ABN AMRO Bank N.V.

Integrated Annual Report 2022


Banking
for better,
for generations
to come

About this report

Welcome to ABN AMRO's 2022 Integrated Annual Report. The purpose of this report is to explain how, over time, we create value for our stakeholders as a bank, an employer and a contributor to long-term well-being and prosperity.

This report describes ABN AMRO's business, strategy and performance during 2022, as well as providing an overview of the bank's system of governance and approach to risk and capital management. Our previous Integrated Annual Report was published in March 2022.

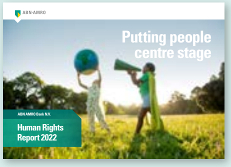
The Integrated Annual Report consists of the Executive Board report (chapters: Introduction; Strategy, value creation & performance; Risk, funding & capital; Leadership & governance), the Report of the Supervisory Board, the Annual Financial Statements and Other. All financial information in this report has been prepared in accordance with the International Financial Reporting Standards (IFRS), as endorsed by the European Union. It also complies with the financial reporting requirements included under Title 9, Book 2, of the Dutch Civil Code, where applicable. We also apply the Integrated Reporting <IR> Framework and comply with the EU's current Non-Financial Reporting Directive (NFRD). Please see page 339 for further information on our approach to reporting, the basis of preparation for this report and other legal notices.

This Integrated Annual Report is our primary statutory and regulatory reporting disclosure. We also publish other reports, including ABN AMRO's Impact Report, Pillar 3 Report and Human Rights Report. Though published as part of an annual reporting suite, all reports have their own purpose and should be read as stand-alone reports. See our website for more information on these reports.

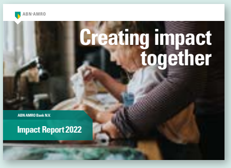
European single electronic reporting format

This document is the PDF version of ABN AMRO's 2022 Integrated Annual Report in the European single electronic reporting format (ESEF) and has been prepared in this way for easy access. To download the ESEF reporting package, visit abnamro.com/ir or contact us at investorrelations@nl.abnamro.com. In the event of discrepancies between this PDF version and the ESEF reporting package, the latter prevails.

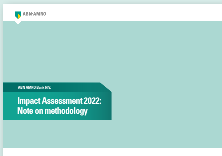
Other ABN AMRO reports



Human Rights Report 2022



Impact Report 2022



Impact Assessment 2022: Note on methodology

Pillar 3 Report 2022

Abbreviations and definitions of important terms 2022

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Performance highlights in 2022

1,867 ↑
Net profit (in EUR millions)
2021: 1,234

9% ↑
Return on average equity
2021: 6% (target 2024: 8%)

1.96 ↑
Earnings per share (in EUR)
2021: 1.21

69.2% ↓
Cost-income ratio
2021: 76.4%

3 ↑
Cost of risk (in bps)
2021: -7 (target 2024: 20)

129 ↑
Net interest margin (in bps)
2021: 127 basis points (target 2024: 127)

5.3 =
Absolute cost base (in EUR billions)
2021: 5.3 (target 2024 <4.7)

Relational Net Promotor Score:

0 ↑
NPS mortgages
2021: -1 (target 2024: >0)

-38 ↓
NPS SMEs (including self-employed)
2021: -33 (target 2024: >0)

Market share growth in focus segments:

17% ↑
New production mortgages
2021: 16% (target 2024: 20%)

16% ↓
SMEs (including self-employed)
2021: 18% (target 2024: 20%)

63% ↑
Straight-through-processing rate
2021: n/a (target 2024: 90%)

31% ↑
Percentage of sustainability (acceleration) asset volumes
2021: 27% (target 2024: 36%)

31% ↑
Percentage of women at sub-top
2021: 30% (target 2024: 34%)

15.2% ↓
CET1 ratio (under Basel (III)
2021: 16.3%

16% =
CET1 ratio (under Basel IV)
2021: 16% (target 2024: 13%)

5.2% ↓
Leverage ratio
2021: 5.9%

Interview with our Chief Executive Officer

"We will continue to push the consistency of our execution, while coming together as one bank to support our clients in the best way possible. In line with our purpose, that also means we have to take care of vulnerable groups of clients"

Robert Swaak
CEO of ABN AMRO Bank N.V.

How do you look back on 2022?

"It was another turbulent year, which of course will be remembered for the start of the war in Ukraine. The continuing violence has claimed thousands of lives and forced millions of people out of their homes. I'm deeply saddened by all this suffering and devastation so close to home.

It is clear that we are living in a world of converging crises. We were just coming out of the Covid-19 crisis when Russia invaded Ukraine. The ongoing energy crisis aggravated inflationary pressures, and now we also find ourselves in an economic downturn. And remember, even before the pandemic, we were already dealing with the climate crisis and the cost of creating a more sustainable economy."

What does this world of converging crises mean for the bank and its clients?

"To start with our clients, I continue to be amazed by their flexibility, which already became apparent during the Covid-19 crisis. Just as things were starting to look better, we were faced with the war in Ukraine and an unprecedented rise in energy prices leading to higher cost of living for our clients. Once again, many companies rose to the challenge and found ways to significantly reduce their energy usage without impacting production levels. Is it sustainable? 2023 will tell. But the ability of our clients to innovate and navigate change is admirable, though this adaptability comes at a price.

For the bank, it means that crises feed into each other, so you can't deal with them in isolation. A good example is our new climate strategy. Although it outlines how we will play our part in limiting global warming to 1.5°C, this strategy is not just about climate. In line with our purpose, 'Banking for better, for generations to come', we strive to achieve a just transition.

We simply cannot take decisions on climate without considering the social consequences, and we can't expect to make progress if there's no governance."

Despite the challenging environment, the bank delivered a strong performance in 2022. How do you explain that?

"The quick answer is that we started to benefit from changing interest rate conditions, which significantly boosted our net interest income. But what you're also clearly seeing is that our strategy is starting to deliver. In 2020, we decided to de-risk the bank by winding down our CB non-core portfolio, and the past year has confirmed that we made the right choices. Our risk profile has improved and we're seeing continued volume growth in the three transition sectors we focus on: energy, mobility, and digital. If we had not de-risked the bank, we would have been much more vulnerable in the current environment. In fact all client units contributed to better results in 2022 and our cost discipline began to pay off.

A big milestone this past year was our inaugural share buyback. I'm very pleased with our strong capital position, which allows us to continue to operate and grow the bank, to weather crises and to do what's right for our owners, which is to pay dividend and to return capital if and when we are able to."

It sounds like the bank's transformation is starting to pay off. How do you view the strategic progress made last year?

"We made another big step forward in being a personal bank in the digital age, serving clients where we have a right to win in the Netherlands and Northwest Europe. We have almost completed the wind-down of our CB non-core activities and made good progress on our AML remediation programme, which we expect to finalise by the end of this year. Going into 2023, we remain on track to deliver on our strategic promises to stakeholders. Our ROE for 2022 was 9% and our ambition of 10% is clearly within reach. At the same time, our cost levels are clearly not where we want them to be. We are working hard to reach our cost target for 2024, though this has become more challenging in the current environment."

Apart from costs, what else will you focus on in 2023?

"We will look at everything we do through the lens of our people and clients. Although most of our clients appreciate the convenience of digital banking, our Net Promoter Score, or NPS, remains an area of concern. Especially in personal banking, our scores are affected by negative sentiment, the increasing costs of payment packages and a further reduction in the number of branches. In 2023, we will work very hard to improve our NPS across the bank.

Secondly, we will continue to focus on the engagement of our people as our employee engagement scores took a clear hit. We have been through several reorganisations, which created a lot of uncertainty, and we had very intense negotiations about a new collective labour agreement in the Netherlands. I'm pleased that we were able to reach a solution that provides clarity and stability for the next two years. In 2023, we will try our utmost to help people reconnect with the bank and our purpose. As we continue to change the bank, we need to have the courage to have honest and sometimes extremely difficult discussions amongst ourselves. This is particularly important as we try to find our way in the era of hybrid working."

It looks like 2023 will be another challenging year. How will that affect the bank's priorities?

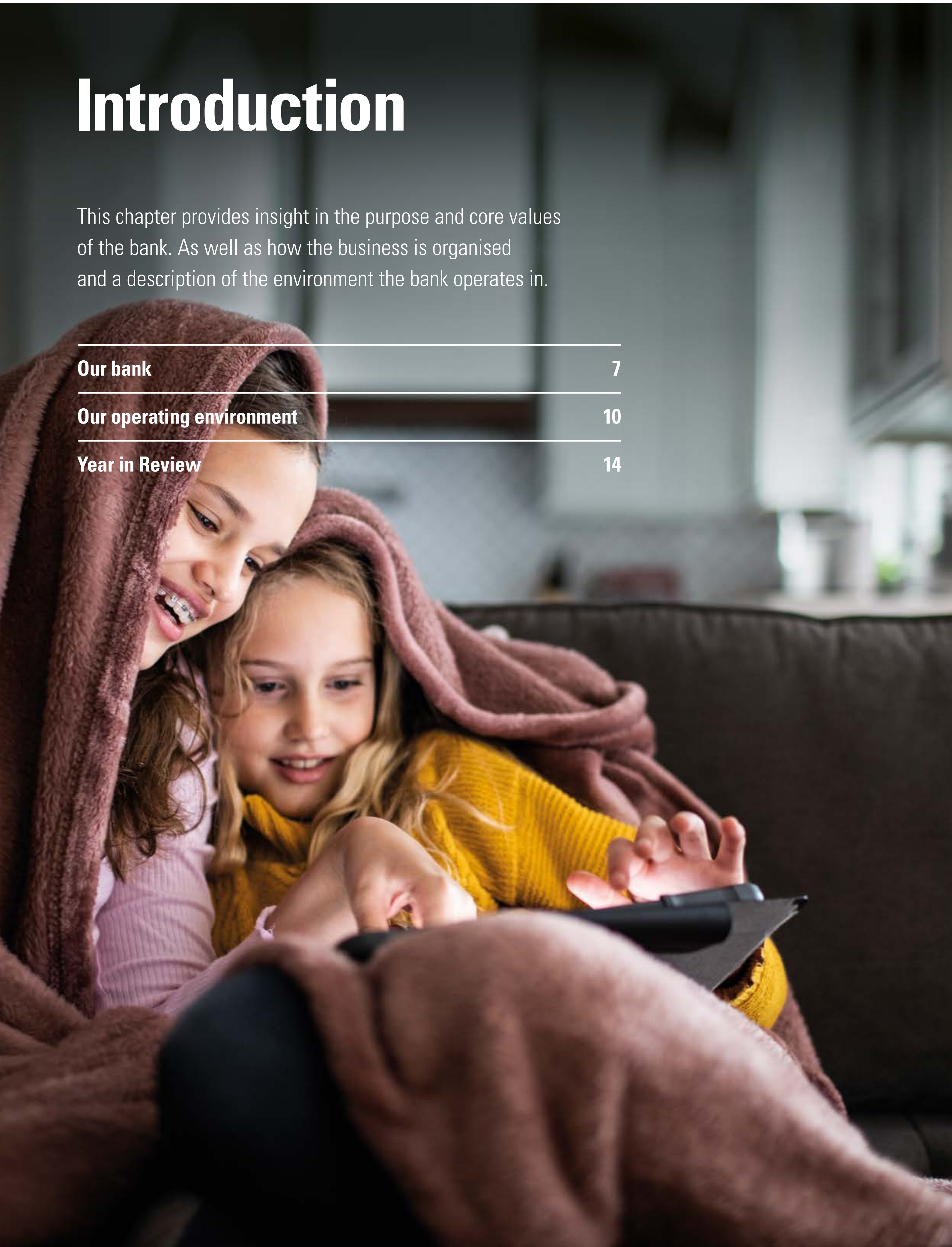
"Despite all the uncertainty, our priorities will remain the same. We have clarity on what we want to deliver and we can keep that at the forefront as we work through difficult times. We will continue to push the consistency of our execution, while coming together as one bank to support our clients in the best way possible. In line with our purpose, that also means we have to take care of vulnerable groups of clients who can't move at the same pace as the digital world. We will continue to offer financial care coaches to help them keep up with changes in digital banking and we are always looking for ways to better support them."

Looking back on the past year, what are you proud of?

"I'm proud that we've proven to be a stable pillar in society, supporting our clients and providing lending solutions also in times of crises. Not so long ago, banks used to be part of the problem. Today, we are part of the solution. Our business, our capital position and our liquidity levels show resilience, and we are staying very close to our clients, assuring them that we are there when they need us. Also, I continue to be proud of our colleagues worldwide, who through changing circumstances continue to stay close to our clients and our bank.

In conclusion, I want to extend a huge word of thanks to the people in the bank, for whom I have great admiration. 2022 was not only challenging because of everything going on in the world around us, but also because of our ongoing transformation. It was a year full of reorganisations, which was extremely difficult for everyone involved. Despite all those changes and challenges, our people stayed committed to our clients. I can't stress enough how crucial this is for the bank that we aspire to be. If we maintain our personal focus in a digital age, I'm confident that 2023 will be a successful year of delivery on our strategy."

