraud potentially materially impacting the view of the financial statements.

Our audit response related to risks of non-compliance with laws and regulations

We performed appropriate audit procedures regarding compliance with the provisions of those laws and regulations that have a direct effect on the determination of material amounts and disclosures in the financial statements. Furthermore, we assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with the managing board, relevant executives, internal audit, legal, compliance and risk management, and the supervisory board, reading minutes, inspection of internal audit and compliance reports, and performing substantive tests of details of classes of transactions, account balances or disclosures.

We also inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

Our audit response related to going concern

As disclosed in section 3. A). "Basis of preparation" of the notes to the consolidated financial statements, the financial statements have been prepared on a going concern basis. When preparing the financial statements, the managing board made a specific assessment of the company's ability to continue as a going concern and to continue its operations for at least twelve months from the date of preparation of the financial statements and confirmed this in section 4.2 "In Control Statement" of the universal registration document.

We discussed and evaluated the specific assessment with the managing board exercising professional judgment and maintaining professional skepticism. We considered whether the managing board's going concern assessment, based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, contains all relevant events or conditions that may cast significant doubt on the company's ability to continue as a going concern, with a focus on whether the company will continue to comply with regulatory liquidity and solvency requirements. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion.

Based on our procedures performed, we did not identify material uncertainties about going concern. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

Our key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the supervisory board. The key audit matters are not a comprehensive reflection of all matters discussed.

In comparison with previous year, the nature of our key audit matters did not change.

Impairment of goodwill and other purchased intangible assets	
Risk	Euronext accounts for a significant amount of goodwill and customer relationships on its consolidated balance sheet. As described in note 18, goodwill amounts to €4 billion as at 31 December 2023 and other purchased intangible assets have a value of €2 billion mostly consisting of acquired customer relations which have a finite useful life. Management is required to perform annually an impairment test of goodwill. Where indicators of impairment of other purchased intangible assets are identified, a detailed impairment test is performed. These impairment tests involve judgement in applying assumptions in the valuation models. Key judgements and estimates used in the valuation models include cash flow projections, revenue growth, discount rates, amortization periods for intangible assets and customer retention rates. The goodwill impairment test is disclosed in note 18 with reference to note 3 and did not result in recognition of an impairment. As disclosed in note 18, no indicators of impairment of other intangible assets with a finite useful life were identified. We have determined the impairment of goodwill and other purchased intangibles to be a key audit matter due to the size of the goodwill and intangible assets as at 31 December 2023 and the use of judgement by management in the impairment test.
Our audit approach	Our audit procedures included, amongst others, evaluating the appropriateness of Euronext's accounting policies related to the impairment testing in accordance with IAS 36 "Impairment of assets". We obtained an understanding of the impairment process, evaluated the design of internal controls in respect of impairment testing and adopted a substantive audit approach. We performed substantive procedures, including the reconciliation of the data used in the impairment calculations and disclosures to source systems. With involvement of our own specialists in the area of impairment analyses of goodwill and other intangibles, we evaluated the model used by Euronext and tested key inputs applied in the goodwill impairment test such as the discount rates and growth rates assigned to each of the cash generating units and we evaluated these key inputs by comparing them to a range of economic and industry forecasts. We assessed the accuracy of forecasts included in the model by comparing the forecasts with the 2024 budget and 2025 business plan as approved by the managing and supervisory boards and evaluated the reasonableness of cash flow forecasts by analyzing the revenue growth rates used. We performed sensitivity analysis on the key assumptions (including the model inputs, cash flow forecasts and customer retention rates) used in the models to understand the impact that reasonably possible changes to these key inputs would have on the carrying amount of the goodwill and could trigger a potential impairment of purchased intangible assets at the balance sheet date. Finally, we evaluated the adequacy of the relevant disclosures made in the financial statements.
Key observations	Based on our procedures performed we consider the valuation of the goodwill and other purchased intangible assets to be reasonable in accordance with EU-IFRSs.