Robert Swaak
CEO of ABN AMRO Bank N.V.



Introduction

This chapter provides insight in the purpose and core values of the bank. As well as how the business is organised and a description of the environment the bank operates in.

Our bank

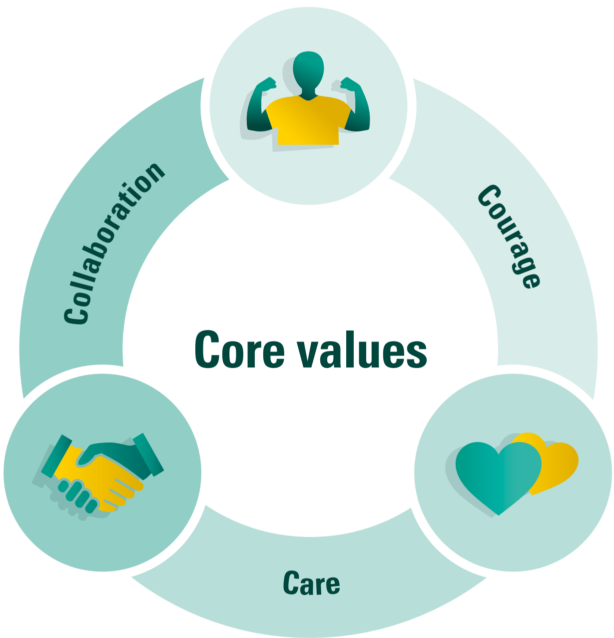
ABN AMRO is one of the Netherlands' leading banks. We have over 20,000 employees, serving private and business clients in both the Netherlands and Northwest Europe. Our products include, among other things, loans, mortgages, payment services, financial advice, savings and investment products and services.

Our purpose and core values

We have a clear purpose: *Banking for better, for generations to come*. This purpose provides us with a compass for everything we do: for how we manage our business, for the decisions we take and for how we work with our clients and other stakeholders.

We work together with our clients to meet the challenges of our times. We take our role in society seriously. Our aim is always to be a trusted partner for our clients and to create long-term value for all our stakeholders.

Supporting this purpose are our core values: *care, courage and collaboration*.



Care

We care for our clients and want to do what is best for them. By understanding our clients' needs, we can help advance their long-term interests. We also care about our planet and people, which sits at heart of our ambitions for a more sustainable future.

Courage

It takes courage to commit to positive change. That is why we take a stand in the social debate, act on our principles and will always speak up against wrongdoing. Courage also means engaging with clients, persuading them to adopt more sustainable business practices, and being prepared to say 'no' if we believe it is in a client's best interest.

Collaboration

It is only through collaboration that we can achieve our ambitions. We set great store by working together both across the organisation and with partners outside ABN AMRO to address the serious social and environmental challenges we face and keep the financial system secure.

Our client units

Our business is organised by client needs – to ensure we put clients' interests first. We have transformed our business in three client units, created in January 2022: Personal & Business Banking, Wealth Management and Corporate Banking.[1] In total, we serve more than five million clients, mainly in the Netherlands and Northwest Europe.

Personal & Business Banking

We are one of the largest retail banks in the Netherlands. ABN AMRO is the first-choice bank for around 20% of the Dutch population. In 2022, we were market leader in the production of new mortgages and in issuing credit cards in the Netherlands. We were the second biggest in savings accounts. We also supply banking and payment services to approximately 350,000 small and medium-sized businesses across the Netherlands[2].

Wealth Management

Our Wealth Management business serves more than 100,000 clients in four markets in Northwest Europe. We are market leader in the Netherlands, and among the largest private banks in Germany, providing financial advice and a full array of wealth management services. In total, over 45% of the assets that clients invest with us qualify as ESG or impact investing. Our Wealth Management business manages just over EUR 202 billion in client assets.

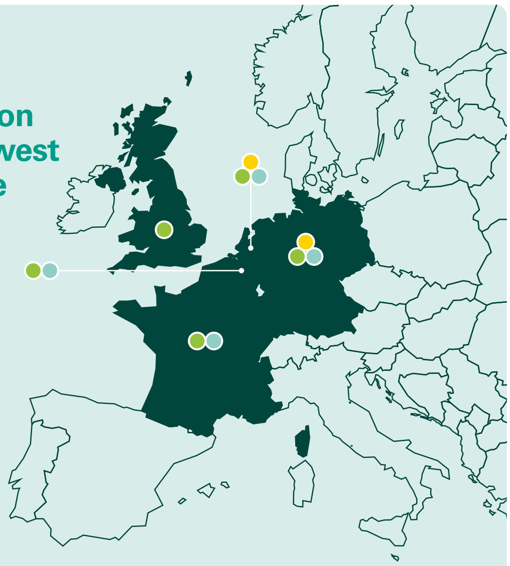
Corporate Banking

Corporate Banking serves more than 8,500 medium-sized and large corporate clients and financial institutions.[3] We provide financing, advisory services, corporate finance and corporate investment products, as well as asset-based finance and capital market solutions. Corporate Banking has been leveraging on the strong domestic franchise in selected Northwest European countries, where it serves corporate clients and financial institutions in a variety of sectors, with a strong market position in the Netherlands. We are a global leader in Clearing.

To support our client units, we have a series of **Group Functions**, including Finance, Risk Management, Innovation & Technology, Human Resources, Group Audit, Legal & Corporate Office, Brand Marketing & Communications, Strategy & Innovation and a Sustainability Centre of Excellence.

1 Prior to January 2022, ABN AMRO was organised by business line (Retail Banking, Private Banking, Commercial Banking and Corporate & Institutional Banking).
2 Refers to clients with annual turnover of less than EUR 25 million.
3 This number excludes our business to business clients in ABF and Clearing.

Focus on Northwest Europe



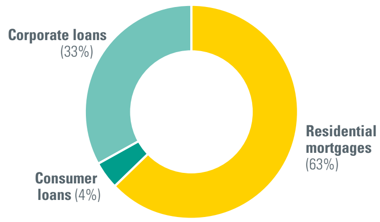
- Personal & Business Banking
- Wealth Management
- Corporate Banking

The Netherlands: Personal & Business Banking, Wealth Management, Corporate Banking
Belgium: Wealth Management, Corporate Banking
France: Wealth Management, Corporate Banking
Germany: Personnal & Business Banking, Wealth Management, Corporate Banking
United Kingdom: Corporate Banking

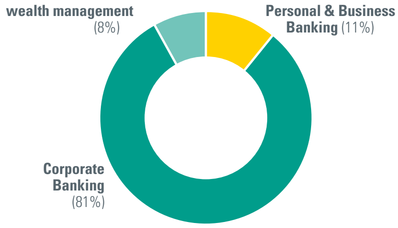
Other offices:
Europe: Athens (Greece), Oslo (Norway)
Outside Europe: Australia, Brazil, Hong Kong, Japan, Singapore and the US

We have closed our Shanghai and Sydney operations following the wind-down of our former Corporate & Institutional Banking portfolio outside Europe, but have maintained offices elsewhere as part of our global Clearing activities.

Client loans by type
end-2022

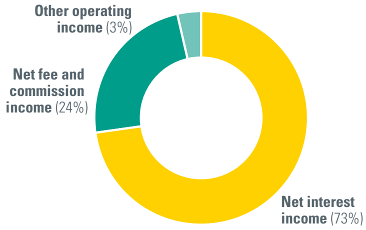


Corporate loans by client unit
end-2022

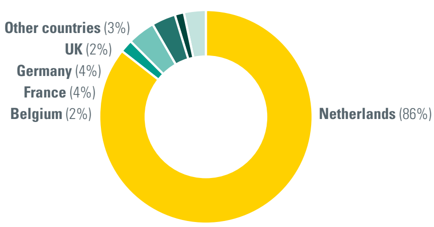


Corporate Banking includes EUR 1.15 billion in non-core loans outside the Netherlands. These loans are being exited as part of the Corporate & Institutional Banking wind-down.

Source of income
2022



Location of employees
FTEs, end-2022



Our operating environment

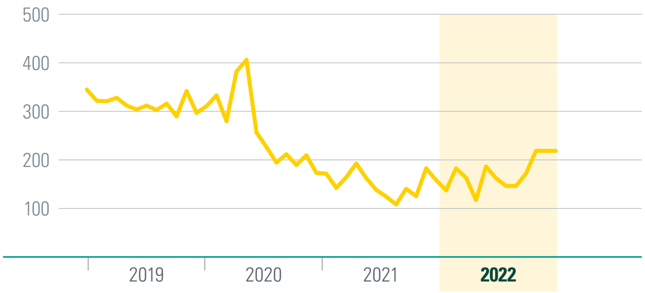
Economic and business environment

For most of 2022, economic activity remained strong, though the war in Ukraine triggered a rise in energy prices, squeezing consumer spending and slowing growth in the second half of the year. Higher inflation also brought an end to historically low interest rates and contributed to a cooling-off in the Dutch housing market.

Dutch economy

The Dutch economy continued to grow in 2022, pursuing its recovery from Covid-19 and as supply chain issues became less pressing. GDP growth started to weaken in the second half of the year, however. The conflict in Ukraine triggered a sharp rise in energy prices, squeezing consumer spending. Despite this slowdown, the Netherlands continues to outperform other economies in Europe.

Number of bankruptcies



Source: CBS Statistics Netherlands.

Unemployment remained at historic lows throughout the year, fuelling continued skills shortages across the economy, particularly in areas such as data analytics and digital technologies. Unemployment remains lower than during the previous downturn in the Dutch economy, which followed the 2008 financial crisis. Corporate bankruptcies have been at historic lows, largely because of government support for companies during the pandemic. With the economic slowdown, bankruptcies started to increase from August, but remained below pre-pandemic levels.

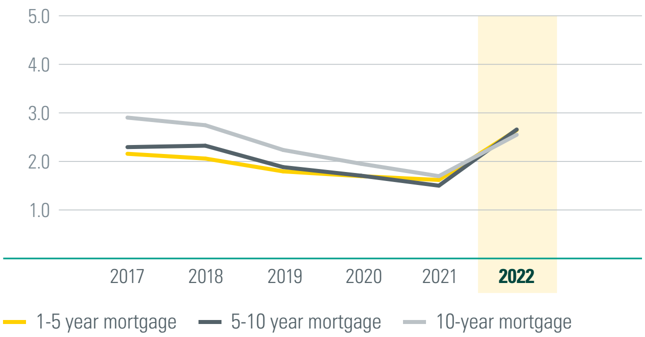
Interest rates

Interest rates began to rise in 2022 as the European Central Bank (ECB) responded to higher inflation in the wake of the war in Ukraine, ending a prolonged period of historically low rates. The ECB increased its deposit rate four times during the year; there were also increases at other central banks, including the US Federal Reserve. Mortgage rates in the Netherlands followed suit, reaching their highest level for more than five years.[1]

Real estate market

Higher interest rates – and the squeeze on household budgets due to rising inflation and energy prices – triggered a cooling-off in the Dutch property market. Prices for both residential and commercial property began to weaken in the second half of the year. With rising interest rates, mortgage borrowers showed a renewed interest in shorter-term loans. Defaults on mortgages in the Netherlands remain historically low, given the country's strict loan-to-income lending rules.[2] Investment in commercial property – both retail and office – started to weaken from mid-2022 as a result of higher interest rates and increased economic uncertainty. For 2022 as a whole, house prices rose by 14%; however, the number of homes sold declined by 15%.

Dutch mortgage rates
(% change)



Source: Statista 2022.

SMEs under pressure

Small and medium-sized companies (SMEs) are under increasing pressure. Many received financial support from the government during the Covid-19 crisis; this has now expired. At the same time, SMEs have to pay taxes deferred during the pandemic; some are also facing higher energy costs, which will squeeze margins, particularly if consumer spending slows amid a weakening economy. The result could be an increased risk of bankruptcies and loan defaults. Even so, unemployment is likely to remain low, given the currently tight labour market.

1 For shorter-term mortgages of less than 10 years.
2 Low unemployment and the relatively small number of interest-only loans have also helped to reduce default rates.

Society, climate and technology

The war in Ukraine has caused considerable disruption in society. Higher energy prices have led to a higher cost of living in many countries, including the Netherlands. The war has also added to a sense of uncertainty at a time when society is still recovering from the after-effects of the Covid-19 pandemic.

Climate change

During 2022, we saw increased evidence of climate change. Europe experienced a long heatwave during the summer. The EU has pledged carbon neutrality by 2050; companies, including ABN AMRO, are making similar pledges. According to the UN Environment Programme (UNEP), we are currently on course for global warming of +2.8°C, above the +1.5°C target set out in the 2015 Paris Climate Agreement.[1] Therefore, climate change remains a priority for ABN AMRO, both in managing climate risk in our own business and in supporting our clients' transition to new, low-carbon business models.

Digital technologies

Digital technologies have become a fixture in our lives – in everything from shopping, communications and transport to banking. At ABN AMRO, we are using digital technologies to improve client service, increase efficiency and reduce operating costs. Data is giving us new insights into what our clients need and want. At the same time, digital technologies bring new risks – we are constantly monitoring cyber and privacy risks, for example, to protect our systems and keep our clients' money safe.

Regulatory change

Banking is one of the most highly regulated industries. We are constantly adapting to new regulations in all areas of our business, ranging from risk management to payment services and consumer protection. New capital rules are being introduced under Basel IV. EU regulators have also introduced new rules on sustainable finance – these include the Sustainable Finance Disclosure Regulation (SFDR), which applies to asset managers and investment advisers, and the planned Corporate Sustainability Reporting Directive (CSRD), due to come into effect from 2024.

As of 2025, the CSRD will require all large companies[2] to report more on their social and environmental performance, an important step in increasing funding for more sustainable businesses. See page 349 for full details of regulatory developments in 2022.

Cost of living

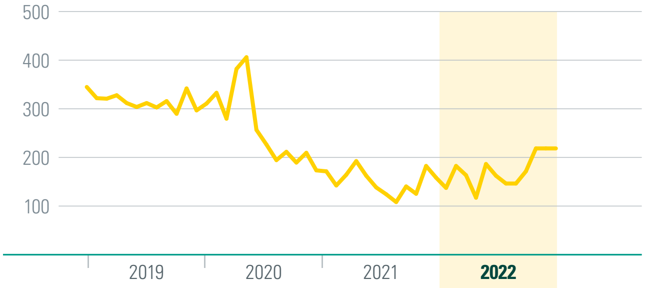
Many households are struggling with rising prices, particularly for food and energy. According to the Netherlands Bureau for Economic Policy, poverty rates have increased to 6.7% in 2022.[3] As one of the Netherlands' leading retail banks, we are supporting our clients where possible. Government intervention will soften the effect of rising consumer prices, particularly among lower-income groups struggling to pay household bills. The government's 2023 budget excises duty on fuel and increased social security payments for the worst-off. The government also agreed a separate price cap with energy companies to limit household bills.

Changing societal attitudes

Societal attitudes continue to change, and we are seeing a greater emphasis on diversity, inclusion and fairness following the pandemic. At the same time, attitudes in the workplace are changing. The increase in at-home working since Covid-19 has highlighted the importance of well-being, with renewed pressure on employers to support mental health.

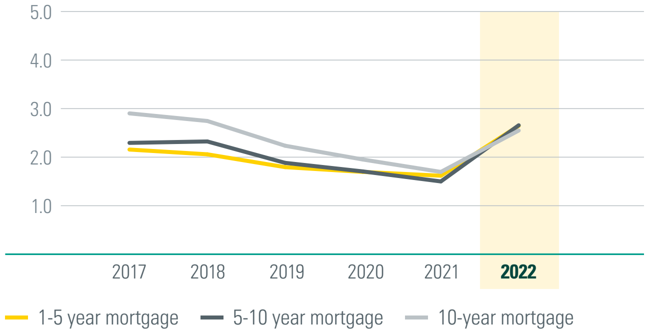
[1] Source: UNEP Emissions Gap Report 2022.
[2] Companies must report under the CSRD if they meet at least two of the following criteria: they have more than 250 employees, annual turnover of more than EUR 40 million or assets exceeding EUR 20 million.
[3] Source: Dutch Central Planning Bureau (September 2022 estimate).

Number of bankruptcies



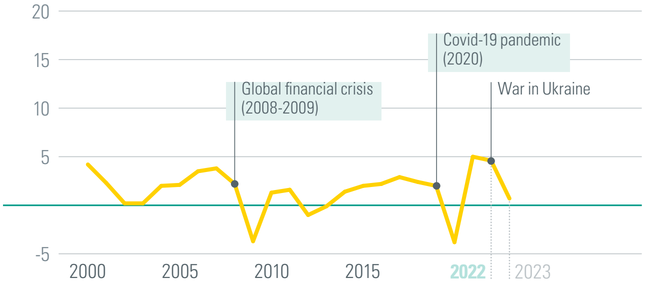
Source: CBS Statistics Netherlands.

Dutch mortgage rates
(% change)



Source: Statista 2022.

GDP growth in the Netherlands
(year-on-year change)



2022 and 2023 are estimated.
Source: World Bank (for 2000-2021); ABN AMRO for 2022 and 2023 estimates.

House price development (2020-2022)
(% change, year on year)

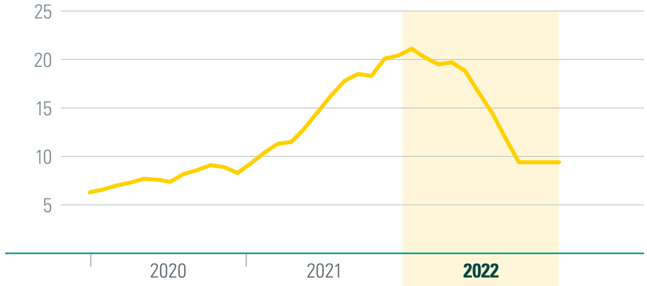
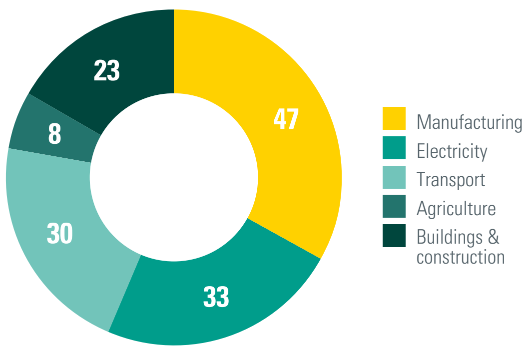


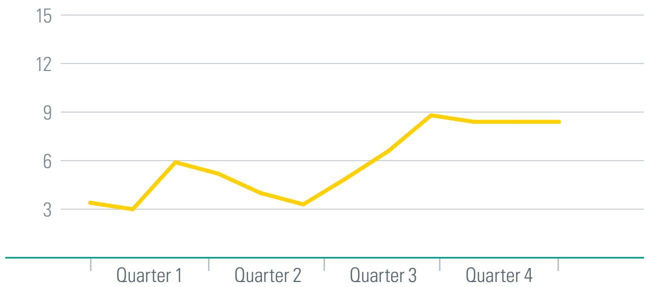
Chart shows year-on-year % change in prices for existing owner-occupied dwellings in the Netherlands.
Source: CBS Statistics Netherlands.

CO_2 emissions by source in the Netherlands
(in %)



All figures shown are in megatonnes, based on 2021 data.
Source: CBS Statistics Netherlands.

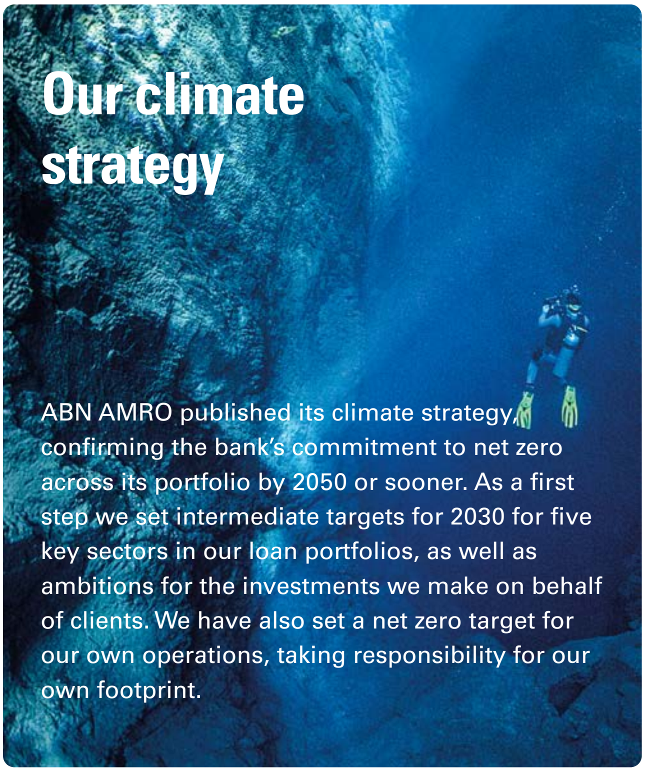
Rising cost of living in 2022
(% change)



Charts shows year-on-year change in average prices for housing, water and energy.
Source: CBS Statistics Netherlands.

"Digital technologies have become a fixture in our lives – in everything from shopping, communications and transport to banking"

Year in Review



Our climate strategy

ABN AMRO published its climate strategy, confirming the bank's commitment to net zero across its portfolio by 2050 or sooner. As a first step we set intermediate targets for 2030 for five key sectors in our loan portfolios, as well as ambitions for the investments we make on behalf of clients. We have also set a net zero target for our own operations, taking responsibility for our own footprint.

Share buyback completed

In May, ABN AMRO completed its EUR 500 million share buyback. Just over 42 million shares were repurchased at an average price of EUR 11.77. ABN AMRO's largest shareholder – the Dutch government's NL financial investments (NLFI) – participated fully in the buyback, and as a result retained its 56.3% stake in the bank.

In line with our capital framework we have since announced another share buyback programme of EUR 500 million to further optimise our capital position, superseding the EUR 250 million conditional share buyback permission. This programme will commence on 9 February and is expected to end no later than June 2023.

Executive Board appointments

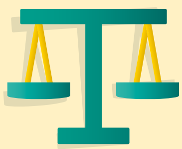
Two new members were appointed to ABN AMRO's Executive Board in 2022: Annerie Vreugdenhil, Chief Commercial Officer for Personal & Business Banking (effective 1 March 2022), and Carsten Bittner, Chief Innovation & Technology Officer (effective 1 January 2023).

Annerie Vreugdenhil

Carsten Bittner

Two-year labour agreement signed

ABN AMRO signed a new two-year Collective Labour Agreement (CLA) with Dutch trade unions. The Agreement includes a 4% pay rise from October 2022 and a further 2.5% from July 2023. The CLA covers 18,000 ABN AMRO employees across the Netherlands, 86% of our total workforce.



ABN AMRO sells life and pension businesses

Insurance group Achmea agreed to buy ABN AMRO Pensioeninstelling NV, the bank's premium pension institution, which has EUR 3.5 billion in assets under management. During the year, ABN AMRO also sold its life insurance associate – ABN AMRO Levensverzekering N.V. – to NN Group.[1]

Help for refugees from the war in Ukraine

ABN AMRO took quick action in response to the war in Ukraine, opening current accounts for Ukrainians with refugee status in the Netherlands, donating to the Ukraine appeal and ensuring that sanctions against Russia were fully applied.

Apology for historical involvement in slavery

ABN AMRO issued an apology for the involvement of the bank's predecessors in the slave trade during the 18th and 19th centuries. The apology was based on historical research commissioned by ABN AMRO and in line with the bank's work in tackling modern-day slavery in the Netherlands.

[1] ABN AMRO Levensverzekering N.V. was formerly owned by ABN AMRO Verzekeringen, a subsidiary of NN Group (51%) and an associate of ABN AMRO (49%).

Strategy and value creation

This chapter provides the strategy of the bank and an overview of the opportunities and risks arising from the strategy. It describes how the bank creates value for stakeholders. The performance part provides insight in the 2022 performance on the strategy and the chapter ends with an outlook going into 2023.

Interview with Ewald Bontje, owner and Commercial Director of Grozette

Many businesses are facing rising prices for energy and other raw materials. We asked Ewald Bontje, owner and Commercial Director of Grozette, how his business is coping with increased costs.

"Grozette produces grated and powdered cheese, mainly for the catering, food processing and retail industries. We export to around 35 countries.

We need a lot of energy to dry the cheese, which we receive from cheese producers. And in the past few months, we've seen a significant increase in energy prices. Energy now accounts for a major part of our overall cost base.

It's not just energy, either. We've also had price rises for the cheese we buy, as well as for transport, packaging and machine parts, and even for inputs like cardboard.

Of course, we're working closely with our suppliers and customers. But, inevitably, these price increases are cutting into our margins. Hopefully, prices will come down as we get closer to summer, but we're still living in uncertainty for the time being.

We're fortunate that we started building a new factory two years ago. That factory is now fully up and running.

We used a combination of gas and electricity in the past, but are now using only electricity. Although it hasn't made much difference in terms of price, it does give us an advantage in another area.

> **Given the importance of moving away from gas in the Netherlands, our new factory means we're well positioned for the future**

Given the importance of moving away from gas in the Netherlands, our new factory means we're well positioned for the future. If we had to make a similar investment decision today, with the increased prices and interest rates, the outcome would most likely be different.

ABN AMRO helped us with the financing; the bank provided a green loan. Our factory was built to the latest BREEAM sustainability standards, and it's double the size of our old one in terms of square metres."

Ewald Bontje
Owner and Commercial Director, Grozette B.V.

Strategy and value creation

Our purpose – Banking for better, for generations to come – guides us through change. It is the basis for how we shape and deliver on our strategy, and encourages high performance and engagement from our employees. Our strategy has three strategic pillars: **customer experience, sustainability and future-proof bank**. These are our guiding principles in acting on our purpose.