Recognition of internally developed software	
Risk	The capitalization of expenses for internally developed software involves judgement in assessing the capitalization against the recognition criteria set out in IAS 38 "Intangible assets". Euronext's accounting policy for capitalizing software development costs is disclosed in section 3, under H). (ii) "Internally generated intangible assets". As disclosed in note 18 of the financial statements internally developed software capitalization amounts to € 167 million as per 31 December 2023. We have determined the recognition of internally developed software as an intangible asset to be a key audit matter following the internally developed software investments related to among others the ongoing implementation of trading platform Optiq at Borsa Italiana and the expansion of the clearing activities to all Euronext markets, the use of judgement by management in determining whether the recognition criteria were met and the audit effort required to address the matter. We specifically considered the risk that expenses are capitalized inappropriately as internally developed software. The internally developed software recognised is disclosed in note 18 "Goodwill and other intangible assets" to the financial statements.
Our audit approach	We evaluated Euronext's accounting polices related to the recognition of internally developed software in accordance with IAS 38, and whether assumptions and the criteria applied for capitalization are appropriate and have been applied consistently. We also obtained an understanding of the recognition process, evaluated the design and implementation of internal controls. We adopted a substantive audit approach and performed procedures in respect of the capitalized software development costs, including the reconciliation of the data used in the calculations and disclosures to source systems. For a sample of additions, we have agreed amounts recognized to supporting documentation to confirm that the costs were incurred and the internally developed software meets the definition of an intangible asset and the recognition criteria of IAS 38. For all intangible assets we have tested the appropriateness of the amortization period based on historic trends of economic lives and management's best estimate of future performance. Finally, we evaluated the adequacy of the relevant disclosures made in the financial statements.
Key observations	Based on our procedures performed we consider the recognition of internally developed software to be reasonable and in accordance with EU-IFRSs.

Measurement of financial assets at fair value through other comprehensive income	
Risk	Euronext holds a direct and an indirect minority interest in Euroclear S.A. As described in note 20 to the financial statements this investment is classified as a financial asset at fair value through other comprehensive income. As Euroclear is a non-listed company, Euronext developed an internal model to estimate the fair value, as disclosed in note 35 to the financial statements. A weighted approach is applied which is based on the return on equity, expected dividend growth rate (non-observable parameters) and cost of capital of comparable regulated entities and market observable transactions less a discount for illiquidity. In 2023, Euronext revalued its total interest by €12 million, increasing the fair value to €261 million. The determination of the fair value of the interest in Euroclear involves significant management judgment and assumptions as certain unobservable inputs are used. The use of different valuation techniques and assumptions can produce significantly different estimate of fair value. Given the inherent subjectivity we determined this a key matter for our audit.

Our audit approach	Our audit procedures comprised, amongst others, evaluating the appropriateness of Euronext's accounting policies related to the fair valuation of an interest in a non-listed company according to IFRS 9 "Financial Instruments" and IFRS 13 "Fair value measurement". The procedures performed included an evaluation of the methodology and the appropriateness of the valuation model for consistency and an assessment against generally accepted market practice and inputs used to value the investments. We also obtained an understanding of the valuation process, evaluated the design and implementation of internal controls and adopted a substantive audit approach. We used our specialists in the area of valuation of financial investments to independently evaluate the valuation performed. As part of these audit procedures, we tested the reasonableness of key inputs used in the valuation such as the market observable transfers, and the non-observable parameters, the return on equity and expected dividend growth rates. Finally, we evaluated the adequacy of the disclosures related to financial assets at fair value through other comprehensive income. In particular we evaluated whether disclosures adequately convey the degree of estimation uncertainty and the range of possible outcomes.
Key observations	We consider the measurement of and disclosures on the financial assets at fair value through other comprehensive income to be reasonable and in accordance with EU-IFRS.