Our positioning and strategy

Through our strategy, we are becoming a personal bank in the digital age. We have long-term client relationships built on trust and supported by sector and sustainability expertise. Our trusted relationships with clients, together with our capabilities across all client segments, enable us to support them at all important financial steps in their lives.

We have made clear choices, resulting in a distinct profile and focus, serving clients where we have scale in the Netherlands and Northwest Europe. We are fully committed to our moderate risk profile and role as a gatekeeper of the financial system. Our culture and licence to operate remain clear priorities.

In 2022, we continued to execute our strategy. At the beginning of the year, we re-organised the bank into three new client units to ensure we always put clients' interests first. We have now almost completed the wind-down of our former Corporate & Institutional Banking business outside Europe. On Customer experience, we introduced updated digital signatures, continued to expand video banking and put in place a new three-layered client service model to deliver both convenience and expertise. On Sustainability, we published our climate strategy, aimed at achieving 'net zero' across all our portfolios by 2050 at the latest – in line with the Paris Climate Agreement. We also provided more budget coaches and debt counsellors during the year to those struggling to meet the higher cost of living. Meanwhile, on Future-proof bank, we digitalised more of our processes to further improve customer service, made progress on our Anti-Money Laundering (AML) programme and signed a new two-year collective labour agreement for our employees in the Netherlands.

Our strategic pillars

Our trusted relationships with clients enable us to support them at all important financial moments. We offer both convenience and expertise. We deliver a convenient daily banking experience increasingly digitally. At moments that matter we support our clients with sector and sustainability expertise. We are focusing on attractive segments in the Netherlands and Northwest Europe where we can grow profitably. In the Netherlands, we will further develop our positions in mortgages and among SMEs with new propositions, and we are pursuing growth in the market for wealthy clients, affluent and high-income clients and mid-to-large corporates, where we can leverage our expertise.

We aim to achieve positive Net Promoter Scores (NPS) and to increase our market share to above 20% in both mortgages and SMEs. In Corporate Banking Northwest Europe, we are building on our expertise in the Netherlands and will focus on the energy, mobility and digital transitions, aiming for a top-three position in selected niches. We remain open to acquisitions that accelerate our strategy execution and are developing new business models in areas such as sustainability and digital banking. For details of progress made against our customer experience pillar, see page 30.

Sustainability has been a core element of our strategy since 2018 and is core to our purpose. Our goal is to help clients transition to more sustainable business models. We are focused on the wider sustainability shift: our efforts are designed to help mitigate climate change, accelerate circular business practices and create positive social impact. We also strive to lead by example, reducing our carbon emissions, strengthening our approach to human rights, increasing our positive social impact and also improving gender diversity of our staff – particularly among those at the 'sub-top' immediately below the most senior management levels. In early 2022 we confirmed our commitment to achieve net zero emissions across our portfolios and operations by 2050, in line with the trajectory to limit global warming to a maximum temperature increase of 1.5°C from pre-industrial levels. During 2022, we developed a bank-wide approach to achieve our net zero ambitions and mitigate the transition risks associated with climate change. We aim to support our clients in decarbonising their business models and footprint through continuous engagement, offering advice and financing solutions. We have formalised our climate commitment by joining the Net-Zero Banking Alliance, becoming part of a global group of banks committed to aligning their lending and investment portfolios with net zero emissions by 2050. To integrate sustainability across our businesses, we established a Sustainability Centre of Excellence, headed by our new Chief Sustainability Officer. We have set clear 'sustainability acceleration' targets. By 2024, our aim is to have more than one-third of loans and client investments allocated to sustainable businesses, projects or assets. For details of progress made against our sustainability pillar, see page 33.

We are building a future-proof bank by simplifying and centralising our operating model, delivering a better experience for our clients, while at the same time delivering on cost-saving programmes. This means further digitalising our business processes, streamlining our product offering and introducing a new client engagement model. By 2024, we aim to have approximately 90% of high-volume processes digitalised end-to-end and to have reduced the size of our product portfolio by around 60%. At the same time, we place great value on fostering a culture within the bank in which everyone feels respected and valued. Our employees are the foundation of the bank of the future and therefore we support our people as part of our drive to develop and transform our workforce. For details of progress made against our future-proof bank pillar, see page 39.

Our value-creating topics

We carry out a regular assessment of our operating environment. This assessment helps us identify strategic differentiators – the value-creating topics where we and our stakeholders believe our strategy can create most value for our stakeholders. Currently, we have nine strategic differentiators, each linked directly to a strategic pillar. The nine strategic differentiators are based on an assessment carried out in 2020 and are the basis of this report. Please note that we do not have strategic KPIs in place for all strategic differentiators. In such cases, we use non-strategic KPIs, or other metrics, some of which are available only internally.

Customer experience

Strategic differentiators
- Customer experience
- Digitalisation
- Clear and appropriate advice

→ Page reference 30

Sustainability

Strategic differentiators
- Responsible investment and financing
- Circular economy
- Diversity and equal opportunities

→ Page reference 33

Future-proof bank

Strategic differentiators
- Viable business model
- Risk profile/management
- Financial performance

→ Page reference 39

We conducted our latest assessment in 2022 in preparation for steering on these topics in 2023 in line with our strategy. The new value-creating topics as of 2023 are: Secure Banking (including Client Data Protection), Customer Experience, Viable Business Model, Responsible Investment & Financing, and Risk Profile/Management. For more details on the methodology, see page 340.

Our strategic targets

Strategic pillars	Metric	2024 targets	2022 results	2021 results
Customer experience				
	Relational NPS			
	Mortgages	> 0	0	-1
	SMEs (incl. self-employed)	> 0	-38	-33
	Market share growth in focus segments			
	New production mortgages	20%	17%	16%
	SMEs	20%	16%	18%
Sustainability				
	Supporting clients' transition to sustainability			
	Percentage sustainability (acceleration) asset volume	36%	31%	27%
	Diversity & Inclusion			
	Percentage of women at sub-top	34%	31%	30%
Future-proof bank				
	Digitalisation			
	Straight-through-processing rate of high volume service and product processes	90%	63%	n/a
	Financial targets			
	Absolute cost base (in EUR billions)[1]	<4.7	5.3	5.3
	Through-the-cycle cost of risk (in bps)	20	3	-7
	Return on equity (ambition with normalised interest rates)	8% (10%)	9%	6%
	CET1 ratio (Basel IV)[2]	13%	16%	16%

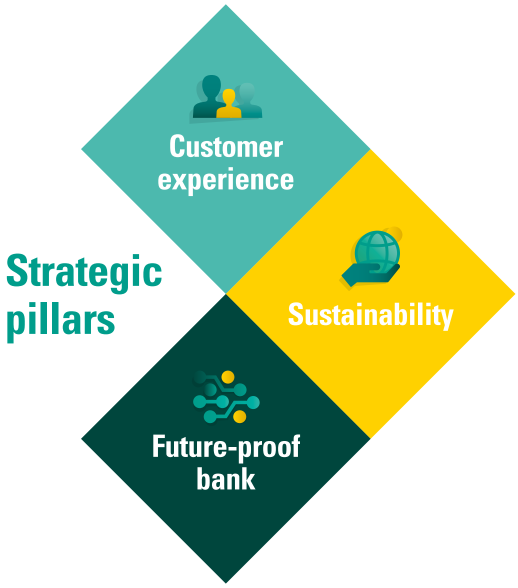
[1] Excluding large incidentals.
[2] CET1 ratio (Basel IV) is rounded to the nearest whole percent. For more information about CET1 ratio Basel IV, please refer to the Capital section in the Risk, funding & capital chapter.

Definitions for above indicators and its methodological and scope changes (where applicable) can be found on pages 343-344.

Opportunities and risks arising from our strategy

Our strategy is to become a personal bank in the digital age, to create a new, more effective service model for our clients and to support our clients in moving to more sustainable business models.

There are also risks arising from our strategy and the clear choices we have made. Some of these risks relate to our ability to manage change; others relate to our operating environment and the prospects, going into 2023. The table below provides an overview of our principal opportunities and risks, mapped to both our strategy and strategic differentiators:



Customer experience

Strategic differentiators	Opportunities	Risks
Customer experience	▸ Enhance our sales and service model to drive client NPS leading to increased demand of ABN AMRO's products ▸ Provide financial advice where most needed. Support our clients by providing proactive advice on next best actions ▸ Innovate our products and services	▸ Clients having difficulty adapting to our new client service model (not digitally savvy) ▸ Moving from in person contact to video banking, phone and digital could negatively impact client engagement ▸ Increasing regulatory pressure could influence the customer journey and customer experience (e.g. KYC/AML/ESG)
Digitalisation	▸ Make customer service better, quicker and more reliable ▸ More targeted personalised digital approach ▸ Convenient client journeys with frictionless interaction by offering full digital self service	▸ Possible losses (incl. client data) because of increased cyber attacks ▸ Lower cross-selling rates because we interact through third party channels ▸ Large investments required in our digital & data infrastructure and still risk of underdelivering on customer expectations
Clear and appropriate advice	▸ Help clients solve problems with Beyond Banking propositions ▸ Ensure compliance with all regulations to protect our clients ▸ Leverage digital (self-service) solutions for clients, enabling front office employees to focus on client advice	▸ Shortage of skills and knowledge (finance, sector, sustainability, cyber, etc.) to provide advice, particularly in niche markets ▸ Incorrect advice or advice not in full compliance with regulations leading to claims from clients

Key: **Short-term** 0-2 years | **Medium-term** 2-5 years | **Long-term** More than 5 years

For each opportunity/risk, we have indicated whether we believe the principal impact will occur over the short, medium or long term. Please note that this relates to the principal impact only – we accept that the impact of most opportunities/risks will fluctuate over time. We define short, medium and long term as follows (in line with the proposed European Sustainability Reporting Standards, ESRS).

We have mapped opportunities and risks to our strategic differentiators; these have been identified through our regular materiality assessment. Details of this assessment may be found on page 340. For further information on risk types and our approach to risk management, please refer to the Risk, funding and capital section of this report from page 56.

Sustainability

Strategic differentiators	Opportunities	Risks
Responsible investment and financing	▸ Position ABN AMRO as a leader in sustainable finance (including advice) ▸ Increased insight into client needs to support them in their sustainability shift, leading to new financing opportunities	▸ Emerging climate and environmental risks with potential impact on risk profile ▸ Reputation risk if bank fails to deliver on sustainability commitments
Circular economy	▸ Help clients adapt and improve business activities and models to become more circular ▸ As a leader, set new industry standards for circular financing ▸ Use frontrunners as an inspiration for existing and new clients	▸ Shortage of viable projects to finance and uncertainty in financing business cases ▸ Reduced focus on circular financing because of pandemic and economic uncertainty
Diversity and equal opportunities	▸ Bring in new, diverse talent to create a more inclusive working environment ▸ Strengthen reputation by better reflecting our client base in our workforce ▸ Increase creativity and improve decision-making through diversity of mind	▸ Reputational risk when failing to meet publicly-stated targets ▸ Delays in implementing diversity measures due to tight labour market

Future-proof bank

Strategic differentiators	Opportunities	Risks
Viable business model	▸ Further diversify higher fee income and growth in focus segments ▸ Simplify and rationalise current range of products and services ▸ Adapt business model to reflect the evolution of the financial services market and implement new products/ services ▸ Increase efficiency through digitalisation and refocusing costs	▸ Long-term risk of disintermediation in banking sector and new entrants increasing their scope ▸ Unfavourable economic trends: GDP decline, bankruptcies, etc. ▸ Failure to deliver on our financial targets due to unsuccessful investment and hence lack of growth in focus segments
Risk profile/ management	▸ Further enhance risk profile and strengthen confidence in bank's risk management ▸ Limit potential losses from increased impairments or rising credit risk ▸ Improve public confidence by strengthening performance on compliance and AML	▸ Increased compliance risk or loss of reputation if bank fails to deliver strong risk management ▸ High risk costs impacting the bank's profitability ▸ Continued regulatory pressure expanding our role as a gatekeeper, leading to continued high costs ▸ Inability to (efficiently) prevent crime due to rapid technological developments used by (cyber) criminals
Financial performance	▸ Improve financial performance through growth in target markets, cost discipline and improved risk profile ▸ Capital allocation and RWA optimisation geared to returns, using capital to grow where we see future returns ▸ Free up resources for investment in new growth opportunities	▸ Margin pressure following long period of low rates reducing the bank's net interest income ▸ Underinvestment in innovation, skills and product development due to tight cost discipline ▸ Not delivering on our cost targets


We aim to create long-term value for all our stakeholders

Value creation

We aim to create long-term value for all our stakeholders; value creation is central to our strategy.

We create value mostly in two ways:

- By maximising the positive impact of our business – supporting economic growth and job creation through loans to businesses, for example, or providing our employees with career opportunities and a safe, inclusive working environment.
- By minimising the negative impact – we realise that, like any business, our activities may also cause harm. Through our loans, we may be indirectly damaging the environment or financing companies with a poor record of respecting labour rights. To minimise these risks, we set strict rules for lending and investment.