Reliability and continuity of the IT environment	
Risk	The activities and financial reporting of Euronext are highly dependent on the reliability and continuity of the IT environment. Effective general IT controls with respect to change management, logical access, infrastructure and operations, support the integrity and continuity of the electronic data processing as well as the operating effectiveness of the automated controls. As described in the risk management Section 2 in the universal registration document, the IT environment and the IT organization of Euronext continue to be strengthened. There is a risk that the general IT control measures may not always operate as intended and, as a result, internal controls are ineffective. Therefore, we identified the reliability and continuity of the IT environment, insofar in scope of our audit of the financial statements, to be a key audit matter.
Our audit approach	IT audit specialists are an integral part of the engagement team and assess the reliability and continuity of the IT environment to the extent necessary for the scope of our audit of the financial statements. In this context, we evaluated the design of the IT processes and tested the operating effectiveness of general IT controls, as well as application controls over data processing, data feeds and interfaces where relevant for the financial reporting. We performed procedures on access management, cyber security, security event monitoring and segregation of duties for the related systems. We also assessed the possible impact of changes in IT during the year resulting from the internal transformation activities and remedial measures on the operating effectiveness of general IT controls and the automated controls. Where applicable, we tested internal controls related to cloud computing and third-party service providers. Where applicable, we tested internal controls related to cloud computing and third-party service providers.
Key observations	Our testing of the general IT controls and the substantive tests performed, provided sufficient evidence to enable us to rely on the adequate and continued IT environment relevant for our audit of the financial statements.

Report on other information included in the universal registration document

The universal registration document contains other information in addition to the financial statements and our auditor's report thereon.

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements.
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code for the management report and the other information as required by Part 9 of Book 2 of the Dutch Civil Code and as required by Sections 2:135b and 2:145 sub-section 2 of the Dutch Civil Code for the remuneration report.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements. By performing these procedures, we comply with the requirements of Part 9 of Book 2 and Section 2:135b sub-Section 7 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

The managing board is responsible for the preparation of the other information, including the management report in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information required by Part 9 of Book 2 of the Dutch Civil Code. The managing board and the supervisory board are responsible for ensuring that the remuneration report is drawn up and published in accordance with Sections 2:135b and 2:145 sub-section 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements and ESEF

Engagement

We were engaged by the general meeting of shareholders as auditor of Euronext on 19 May 2017, as of the audit for the year 2017 and have operated as statutory auditor since that date.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audit of public-interest entities.

European Single Electronic Reporting Format (ESEF)

Euronext has prepared the universal registration document in ESEF. The requirements for this are set out in the Delegated Regulation (EU) 2019/815 with regard to regulatory technical standards on the specification of a single electronic reporting format (hereinafter: the RTS on ESEF).

In our opinion the universal registration document prepared in the XHTML format, including the partially marked-up consolidated financial statements as included in the reporting package by Euronext, complies in all material respects with the RTS on ESEF.

The managing board is responsible for preparing the universal registration document, including the financial statements, in accordance with the RTS on ESEF, whereby the managing board combines the various components into a single reporting package.

Our responsibility is to obtain reasonable assurance for our opinion whether the universal registration document in this reporting package complies with the RTS on ESEF.

We performed our examination in accordance with Dutch law, including Dutch Standard 3950N, "Assurance-opdrachten inzake het voldoen aan de criteria voor het opstellen van een digitaal verantwoordingsdocument" (assurance engagements relating to compliance with criteria for digital reporting). Our examination included amongst others:

- Obtaining an understanding of the company's financial reporting process, including the preparation of the reporting package
- Identifying and assessing the risks that the annual report does not comply in all material respects with the RTS on ESEF and designing and performing further assurance procedures responsive to those risks to provide a basis for our opinion, including:
  - Obtaining the reporting package and performing validations to determine whether the reporting package containing the Inline XBRL instance document and the XBRL extension taxonomy files, has been prepared in accordance with the technical specifications as included in the RTS on ESEF
  - Examining the information related to the consolidated financial statements in the reporting package to determine whether all required mark-ups have been applied and whether these are in accordance with the RTS on ESEF.