Our stakeholders

We define our stakeholders as *any group or individual the bank affects through its activities or products and services or who, in turn, may affect the bank's ability to achieve its goals.*

Using this 360° definition, we recognise four main stakeholder groups: our clients, employees, investors and society. We regularly consult our stakeholders and incorporate their views, where possible, into our decisions, strategy and reporting.

Our value creation model

The following pages provide an overview of our value creation process, which consists of four steps and should be read from left to right:

- **Inputs:** these are the resources we need to operate our business, ranging from the time, skills and know-how of our employees to the equity provided by the bank's shareholders.
- **Business activities:** this is our 'engine room' – it shows how our activities transform inputs into value for stakeholders.
- **Outputs:** these are the immediate results of our activities: the loans and mortgages we provide to clients, for example, or the salaries and benefits we pay employees.
- **Outcomes:** these show the effects of our business on stakeholders – the fact, for example, that our products and services may help clients save and invest, or that, through home ownership, our mortgages may provide a greater sense of personal security.

Much of the value we create is financial in nature, though it may also be social or environmental. To demonstrate this, our value creation model uses six capitals, based on the Integrated Reporting <IR> Framework: manufactured, financial, intellectual, human, social and natural.

Stakeholder engagement

Stakeholder group	How we engage	Key issues in 2022[1]
Clients Individual clients, SMEs, and larger corporates	▶ Regular client surveys ▶ Call centres, video banking and online chatbot	▶ Introduction of new client service model (page 31) ▶ Continued branch closures (page 30)
Employees Full-time and part-time employees and subcontractors	▶ Employee engagement survey ▶ Meetings with works council, unions and other employee representative groups	▶ New collective labour agreement (page 41) ▶ Hybrid working (page 40)
Investors Shareholders and bondholders	▶ Annual General Meeting (AGM) ▶ Roadshow meetings and investor conferences	▶ Strategy execution (pages 30-53) ▶ Financial performance (page 44) ▶ Changes in operating environment (page 10)
Society Suppliers and other business partners, local communities, governments, regulators and NGOs	▶ Regular meetings with government and regulators ▶ Industry roundtables and conferences ▶ In-person meetings with suppliers and business partners	▶ Cost of living /financial inclusion (page 11) ▶ Climate change (page 34) ▶ Banking sector regulation (page 349)

[1] Please note this is intended to be an overview only; it does not provide an exhaustive list of issues discussed during the year.

Value creation

Inputs

Manufactured
- Use of offices, property and equipment, including IT

27 bank branches
93% of the suppliers have signed code of conduct

Financial
- Payments from clients
- Financial capital from investors
- Deposit and savings from clients

EUR 5.4 billion in net interest income
EUR 1.8 billion in fees and commissions
EUR 22.8 billion in shareholders' equity
EUR 130 billion in deposit and savings

Intellectual
- Purchased software e.g. payment systems
- Innovation and investment in new business models, products and services
- Purchased consulting services
- ABN AMRO brand and reputation

EUR 127 million spent on intangible assets such as purchased software
Net Promoter Score (NPS) 2021
- **-18** Retail Banking
- **+14** Private Banking
- **+1** Commercial Banking
- **+37** Corporate & Institutional Banking

EUR 974 million spent on IT

Human
- Employees' time, skills and expertise
- Training and development programmes

20,038 employees

Social
- Relationships with clients, employees, business partners and other stakeholders
- Industry networks and cooperation

Over **16** lending clients **4** Clearing clients and **747** companies engaged through investment services
EUR 1.0 million in community investment made through ABN AMRO Foundation

Natural
- ABN AMRO's consumption of energy, water and other natural resources

72 GwH in energy use, excluding transport

Our business model

Our purpose
Our strategy
Our pillars
Our VCTs

Our business activities

Banking services
We provide banking services to individuals and businesses. Most of our revenue comes from net interest income – the difference between interest charged to clients on loans and the bank's own funding costs. We also receive fees and commissions in return for our services.

Funding and managing risk
We fund our loans through deposits, savings and capital markets – and actively manage the risks associated with them.

Reinvesting and sharing returns
From our income, we meet our operating costs, reinvest in our business and pay out returns to our investors.

This overview of our value creation process consists of four steps – and should be read left to right:

Inputs
These are the resources we need to operate our business, ranging from the time, skills and know-how of our employees to the equity provided by the bank's shareholders.

Business activities
This is our 'engine room' – it shows how our businesses transform inputs into value for stakeholders.

Outputs
These are the immediate results of our activities: the loans and mortgages we provide to clients, for example, or the salaries and benefits we pay employees.

Outcomes
These show the effects of our business on stakeholders – the fact, for example, that our products and services may help clients save and invest, or that, through home ownership, our mortgages may provide a greater sense of personal security.

Introduction
Strategy, value creation & performance
Risk, funding & capital
Leadership & governance
Annual Financial Statements 2022
Other

Outputs / Outcomes

Manufactured

Outputs

EUR 150.8 billion
in mortgages

EUR 79.1 billion
in loans and advances to corporates

Market share
- **17%** new mortgages
- **16%** SMEs

Outcomes

During the year, we created manufactured value for clients by providing services leading to valuable products and advice. For example through mortgage lending, which gives clients access to home ownership. In the case of the Dutch housing market, this is an asset that increases in value for clients. We also create value through our extended loans and advances to support businesses and job creation. We measure our value for specific focus segments through our Net Promoter Score.

Net Promoter Score
- **0** NPS Mortgages
- **-38** NPS SMEs

Financial

Outputs

EUR 2.5 billion
in interest paid to clients and counterparties (incl ECB)

EUR 1.8 billion
in payments to investors

EUR 509 million
paid in corporate tax

Outcomes

In exchange for our services – our manufactured capital – clients and counterparties transferred considerable financial capital to ABN AMRO by paying interest on loans or mortgages and paying transaction fees. Value created for investors rose sharply, mainly driven by an increase in ABN AMRO's share price and a rebound in the bank's net profit for the year.

- **EUR 1.96** earnings per share
- **9%** return on equity
- **16%** CET 1 ratio (Basel IV)
- **EUR 5.3 billion** absolute cost base
- **3 bps** cost of risk

Intellectual

Outputs

99.91% availability
of internet and mobile banking

90% affluent &
60% consumer meetings held
via video banking based on an indication

Outcomes

We created intellectual value for clients by providing advice, by investing in innovation & technology and by maintaining the stability and reliability of the our banking payment system. We also received intellectual capital from others, including suppliers and business partners. At the same time, there were adverse effects, for instance resulting from cybercrime incidents

- **201** client complaints relating to data privacy breaches (1 substantiated)
- **90** total client complaints relating to breaches of other regulatory or voluntary codes in the Netherlands (4 substantiated)
- **21** (potential) violations of the Banking Sector Disciplinary Regulations

Human

Outputs

EUR 2.5 billion
paid to employees in salaries and benefits

EUR 39 million spent on external training and development

Outcomes

Throughout the year, Covid-19 continued to deplete value, affecting our employees' occupational health and safety. At the same time, we created value by providing desks and other equipment to improve home working. In 2022 our workforce grew, creating more value through contributed time, skills and knowledge. In return, we created value for our employees through salaries and benefits. In addition to skill development, we also focused on attracting and retaining talent by offering our employees reskilling and upskilling.

- **78%** employee engagement score
- **2,749** new internal hires

Social

Outputs

90 financial care coaches (78 fte)

273 cases with specific human rights link in the sustainability risk assessment

Outcomes

Our social capital is impacted significantly by our relationships. We have reduced our value creation as reflected in a lower NPS for Personal & Business Banking and a decrease in ABN AMRO's brand value. Social value got depleted through discrimination, underpayment and child labour. However, we created value in 2022 by further reducing financial distress due to difficulties in repaying loans.

- **31%** D&I at sub-top
- Net Promoter Score (NPS) 2022
  - **-16** P&BB (Consumer & Affluent)
  - **-38** P&BB (Business Clients & Ecosystems)
  - **12** Wealth Management
  - **8** Corporate Banking

Natural

Outputs

31% sustainability (acceleration) asset volume

Increased our renewable energy commitments to **34%** of our energy loan book

Over **EUR 512 million** committed to circular economy deals in 2022 in more than 47 deals

Outcomes

We are aware that, like any business, our activities may also cause harm. By financing growth and through our own operations, we are also indirectly damaging the environment. In 2022 we continued to reduce our impact on the environment and use of natural resources, largely as a result of further winding down our CB non-core activities. In addition, to offsetting our own operations emissions, we worked to further minimise our negative impact through, among other things, circular transactions and sustainable products. This impact is measured through our sustainability (acceleration) asset volume KPI.

- **2.70 kTon** of carbon emissions from our scope 1 own operations
- **2.93 kTon** of carbon emissions from our scope 2 own operations
- **40.62 kTon** of carbon emissions from our scope 3 own operations
- **22,587 million** tonnes of carbon emitted as a result of the bank's lending and investment activities (scope 3)

Much of the value we create is financial in nature, though it may also be social or environmental. To demonstrate this, our value creation model uses six capitals, based on the Integrated Reporting <IR> Framework: manufactured, financial, intellectual, human, social and natural.
Inputs and output metrics are included for illustrative purposes only. All figures are for 2022, unless otherwise stated.

Supporting the UN Sustainable Development Goals (SDGs)

In creating value for our stakeholders, our aim is also to contribute to the UN Sustainable Development Goals (SDGs). We impact all SDGs through our value chain, but we have identified three SDGs as most relevant to ABN AMRO – this is where we believe we contribute most to the SDGs: by helping to protect basic human and labour rights, and by supporting the transition to a more sustainable economy.

SDG 8
Decent work and economic growth

Our contribution

- Our loans and advice to business support economic growth and job creation.
- Minimum labour standards are built into our sustainability criteria.
- We also support disadvantaged groups in society looking to join the labour market.

SDG 12
Responsible consumption and production

Our contribution

- We provide financing to companies adopting more sustainable business models.
- We also fund circular economy deals that reduce waste and consumption of often scarce natural resources.

SDG 13
Climate action

Our contribution

- We are committed to net zero across all our portfolios by 2050 or sooner.
- As part of our new climate strategy, we are helping clients reduce their carbon emissions.
- We are also increasing investments in renewable sources of energy and reducing our own environmental footprint.

Interview with Teun van Leijsen founder of Stoov®

For entrepreneurs, we are increasingly managing their business and personal banking together, rather than separately. We asked Teun van Leijsen, founder of Stoov®, what the new approach – known as Entrepreneur & Enterprise – means in practice.

"My relationship with ABN AMRO goes back to 2005. I used to be a banker myself, so I know the ins and outs. I see ABN AMRO as a trusted advisor, on both a personal and business level.

A few years ago, I decided I wanted to live a more sustainable life personally and professionally. I spotted a gap in the market: outdoor terrace heaters for bars and restaurants are very inefficient and costly, and so my idea was to warm the person, not the air around them. I quit my job and set up Stoov®. We make a whole range of heating cushions, pillows and covers, and we're selling right across Europe.

The business has been doing really well. So, I wanted to make a few changes in my personal life. It was actually my advisor at ABN AMRO who suggested I should pursue my dream of building my own net-zero energy house. I thought it wouldn't be possible because all my money is tied up in the business. But the bank arranged everything, taking my personal and business finances into account.

We just recently finished the house. I'm really pleased with it. It's built from wood, and it's 100% energy neutral. We don't use gas – we have solar panels on the roof and electric charging for our cars. It's exactly what I meant when I said I wanted to live a more sustainable life.

What I appreciate about my advisors at ABN AMRO is that they're always there for me. And there are no hidden agendas. I have an idea, I call them, and a few days later they're sitting in my living room, saying 'What do you need, how can we help you?'."

> **"I spotted a gap in the market: outdoor terrace heaters for bars and restaurants are very inefficient and costly, and so my idea was to warm the person, not the air around them"**

Teun van Leijsen
Founder and CEO, Stoov® B.V.

Performance

Customer experience

We bring convenience into the daily lives of our clients and expertise when it matters. In 2022, we continued to expand our digital banking proposition. We also made it easier for clients to make appointments online, extended our Entrepreneur & Enterprise service and worked closely with corporate clients on accelerating the sustainability shift.

Personal through convenience

To bring convenience to daily banking, we are moving to a full digital service. Most of our products – approximately 95% – are now available remotely through, for example, video banking. During 2022, we also extended digital onboarding for new clients. Since October 2022, business can apply ZealiD – an app by a Swedish company certified to issue electronic signatures - for Dutch clients and prospects to sign documents remotely.[1]

The increase in digital banking means fewer clients are visiting our branches[2]. The introduction of electronic signatures is likely to lead to a further decline in visitors. As branches close, we make sure clients still have access to banking services by mobilising our contact centres and financial care coaches to help those who need assistance with digital banking. Over the past year, we further expanded video banking, which gives clients quick and easy access to specialists. In 2022, 98% of meetings with mortgage clients took place by video (compared with 96% in 2021). Digital signatures means loans, mortgages and other paperwork can be finalised and signed at online meetings.

Meanwhile, we are also building on the success of the Tikkie app. Since its launch in 2016, Tikkie has become a fixture of daily life in the Netherlands: in 2022, it had over eight million users. Last year, we added a group payments function and launched Tikkie Zakelijk, a separate made-for-business version. During the year, we also began to merge Grip, our personal finance app, with our main ABN AMRO app. Merging the two apps will give approximately three million active ABN AMRO app users access to Grip functions, offering them at-a-click oversight of their personal finances.

Personal in expertise

We want clients to have access to our advice and expertise when making key financial decisions at important moments in their lives. For individual clients, that may be when they buy a house or get married. For companies, it may be when they need financing to grow their business or acquire another company. Expanding digital banking allows our front-office staff to spend more time with clients where support is needed.

For corporate clients, we continued to expand our sustainability advisory business and introduced a Product-as-a-Service (PaaS) desk to support clients looking for funding for such businesses. This is a fast-growing sector and we now have a PaaS loan portfolio of around EUR 250 million. At the same time, we continued to develop Beyond Banking products for SMEs, one of our other key growth areas. These products include online bookkeeping and invoicing and help with recruitment through our partner HR Office. We also extended our Entrepreneur & Enterprise (E&E) service for Wealth Management clients, combining management of entrepreneurs' personal and business needs.

[1] In addition to electronic signatures, we are also using ID.me, a system that allows people to provide proof of identify online. By the end of 2022, ID.me had been approved for use in dozens of client processes.

[2] Client visits have declined by more than 82% since 2019; by the end of 2022, we had reduced the number of ABN AMRO branches in the Netherlands to 27.

Our new client service model

In the past year we focused on implementing our new client service model for all clients, based on *convenience and expertise*. This model has three layers:

- **Full digital self-service:** clients can access most products themselves online, as well as make payments, open accounts and provide proof of identity.
- **Assisted self-service:** if needed, clients can get more information through click-to-chat and our contact centres. Anna, the ABN AMRO chatbot, now handles around half of all online client requests.
- **Personal expertise:** clients can get advice from our experts when they need it through video and in-person meetings.

Strong demand for mortgages

Mortgages are an important part of our business – residential mortgages account for more than 60% of our loan book. During 2022, we saw continued strong demand for mortgages in the Netherlands, driven mainly by clients trying to lock in the low mortgage rates as these were beginning to rise. With interest rates rising, borrowers also turned to shorter-term mortgages, where ABN AMRO has a well-established presence. By the end of 2022, our share of the Dutch mortgage market had risen to 17%, up from 16% the year before. In recent years, we have digitalised many of our mortgage processes. We are also working with clients to improve the energy efficiency of their homes.

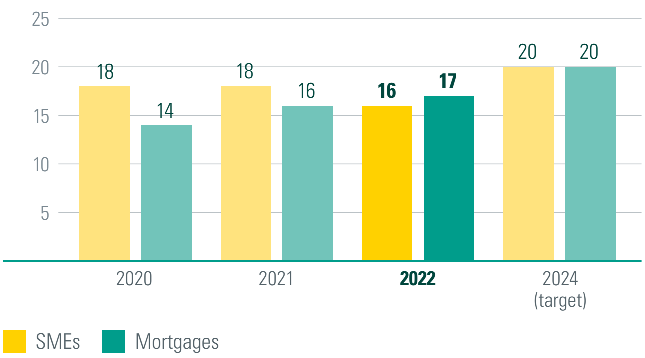
Focus markets

As part of our strategy, we are focusing on specific markets in the Netherlands and Northwest Europe:

Netherlands	Northwest Europe
▶ Affluent and wealthy clients ▶ E&E service ▶ Mortgage clients ▶ Medium-sized and large enterprises ▶ SMEs (including self-employed)	▶ Wealthy clients ▶ E&E service ▶ Medium-sized and large enterprises ▶ SMEs (including self-employed)

We have also set targets to grow our market share among SMEs and mortgages to 20% by 2024. Among SMEs, our market share declined to 16% in 2022, down from 18% the year before, while our share of the mortgages market increased to 17%, up from 16%.

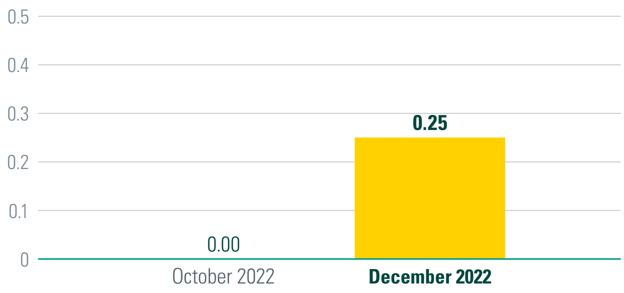
Market share for SMEs and mortgages
(in %)



Ending negative interest rates

In October 2022, we stopped charging negative interest rates on clients' accounts. Like other banks, we introduced negative rates in 2019 because we were paying interest on deposits held at the European Central Bank (ECB) and eventually passed these rates on to clients with total deposits exceeding EUR 100,000. At that amount, only around 5% of clients had to pay negative rates. We were able to stop charging negative rates in October 2022. In December, we raised rates on our savings accounts to 0.25%.

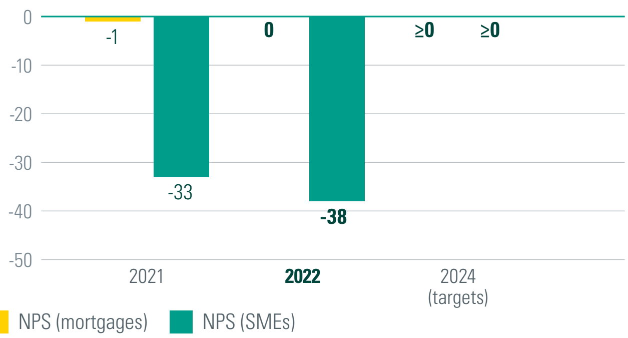
Interest rates on savings accounts
(in %)



Customer loyalty
By combining convenience and expertise, our aim is to improve customer loyalty. We measure this regularly, using the Net Promoter Score, or NPS. We measure the NPS by client unit and market. As part of our strategy, we have set targets for relational NPS for mortgages and SMEs. In 2022, our NPS improved slightly among mortgage clients, but deteriorated among SMEs (see below).

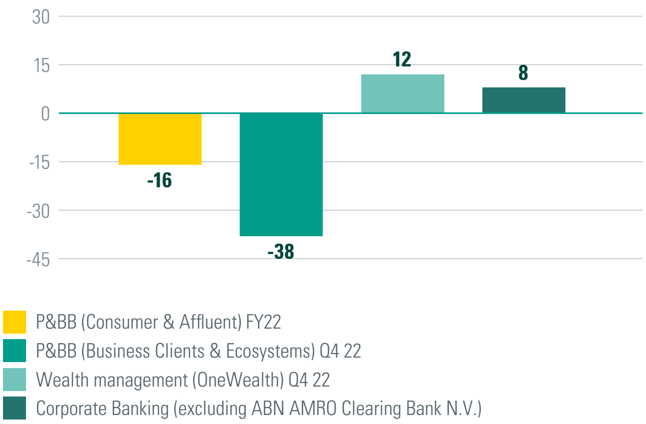
Across the bank, we aim to take a first-time right approach to client relations. To enhance contact with clients, we introduced a new front-office organisation in 2022, comprising three units: client digital engagement, customer care and specialised client advice.

NPS for targeted growth markets



Definitions for above indicators and its methodological and scope changes (where applicable) can be found on pages 343-344.

NPS scores by client unit



Definitions can be found on pages 343-344. Please note that this is the first time we measure the NPS for our new client units (Personal & Business Banking, Wealth Management and Corporate Banking). Prior to 2021, we measured the NPS by business line.

Sustainability

We believe we have a role to play in helping build a more sustainable society. Over the past year, we provided more financing to businesses and individuals making the shift to sustainability. We also put in place a plan to fulfil our ambition of becoming net zero across all portfolios by 2050 or sooner.

We are supporting the shift to sustainability in various ways: by working closely with clients to adopt more sustainable business models, by investing more in renewable energy than we did in 2021 and by encouraging property owners to make their homes and buildings more energy-efficient.

Our three main focus areas in sustainability are climate change, the circular economy and social impact (see below).

Sustainability governance

Strong governance is essential to the success of our approach to sustainability. We want to ensure that all decision-making within the bank takes into account our sustainability objectives. In 2022, we established a Sustainability Centre of Excellence and a Group Sustainability Committee to oversee implementation of our sustainability strategy. Please refer to page 231 for more information on our sustainability governance.

Sustainability acceleration targets

To support our objectives, we set clear sustainability acceleration targets. We want more of our loans, proportionally, to go to businesses that meet our sustainability standards and more of our Wealth Management clients to choose ESG funds and strategies. With more focus on sustainability across the economy, we are seeing continued demand from businesses and individual investors.

We aim to increase the asset volume of sustainable client loans (including mortgages and corporate loans) and ESG and impact investments as part of the bank's outstanding mortgage loan book, corporate loan book and relevant client asset volume from around one-fifth to over one-third in 2024. We are making good progress, with a score of 31% at the year-end.

Operational sustainability targets

			Targets		Results
	2024	2023	2022	2022	2021
Percentage sustainability (acceleration) asset volume[1]					
- ESG + impact investments[2]	42%	40%	38%	46%	38%
- Residential mortgages	34%	31%	28%	28%	25%
- Corporate loans to clients[3]	27%	21%	16%	19%	14%
Total	**36%**	**32%**	**29%**	**31%**	**27%**
External rating					
S&P Global ESG Dow Jones Sustainability Index[4]	top 5%	top 5%	top 5%	top 15%	top 15%

1 The definition of sustainability (acceleration) asset volume is based on ABN AMRO's Sustainability Acceleration Standards. These standards contain clear definitions with regard to clients' sustainability policies, practice and governance. The overall target for sustainability (acceleration) asset volume is calculated as the sum of sustainability (acceleration) asset volume (mortgages and corporate loans) and sustainability (acceleration) client asset volume, divided by the sum of the outstanding mortgage loan book, corporate loan book and relevant client asset volume.
2 In the past our assessment of the Sustainability Acceleration Standard (SAS) KPI has been conservative when data was unavailable or of low quality.
3 Corporate loans were previously reported separately as loans from our Corporate & Institutional Banking and Commercial Banking businesses. This figure is now reported as corporate loans in line with the new client units introduced at the start of 2022. Corporate loans includes loans from all three client units. Non-core loans from our former Corporate & Institutional Banking unit are not included. Results for 2021 have been adjusted accordingly to allow like-for-like comparison.
4 The result indicates to which extent ABN AMRO deviates from the highest score of the industry leader.

Note on Green Asset Ratio

In 2022, we carried out an initial Green Asset Ratio (GAR) pilot. The aim of the GAR pilot was to better understand the complexities and processes, and how to cope with potential data gaps for next year's disclosure. As published information regarding alignment of NFRD companies is not yet available, the pilot was based on the assumption that these companies were not aligned with the Taxonomy. For our Dutch portfolio of loans collateralised by residential properties, we were able to estimate alignment based on assumptions.

The criteria used for determining a substantial contribution for properties are based on building permit year, property type and energy performance (A-labels and BENG2). Loans highly exposed to physical risks were excluded from the GAR calculation. Since the exact interpretation of all the criteria is not yet clear and many assumptions were made when analysing this pilot, we chose to disclose an estimate to reflect the uncertainty in the regulation.

Based on two plausible scenarios, we calculated a preliminary Green Asset Ratio estimate of approximately 8-9%, where we used ABN AMRO's total covered assets as the denominator of the GAR and the potential aligned assets as the numerator. We chose to use the total covered assets in the denominator so as to align with next year's compulsory GAR disclosure. The detailed methodology of the underlying numbers can be found in the definitions section of this report.

Climate change

To facilitate and accelerate climate action, we have an inclusive and expertise-based approach. For us, engaging with clients to support their transition is fundamental to truly making a difference. Our sustainability efforts aim to support our clients in decarbonising their business models or assets and their environmental footprint in order to structurally reduce carbon emission in the real economy, accelerate circular business practices and create positive social impact. In line with our purpose, we strive to achieve a responsible and just transition that is socially inclusive and demonstrates respect for human rights.

Our climate strategy, launched in 2022, is an action plan designed to achieve our goal of bringing our portfolios into line with the scenario of limiting global warming to 1.5°C and supporting the transition to a net zero economy by 2050. We have set intermediate targets for 2030 for five sectors: oil and gas, power generation, shipping, commercial real estate and residential mortgages (the largest asset class in our books). We have also set a carbon reduction ambition for our client assets portfolio and aim to achieve carbon neutrality in our own operations in 2030. We will replace our Mission 2030 target with these new climate targets, both for CRE and residential mortgages.