Description of responsibilities regarding the financial statements

Responsibilities of the managing board and the supervisory board for the financial statements

The managing board is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRSs and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the managing board is responsible for such internal control as the managing board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the managing board is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, the managing board should prepare the financial statements using the going concern basis of accounting unless the managing board either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. The managing board should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgment and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. The Information in support of our opinion section above includes an informative summary of our responsibilities and the work performed as the basis for our opinion.

Our audit further included among others:

- Performing audit procedures responsive to the risks identified, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the managing board
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

Communication

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit. In this respect we also submit an additional report to the audit committee of the supervisory board in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the supervisory board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Amsterdam, 28 March 2024

Ernst & Young Accountants LLP

Signed by J.G. Kolsters

9.3 Limited assurance report of the independent auditor on selected ESG Key Performance Indicators

To: the shareholders and supervisory board of Euronext N.V.

Our conclusion

We have performed a limited assurance engagement on selected ESG Key Performance Indicators (hereinafter: ESG KPIs) in the accompanying Universal Registration Document for the year 2023 of Euronext N.V. at Amsterdam. Based on our procedures performed and the assurance information obtained, nothing has come to our attention that causes us to believe that the selected ESG KPIs are not prepared, in all material respects, in accordance with the applicable criteria as included in the section "Criteria" . The selected ESG KPIs are included in chapter "3.5 Summary ESG KPI" and consist of:

Impact areas	KPIs
Our markets	1. Number of serious incidents on the regulated markets reported to the College of Regulators 2. Number of operational alerts treated by EMS 3. Availability time of the system Optiq® 4. Proportion of revenues linked to ESG products and services in the global revenues of the group
Our partners	5. Net Promoter Score 6. Percentage of suppliers with SBTi set reduction targets on Scope 1 and Scope 2 GHG emissions
Our people	7. Percentage of women in the Senior Leadership Team
Our society	8. Use of the Whistleblower mechanism 9. Data Protection training by new joiners to the company 10. Personal Data breaches
Our environment	11. Carbon footprint (location based

Basis for our conclusion

We have performed our limited assurance engagement on the selected ESG KPIs in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)' (Assurance engagements other than audits or reviews of historical financial information (attestation engagements)). Our responsibilities in this regard are further described in the section "Our responsibilities for the assurance engagement on the selected ESG KPIs" of our report.

We are independent of Euronext N.V. in accordance with the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten" (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagement. Furthermore, we have complied with the "Verordening gedrags- en beroepsregels accountants" (VGBA, Dutch Code of Ethics for Professional Accountants). We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Criteria

The criteria applied for the preparation of the selected ESG KPIs are the criteria developed by Euronext N.V. and are disclosed in chapter 3.5 Summary ESG KPI" of the Universal Registration Document.

The comparability of ESG KPIs between entities and over time may be affected by the absence of a uniform practice on which to draw, to evaluate and measure this information. This allows for the application of different, but acceptable, measurement techniques.

Consequently, the selected ESG KPIs need to be read and understood together with the criteria applied.

Corresponding information not assured

The adjusted carbon footprint figures for the period 2022 have not been part of the assurance engagement. Consequently, the corresponding adjusted carbon footprint figures and thereto related disclosures for the period 2022 are not assured. Our conclusion is not modified in respect of this matter.

Limitations to the scope of our assurance engagement

Our assurance engagement is restricted to the selected ESG KPIs. We have not performed assurance procedures on any other information as included in the Universal Registration Document in light of this engagement.

Our conclusion is not modified in respect of this matter.

Responsibilities of the managing board and the supervisory board for the selected ESG KPIs

The managing board is responsible for the preparation of the selected ESG KPIs in accordance with the criteria as included in the section "Criteria". The managing board is also responsible for selecting and applying the criteria and for determining that these criteria are suitable for the legitimate information needs of the intended users, considering applicable law and regulations related to reporting. The choices made by the managing board regarding the scope of the selected ESG KPIs and the reporting policy are summarized chapter "3.5 Summary ESG KPI" of the Universal Registration Document.