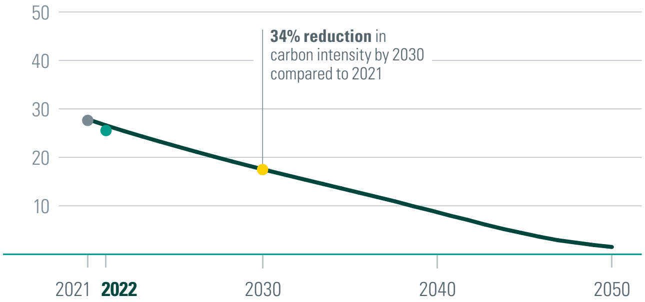
To engage with our clients in a meaningful way, we need to know where our clients are on their journey towards net zero and how they are progressing. For the sectors in scope, we will therefore carry out a review process to assess where clients in these priority sectors are on this journey. For our Corporate Banking clients, our client engagement process will be further enhanced to include sector-specific questionnaires assessing the risks and opportunities. As we gain deeper insight into our clients' needs, we will look to capitalise on opportunities by providing access to capital, expertise and partnerships, our key tools for change as a bank.

- In Corporate Banking, we are mobilising capital to support the sustainability transition through products such as GroenBank loans, sustainability-linked loans and bonds. Our teams are working closely with clients to address relevant sector topics such as upcoming disclosure requirements and climate change related risks and opportunities. At the same time, we are helping clients through initiatives such as Impact Nation, designed to support our clients with their key sustainability challenges. We are also working through the Poseidon Principles to decarbonise international shipping. We have a program in place to facilitate corporate real estate clients making their assets more sustainable and we are providing advice to clients on possible government support and subsidies.
- In Wealth Management, we have a dedicated ESG & Sustainability investment team to support clients. ESG investment is the default option across our wealth management business. As part of the bank's climate strategy, we will be working with clients to set ambitions for their investments, based on carbon intensity. As securing reliable data is still a challenge in many areas, we will start with equity investments in discretionary portfolios before moving to other asset classes.

Residential mortgages

Benchmark is CRREM 1.5 NL scenario

kg CO_2 /m²

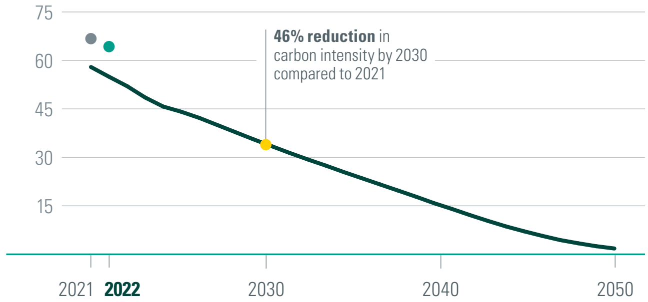


— Benchmark CRREM 1.5 NL
● ABN AMRO 2021 baseline
● ABN AMRO 2022 performance
● ABN AMRO 2030 target

Commercial real estate

Benchmark is CRREM 1.5 NL scenario

kg CO_2 /m²



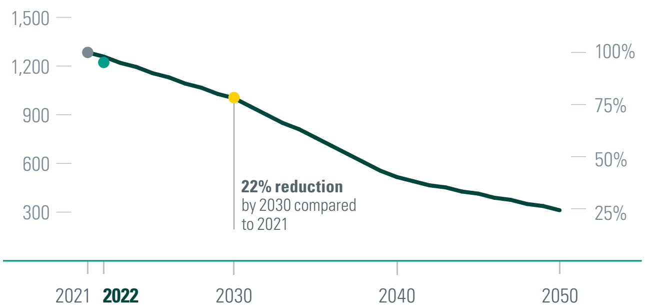
— Benchmark CRREM 1.5 NL
● ABN AMRO 2021 baseline
● ABN AMRO 2022 performance
● ABN AMRO 2030 target

Oil and gas

Benchmark is IEA NZE 2050 scenario

Absolute reduction of committed amounts in EUR million

Oil & Gas supply per IEA NZE 2050 2021=100%

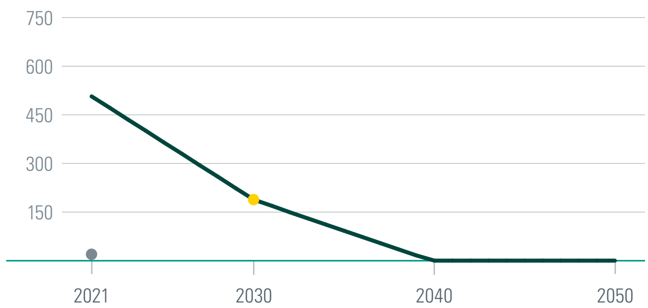


— IEA NZE 2050 global oil & gas supply curve (indexed 2021=100%)
● ABN AMRO 2021 baseline
● ABN AMRO 2022 performance
● ABN AMRO 2030 target

Power generation

Benchmark is IEA NZE 2050 scenario

kg CO_2/Mwh produced



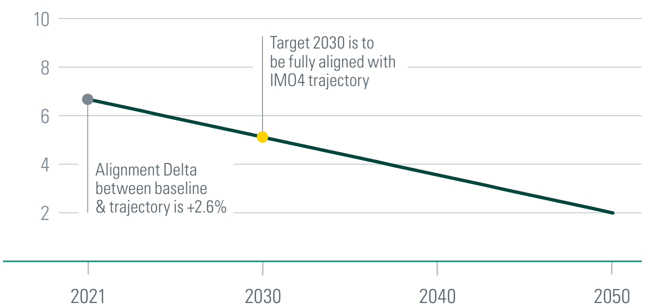
— IEA NZE 2050 Global Power Generation emissions intensity curve
● ABN AMRO 2021 baseline
● ABN AMRO 2030 convergence target

Our current power generation lending portfolio is predominantly renewables. We intend to grow our European portfolio also with utilities and independent power producers as we assist our clients in the decarbonisation of their busines models.
Power Generation and Shipping figures for 2022 are not yet available, as we rely on reported emissions from our customers that are not yet available. We therefore expect to report progress on these sectors with a year delay.

Shipping

Benchmark is IMO 4 scenario

Annual efficiency ratio (AER) – gCO_2/dwt nm



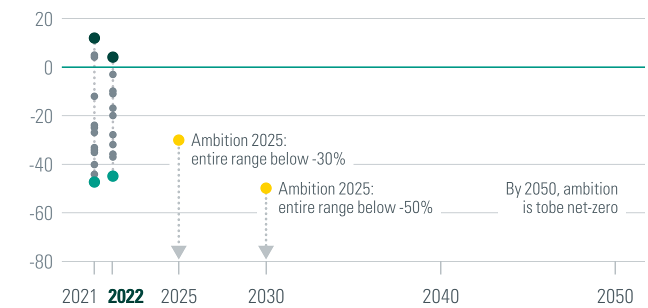
— Poseidon Principles trajectory, based on IMO 4
● ABN AMRO 2021 baseline
● ABN AMRO 2030 target

Power Generation and Shipping figures for 2022 are not yet available, as we rely on reported emissions from our customers that are not yet available. We therefore expect to report progress on these sectors with a year delay.

Client Assets[1]

Range of percentual deviations of equity building block WACI[2] scores against benchmark

Benchmark set to 0; >0% is more carbon intense than benchmark



● Lowest WACI ● Highest WACI ● Individual building blocks

[1] For Client Assets, our ambition is to ensure that we improve our performance relative to the WACI score of the benchmark. We aim for our client assets to be less carbon-intensive than the benchmark (under the zero line). As we progress on our ambitions, the WACI performance of our individual equity building blocks will increase, resulting in a tighter range below the 0 line.

[2] WACI = Weighted Average Carbon Intensity (tCO_2e/EURmln Revenue), reflecting relative building block GHG emissions intensity.

As our targets were only published recently, the processes to actively steer on these targets have only just started. Any positive developments shown in the graphs can be partly explained by our existing goal to make our portfolios more sustainable, but are not yet the result of our active steering on these targets in 2022.

- In Personal & Business Banking, we are working directly with mortgage clients to improve the energy efficiency of their homes. The Mortgage Advice Policy stipulates that every advisor is required to discuss additional financing options for sustainability improvements at every mortgage consultation and list the options customers have for making their properties more sustainable. This subject is also included in the mortgage advice report. We use the Energy Saving Check to provide insight into energy-saving measures. We have also made it easier for residential buy-to-let projects if properties have an A or B energy efficiency label. Personal & Business Banking has a dedicated team, drawn from different departments, that focuses on executing the bank's climate strategy. We have stepped up training among bank staff and intermediaries to support better client engagement. As one of the country's leading mortgage providers, we have a long-standing commitment to improving energy efficiency in homes and offices.

Circular economy

As part of our approach to sustainability, we want to be a frontrunner in the circular economy. Since 2019, we have provided financing for nearly 190 circular deals that re-use waste materials, reducing pressure on often scarce natural resources. These deals include businesses such as:

- Fairphone, which provides more socially responsible mobile phones. These phones are provided in a PaaS model to clients
- In Ovo, which has developed a machine for sexing chicks, thus avoiding the unnecessary slaughter of millions of birds. These machines are provided in a PaaS model where the client pays per use of the machine and In Ovo is responsible for maintaining and repairing the machines.

In total, we have committed over EUR 1.7 billion to circular economy deals, putting us on course to meet our EUR 3.5 billion target by 2024. In 2022, we agreed additional financing for a total of EUR 361 million, which is the same amount as in the previous year. Demand for circular deals has been growing steadily in recent years: in 2022, the Dutch government included the circular economy in its Green Projects Regulation, a decision that may also create opportunities for more financing via ABN AMRO's Groenbank. To reach our target, we are also encouraging leasing and Product-as-a-Service (PaaS) deals, which can prolong a product's shelf-life and reduce waste (see page 30).

Financing for ReintenInfra's new 'circular' premises

Financed by ABN AMRO, ReintenInfra B.V. built new premises using recycled materials from its own road construction and demolition business. This is an example of our commitment to the circular economy. The new premises, in Borne in the eastern Netherlands, consist of a workshop and offices. Eighty per cent of the materials for the building – from carpet tiles to wooden walls and suspended ceilings – came from the company's own demolition and other projects. Even the concrete used to build the new premises was reclaimed. Funding for the project came from ABN AMRO's Groenbank (green bank), which commits at least 70% of client savings to finance sustainable projects like ReintenInfra's.

Social impact

Social issues have gained in prominence in recent years – first with the Covid-19 pandemic, now with higher costs of living. As a bank, we have a responsibility to help clients in financial difficulty, where we can, and to make sure that everyone has equal access to the financial system. Over the past year, rising prices have increased poverty and financial hardship in the Netherlands.[1]

We have 117 budget coaches and debt counsellors to support clients with money problems before their debt becomes problematic. In 2022, these budget coaches worked with more than 70,000 households potentially unable to repay loans or keep up to date with household bills[2]. We also joined the National Coalition for Financial Health, along with ING and Deloitte, with the aim of halving the number of households in the Netherlands with financial worries.

During the year, our primary focus was on prevention, given that many clients are anxious and unaware that we provide help in these circumstances, or leave it too late before seeking help. We also focused on younger people and

1 Source: Netherlands Bureau for Economic Policy Analysis, CPB (August 2022).
2 Our budget coaches support clients with money problems, while we also have financial care coaches to help vulnerable clients with digital and online banking.

students, in part through our Financially Healthy awareness campaign.

Last year, 90 financial care coaches also continued to work with clients who find digital banking difficult and with clients with disabilities to ensure that both these groups retain proper access to banking services following the continued closure of many ABN AMRO branches. In supporting a total of around 80,000 clients we are collaborating with several organisations, including ANBO, the leading Dutch national association for senior citizens. In October, we launched walk-in digital technology clinics run by retired ABN AMRO employees at libraries in Utrecht, Rotterdam and Deventer – along with fellow banks ING Group and Rabobank.

We have put in place a dedicated Inclusive Banking team. In 2022, 40 client advisors completed a training course on unconscious bias, marking a step towards breaking down the invisible barriers that may prevent certain groups from getting loans or, for example, help with their finances.

Human rights

As a bank, we have a responsibility to do business while respecting international human rights – we believe respecting human rights is key to living our purpose. To support our work in this area, we have a detailed Human Rights Statement, which sets out our commitments. Consideration for human rights is also integrated into our Sustainability Risk Framework. We use quarterly risk reviews to identify, manage and address our human rights risks and impacts (described in further detail in our Human Rights Report 2022). As part of our compliance with the UN Guiding Principles on Business and Human Rights, we have also identified our salient human rights issues – those issues we believe are most at risk through our activities and business relationships.

Our salient human rights issues

ABN AMRO's role	Salient issues	Which stakeholders may be affected?
As a service provider	▶ Inability to meet basic needs exacerbated by a lack of access to financial services	People relying on support from charities and other non-profit organisations to meet their basic needs[1]
As a procurer of goods and services	▶ Violation of labour rights	Workers of companies in the bank's supply chain
As a lender As an investment services provider	▶ Violation of labour rights ▶ Violation of land-related rights ▶ Violation of right to life and health ▶ Violation of right to privacy ▶ Violation of right to freedom of opinion and expression	Workers, local communities and consumers

[1] In cases where charities and non-profit organisations are also unable to access financial services to provide support (such as cash payments, humanitarian assistance, etc.).