Furthermore, the managing board is responsible for such internal control as it determines is necessary to enable the preparation of the selected ESG KPIs that are free from material misstatement, whether due to fraud or error.

The supervisory board is responsible for overseeing the reporting process of the selected ESG KPIs of Euronext N.V.

Our responsibilities for the assurance engagement on the selected ESG KPIs

Our responsibility is to plan and perform the assurance engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Our assurance engagement is aimed to obtain a limited level of assurance to determine the plausibility of the selected ESG KPIs. The procedures vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a limited assurance engagement is therefore substantially less than the assurance that is obtained when a reasonable assurance engagement is performed.

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS, regulations for quality management systems) and accordingly maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

Our assurance engagement included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of the sector, insight into relevant sustainability themes and issues and the characteristics of the company as far as relevant to the selected ESG KPIs
- Evaluating the appropriateness of the criteria applied, their consistent application and related disclosures on the selected ESG KPIs. This includes the evaluation of the reasonableness of estimates made by the managing board
- Obtaining through inquiries a general understanding of the internal control environment, the reporting processes, the information systems and the entity's risk assessment process relevant to the preparation of the selected ESG KPIs, without obtaining assurance information about the implementation or testing the operating effectiveness of controls
- Identifying areas of the selected ESG KPIs where misleading or unbalanced information or a material misstatement, whether due to fraud or error, is likely to arise. Designing and performing further assurance procedures aimed at determining the plausibility of the selected ESG KPIs responsive to this risk analysis. These procedures consisted amongst others of:
  - Making inquiries of management and relevant staff at corporate level

  responsible for the sustainability strategy, policy and results relating to the selected ESG KPIs

  - Interviewing relevant staff responsible for providing the information for, carrying out controls on, and consolidating the data in the selected ESG KPIs
  - Obtaining assurance evidence that the selected ESG KPIs reconcile with underlying records of Euronext N.V.
  - Reviewing, on a limited sample basis, relevant internal and external documentation
  - Considering the data and trends in the information submitted for consolidation at corporate level
- Reconciling the relevant financial information with the financial statements
- Reading the information in Universal Registration Document that is not included in the scope of our assurance engagement to identify material inconsistencies, if any, with the selected ESG KPIs
- Considering whether the selected ESG KPIs are presented and disclosed free from material misstatement in accordance with the criteria applied.

The Hague, 28 March 2024

Ernst & Young Accountants LLP

Signed by R.J. Bleijs

GLOSSARY & CONCORDANCE TABLES & ANNEX

ACPR	The French Prudential Supervision and Resolution Authority (*Autorité de Contrôle Prudentiel et de Résolution*)
AFM	*Stichting Autoriteit Financiële Markten*, the Netherlands Authority for the Financial Markets
Alternext	Former name for Euronext's multilateral trading facilities (MTFs) in Paris, Brussels, Lisbon, Oslo and Milan, now called Euronext Growth
AMF	French Authority for the Financial Markets (*Autorité des Marchés Financiers*)
Articles of Association	The Articles of Association (*statuten*) of the Company
Brexit	British exit, referring to the UK's decision in a referendum on 23 June 2016 to leave the European Union
CAGR	Compounded annual growth rate
Cash Clearing Agreement	The Cash Clearing Agreement entered into between Euronext and certain of its affiliates and LCH SA S.A. and LCH SA Group Limited on 22 January 2013
CC&G	Multi-asset clearing house owned by Euronext since 29 April 2021
CCPs	Central counterparties
CDP	*Carbon Disclosure Project:* CDP is a not-for-profit organisation that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.
Central Order Book	Providing access to the deepest liquidity pool in Europe connecting Euronext's regulated markets in Amsterdam, Brussels, Dublin, Lisbon, Oslo and Paris.
CEO	Chief Executive Officer
CFO	Chief Financial Officer
Clearing Services	Clearing Services is the procedure by which an organisation (CCP) acts as an intermediary and assumes the role of a buyer and seller in a transaction through the process of novation in order to reconcile orders between transacting parties.
CMVM	*Comissão do Mercado de Valores Mobiliários,* the Portuguese Securities Markets Commission
Code of business conduct and ethics	Code that reaffirms the Euronext N.V.'s commitment to high standards of ethical conduct and reinforces its business ethics, policies and procedures
CONSOB	*Commissione Nazionale per le Società e la Borsa*, the regulatory authority for the Italian securities market
Company	Euronext N.V. and its consolidated subsidiaries, unless otherwise indicated
Compliance department	The Compliance department of Euronext N.V.
COO	Chief Operating Officer
Core Items	The intellectual property in the UTP and other trading technology, including core software and technology
CSD	central securities depositories
CSD Regulation	EU Regulation on securities settlement and central securities depositories (published on the Official Journal of the European Union on 23 July 2014)
D2C	Dealer-to-Client
D2D	Dealer-to-Dealer
Derivatives Clearing Agreement	The Derivatives Clearing Agreement entered into between Euronext and certain of its affiliates and LCH SA S.A. and LCH SA Group Limited on 14 October 2013. The revenue sharing agreement became effective as of 1 April 2014
Code	The Dutch Corporate Governance Code
Dutch Financial Supervision Act	The Dutch Financial Supervision Act (Wet op het Financieel Toezicht) and the rules promulgated thereunder
EBITDA	Operating Profit Before Exceptional Items and Depreciation and Amortisation
ECB	European Central Bank
EEA	European Economic Area
EGB	European Government Bonds
ELITE	Business support and capital raising platform for ambitious and fast growing companies created by Borsa Italiana
EMEA	Europe, Middle East and Africa
EMIR	The EU Regulation on OTC derivative transactions, central counterparties and trade repositories (Regulation 648/2012)
ESG	Environmental, Social and Governance
ESMA	European Securities and Markets Authority
ETF or ETFs	Exchange traded funds
ETPs	Exchange traded products
EU	European Union
EU Market Abuse Rules	The EU Market Abuse Regulation 596/2014/EU, providing for specific rules that intend to prevent market abuse, such as the prohibitions on insider trading, divulging inside information and tipping, and market manipulation
€, Euro	The lawful currency of the Member states of the European Union that have adopted it
Euroclear	Euroclear Bank S.A./N.V.
Euronext	Euronext N.V. and its consolidated subsidiaries, unless otherwise indicated
Euronext Amsterdam	Euronext Amsterdam N.V. and/or the Regulated Market of the Company in Amsterdam
Euronext Brussels	Euronext Brussels S.A./N.V. and/or the Regulated Market of the Company in Brussels
Euronext Clearing	Euronext's multi-asset clearing house, formerly known as CC&G

Euronext College of Regulators	The parties to a Memorandum of Understanding between the competent authorities regarding the co-ordinated regulation and supervision of Euronext being the AMF, the AFM, the CBI, the FSA, the FSMA, CMVM, and CONSOB
Euronext Dublin	Irish Stock Exchange Plc and/or the Regulated Market of the Company in Dublin
Euronext Lisbon	Euronext Lisba-Sociedade Gestora de Mercados Regulamentados and/or the Regulated Market of the Company in Lisbon
market operator	The operator of a regulated market
Euronext Market Subsidiary or Subsidiaries	(A) each and any of (1) Euronext Paris S.A., (2) Euronext Amsterdam N.V., (3) Euronext Brussels S.A./N.V., (4) Euronext Lisbon S.A., (5) Euronext London Ltd and (6) any other Subsidiary of the Company operating a Regulated Market, and (B) any other Subsidiary that is subject to regulatory supervision controlled, directly or indirectly, by any of the entities listed in sub-paragraph (A), including without limitation Interbolsa S.A.
Euronext Paris	Euronext Paris S.A. and/or the Regulated Market of the Company in Paris
Euronext Rulebooks	The Euronext Rulebook containing the rules applicable to the Euronext Market Operators (Rulebook I) and the various non-harmonised Euronext Rulebooks containing local exchange-specific rules (Rulebook II)
Euronext Securities	The CSD network connecting European economies to global capital markets
Exchange Licence	(A) each declaration of no-objection or approval granted by or on behalf of the College of European Regulators to the Company in relation to the operation or holding of one or more Regulated Markets and/or the operation of one or more Multilateral Trading Facilities by the Company or any of the Euronext Market Subsidiaries, (B) each licence granted by or on behalf of the Minister of Finance of the Netherlands to the Company in relation to the operation or holding of one or more Regulated Markets, as well as (C) each declaration of no-objection granted by or on behalf of the Minister of Finance of the Netherlands to any person holding a qualifying participation in the Company and/or any of its Euronext Market Subsidiaries in the Netherlands within the meaning of section 1 of the Act, in each case such licence, approval or declaration of no-objection (i) as granted pursuant to the Act or other applicable law implementing Directive 2004/39/EC or the relevant memorandum of understanding constituting the College of European Regulators and (ii) as in force and as amended at the relevant time
Facilities Agreement	The Facilities Agreement relates to a term loan facilities and a revolving loan facilities entered into between Euronext N.V. and Bank syndicates
FCA	The UK Financial Conduct Authority
FCPE	Fonds Commun de Placement d'Entreprise "Euronext group"
FICC	Fixed Income, Currencies and Commodities
Finanstilsynet	Financial Supervisory Authority of Norway
FinTech or fintech	Abbreviation for Financial Technology
FRSA	The Dutch Financial Reporting Supervision Act (*Wet toezicht financiële verslaggeving*)
FSMA	Belgian Authority for the Financial Markets (Financial Services and Markets Authority)
FTEs	Full-time employee equivalents
General Meeting	The general meeting of shareholders (*algemene vergadering van aandeelhouders*) of Euronext N.V.
GHG	Greenhouse gas
GOA	The further amended and restated governance and option agreement, to which ICE, the stichting and the Company are parties
Group	The Company and its consolidated subsidiaries
ICE	Intercontinental Exchange, Inc. (formerly named Intercontinental Exchange Group, Inc.), together with its consolidated subsidiaries
IFRS	International Financial Reporting Standards as adopted by the European Union
IOI	Indication of interest
IPO	Initial public offering
IT	Information technology
Interbolsa	The CSD in Portugal for the Portuguese market
JV SPV	Joint Venture Special Purpose Vehicle
LCH SA	Banque Centrale de Compensation, trading as LCH SA
LCH SA Agreements	The Cash Clearing Agreement and the Derivatives Clearing Agreement
LIFFE	LIFFE Administration and Management
Lit trading venue	Trading venue displaying bid and offer prices at any time
LTI	Long Term Incentive
LSEG	London Stock Exchange Group plc,
MAD	The EU Market Abuse Directive (2003/6/EC), now superseded by MAR
Managing Board	The Managing Board (*bestuur*) of Euronext N.V.
MAR	EU Regulation on insider dealing and market manipulation (published on the Official Journal of the European Union on 16 April 2014) which replaces MAD since its entry into force on 3 July 2016
MiFID I	The EU Markets in Financial Instruments Directive (2004/39/EC)
MiFID II	The revised EU Directive on MiFID (published on the Officiel Journal of the European Union on 12 June 2014)
MiFID II / MiFIR legislation	MiFID II and MiFIR
MiFIR	EU Regulation on Markets in Financial Instruments (published on the Official Journal of the European Union on 12 June 2014)
Monte Titoli	Italian central securities depository owned by Euronext since 29 April 2021
MTFs	Multilateral trading facilities designated under MiFID and MiFID II
MTS Bondvision	MTS BondVision is a regulated and secure multi-dealer-to-client trading platform for government bonds and credit
MTS	One of Europe's leading electronic fixed income trading markets
NGEU	Next Generation EU, recovery plan for Europe: https://ec.europa.eu/info/strategy/recovery-plan-europe_en
NOTC	Norwegian OTC-list, a market place for unlisted shares
NTI	Net Treasury Income
NYSE Euronext	The Parent through 13 November 2013
Offering	The offering of Ordinary Shares as that took place on 20 June 2014

Optiq®	Euronext new enhanced multi-market proprietary trading platform
Ordinary Shares	Issued and outstanding ordinary shares in the share capital of the Company
OTC	Over-the-counter
Parent	NYSE Euronext, through 13 November 2013, and ICE, from 13 November 2013 until 20 June 2014
Priority Share	Priority share in the share capital of the Company
Prospectus Directive	Directive 2003/71/EC of the European Union, and any amendments thereto, including Directive 2010/73/EU
Qualifying Participation	Direct or indirect interest of 10% or more of the share capital or voting rights
Quantitative Easing	Quantitative easing is a monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply
Reference Shareholders	A group of institutional investors comprised ofNovo Banco., an affiliate of Banco Espírito Santo, S.A., BNP Paribas S.A., BNP Paribas Fortis S.A./N.V., ABN AMRO Bank N.V. through its subsidiary ABN AMRO Participaties Fund I B.V., ASR Levensverzekering N.V. (a company of the ASR Nederland group), Caisse des Dépôts et Consignations, Bpifrance Participations, Euroclear S.A./N.V., Société Fédérale de Participations et d'Investissement/Federale Participatie- en Investeringsmaatschappij, Société Générale and BancoBPI Pension Fund represented by BPI Vida e Pensões – Companhia de Seguros, S.A.
Reference Shareholders Agreement	The agreement entered into by the Reference Shareholders dated 3 June 2014
Regulated Market	A multi-lateral system or trading venue designated to be a "regulated market" under MiFID and MiFID II
RFQ	Request for quotation
RIE	Recognised investment exchange
ROCE	Return on capital employed
SaaS	Software as a service
Science-Based Targets	The Science-Based Targets initiative : https://sciencebasedtargets.org/business-ambition-for-1-5c
Selling Shareholder	ICE Europe Parent Ltd
Separation	Establishment of Euronext as an independent, publicly traded company by means of an initial public offering
SFTI®	Secure Financial Transactions Infrastructure
Shareholder	Any shareholder of the Company at any time
Share Purchase Agreement	The sale and purchase agreement of Ordinary Shares in Euronext N.V. entered into between ICE, the Selling Shareholder and the Reference Shareholders dated 27 May 2014
Single Order Book	Single Order Book for Euronext Paris, Euronext Amsterdam, and Euronext Brussels which unites trading, clearing and settlement across the exchanges in France, Belgium, and the Netherlands, which results in one single trading line for all listed securities, including those listed currently on more than one Euronext markets for which the Single Order Book executes trades on the designated market of reference.
SLAs	Transitional services agreements and related agreements
SMEs	Small and medium-sized enterprises
SPAC	Special purpose acquisition company
SRI	Socially Responsible Investing refers to investment strategies that seek to maximise financial return while maximising social good and minimising environmental footprint
Subsidiary	Has the meaning as referred to in section 2: 24a of the Dutch Civil Code
Supervisory Board	The Supervisory Board of Euronext N.V.
Support Items	Related support items to the Core Items
Tech or tech	abbreviation for technology
TMT	Technology, media and telecom
Transparency Directive	The EU Transparency Directive 2004/109/EC, as amended by Directive 2013/50/EU with respect to transparency and disclosure obligations
T2S	TARGET2-Securities, the European technical platform set up and operated by the Eurosystem that allow core, neutral and borderless settlement of securities transactions on a DvP (delivery-versus-payment) basis in Central Bank Money
UN	United Nations
UTP or Euronext UTP	Universal Trading Platform or Euronext Universal Trading Platform
WACC	Weighted average cost of capital

Reference table in accordance with Annex 1 Regulation (EU) 2017/1129

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