This table shows ABN AMRO's salient human rights issues – it shows the issues at risk, as well as the business activities (left) to which these may relate and the stakeholders that may be affected by violations (right). These salient issues are based on an initial analysis carried out in 2020 and a further intermediate assessment in 2022.

We have strengthened different elements of our client and credit acceptance due diligence procedures for temporary employment agencies and companies that work with migrant workers. Here, we aim to cover the entire spectrum of issues that are relevant to the issues of fair pay and decent working and living conditions among vulnerable migrant workers in the Netherlands. This is in line with the recommendations of the Roemer report 'No second class citizens' by the Migrant Worker Protection Taskforce.[1]

Gender and cultural diversity

As a bank with millions of clients, we are deeply embedded in society. We believe ABN AMRO should reflect the diversity of that society, not just because it is the right thing to do, but because it brings us closer to our clients and leads to more effective decision-making within the bank. We want our employees to be free to be who they are and feel comfortable in the workplace.

We have targets for both gender and cultural diversity. We continue to make progress against these targets, particularly on gender diversity, but are conscious that more

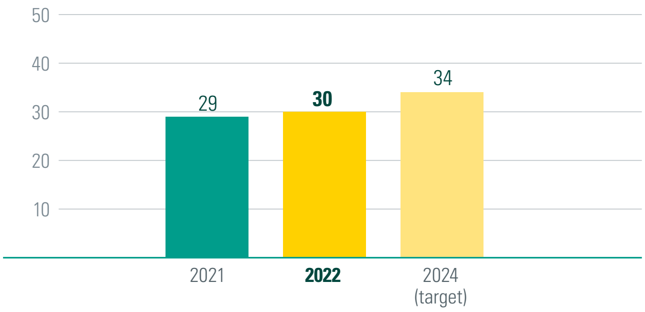
[1] This taskforce was set up to achieve greater protection for migrant workers.

needs to be done to reach our targets on disabilities and cultural diversity[1].

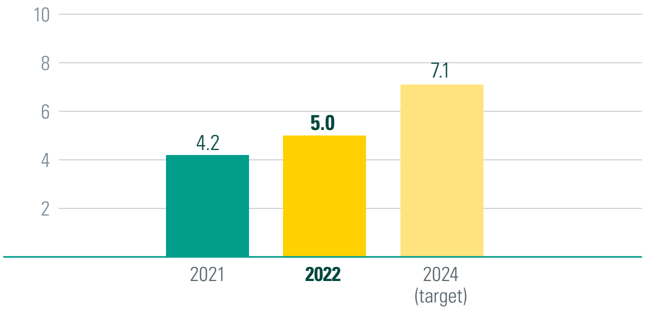
We want to reduce the gender pay gap within the bank to zero. We realise that this will take time: the current gap – 15% in 2022 – reflects the fact that, as in many other companies, proportionally more men than women occupy high-paid positions within the bank. To address this, we have incorporated gender diversity into our succession planning and introduced a new talent matrix, which provides greater insight into the balance between men and women in our organisation.

To achieve our goals, we support various initiatives within the bank, including B-Able for employees with disabilities, the decision to apologise for ABN AMRO's historical involvement in slavery, Pride week, equal pay research and publicly disclosed reporting on this and career sponsorship for women. We are also members of various external networks, including Talent to the Top and Women in Financial Services, so that we can work closely with others promoting workplace diversity and inclusion. Over the past five years, we have also brought 80 former refugees[2] into ABN AMRO's full-time workforce through our Reboot programme.

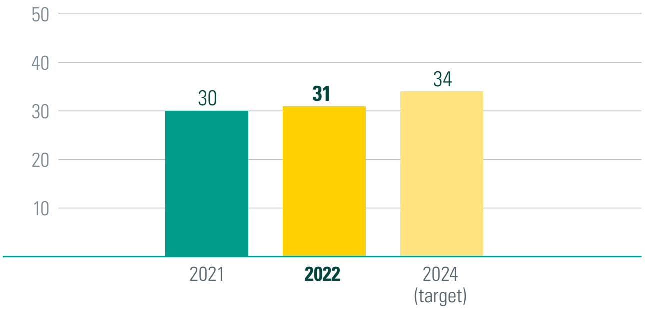
Women at the top
(in %)



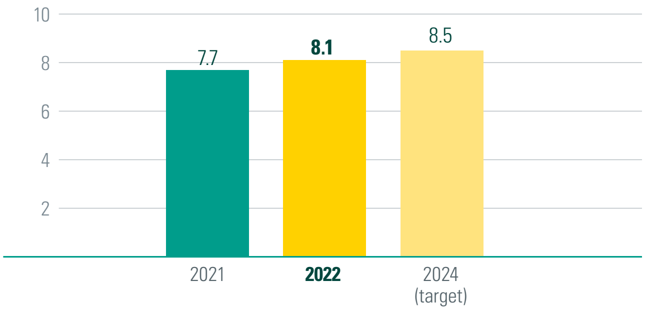
Managers at the top from non-western background
(in %)



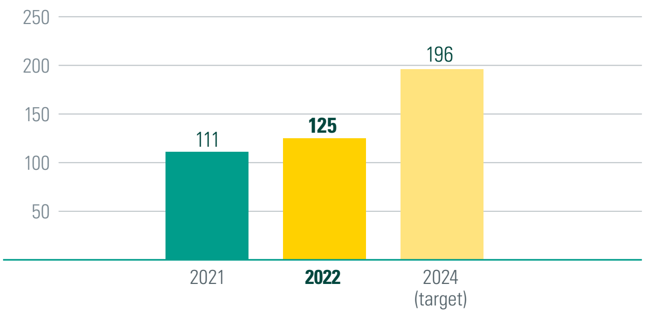
Women at the sub-top[3]
(in %)



Managers at the sub-top from non-western background
(in %)



Employees with disabilities
(headcount)



1 For more information on ABN AMRO and subsidiaries' diversity targets in response to implementation of new Dutch legislation, please see abnamro.com/en/about-abn-amro/product/diversity-and-inclusion-policy.
2 Former refugees with Dutch residency permits.
3 The 31% consists of 777 women and 1,768 men with a total of 2,545 employees.

Definitions may be found on page 343.

Future-proof bank

To implement our strategy successfully, we need to build a bank that is fit for the future. Over the past year, we have simplified our organisation and digitalised more of our processes to improve customer service and continued with our Anti-Money Laundering (AML) programme. We also signed a new two-year collective labour agreement for our employees in the Netherlands.

Simpler organisation

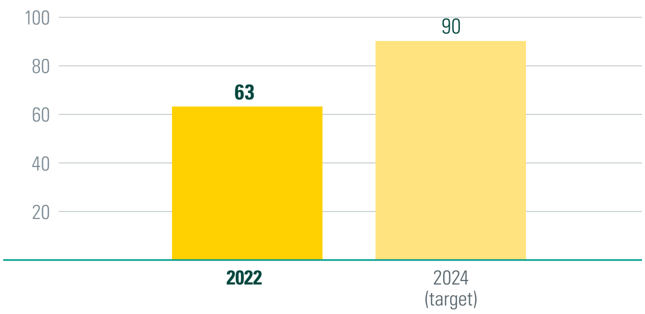
We restructured our organisation in 2022. We replaced our Executive Committee with an eight-member Executive Board and introduced three new client units[1], appointing a Chief Commercial Officer (CCO) for each unit; all three CCOs have a seat on the Executive Board. These changes bring us closer to our clients as the units are organised around client needs.

Meanwhile, we have nearly completed the wind-down of the non-core part of our former Corporate & Institutional Banking business, currently part of Corporate Banking. In 2022, we closed our offices in Dubai, Shanghai, Sydney and Brazil (note these last two locations will continue as Clearing locations). By the end of 2022, we have decreased 93% of CB non-core loans and advances. The wind-down has significantly improved the bank's risk profile; as part of our strategy, we are committed to maintaining a moderate risk profile.

During the year, we also continued to digitalise more of our processes. To achieve this, we are focusing first on processes with the highest volumes, including savings, mortgages and payments. By the end of 2022, we had digitalised 63% of these high-volume processes, putting ourselves on track to meet the 2024 target of 90%. Digitalisation reduces operational risk, supports our new client service model and adds convenience to our clients' daily lives. Clients can now have video meetings with their bankers and advisors and sign documents remotely (see page 30).

In line with our digital-first approach, we are simplifying our product portfolio, with the aim of reducing the number of products by 60% by 2024. We are also migrating more of our operations to the cloud and extending our use of DevOps – where IT Development and IT Operations work in joint teams to speed up the adoption of new digital processes. By the end of 2022, 316 teams had made the switch to DevOps, an increase from 244 in the year before.

Straight-through-processing rate of high-volume processes (in %)



Innovation and use of data

Throughout 2022, we pursued our innovation strategy, focused on three main goals:
- To contribute to a smarter, more sustainable living environment
- To help safely issue, store and trade digital assets, such as digital currencies or non-fungible tokens (NFTs)
- To support digital platforms that offer innovative financial services

[1] Previously, the bank was organised around four business units: Retail Banking, Private Banking, Commercial Banking and Corporate & Institutional Banking.

Through innovation, we are looking to create the next generation of products and services and generate new fee income by employing new digital technologies. We are working on initiatives for each of the goals above. These include PayDay, speeding up payments to employees in the gig economy and ID& Pay, which allows users to identify themselves and make payments within a single app.

We are also working with fintech partners in areas ranging from personal data management to open banking and anti-money laundering. ABN AMRO Ventures, our venture capital arm, currently has EUR 150 million invested in up-and-coming fintech companies. Its latest investment was in Oper Credits, a Belgian software-as-a-service company involved in mortgage lending. In 2022, we also ran our second Future of Finance Accelerator programme with our partner Techstars and continued to support the alumni from the first cohort on their journeys. Moreover, we consolidated our innovation activities through our Strategy & Innovation department.

Alongside innovation, we are stepping up our use of data, as this gives us insight into client needs and supports new product development. Our data strategy focuses on three areas: making sure our data is fit to be used, distributing that data quickly and securely within the bank, and 'unlocking its value'; in other words, ensuring that the data can be analysed and used by our teams to develop new products and services to meet our clients' needs.

Cybersecurity

To successfully drive secure banking in the digital age, we need to be able to continually adapt to emerging threats and global trends. Cybercrime will not be slowing down any time soon and cyber criminals are becoming more professional in their attacks. We have a responsibility to protect our clients' data, privacy and money. We therefore have in place strong capabilities to secure our bank and we are also continuing to invest in our security measures and our capacity to adapt to change, so we can respond quickly to new threats. In 2022, we did not have any significant loss of client data as a result of cyber attacks to report and we were able to maintain a very high level of availability of our internet banking services. The bank works every day to keep our clients safe – a responsibility that is shared by every employee within the bank. Attending security awareness training is part of the mandatory banking licence of every employee.

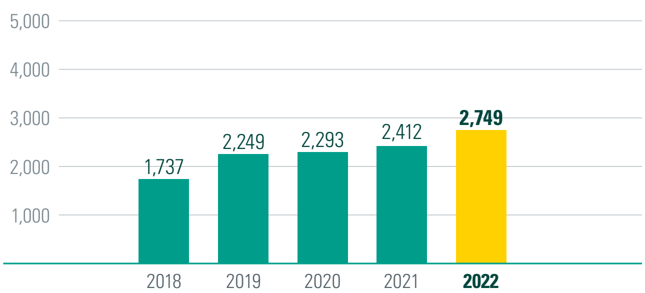
Workforce fit for the future

To support our strategy, we need a workforce that is fit for the future. Like other companies, we are seeing significant skills shortages in the labour market in areas such as data analytics, digital technologies, project management and advisory. During the past year, we increased our use of people analytics to help us identify skills gaps at the bank. In recent years, we have stepped up our recruitment efforts, in part to support digitalisation and AML. In 2022 we had 2,749 new hires, compared to 1,737 in 2018.

Generally, we prefer to reskill or upskill rather than recruit from outside. Over the past year, we spent nearly EUR 39 million on external training and development. We have extensive education programmes in place, including the Compliance Academy, the AML Academy and the Circl Academy, which is responsible for our sustainability training courses. Our approach emphasises the importance of self-learning; in other words, of learning by doing. We have also simplified our job model to encourage mobility within the bank. Over time, we believe we will need a smaller workforce, given the wind-down of our CB non-core operations and increased automation in certain areas. Most of which, we believe, will be achieved through natural attrition, i.e. people retiring or leaving the bank.

New internal hires

(headcount, 2018-2022)



Hybrid workplace

Post-pandemic, we have moved to a more hybrid way of working, with employees dividing their time between the office and home. We encourage all staff to spend at least one day a week at the office to strengthen teamwork and make team agreements that contribute to have an effective and impactful workday. Alongside the shift to more hybrid working, we are seeing an increased focus throughout society on mental health and well-being. In 2022, we continued to build on our MyWellbeing programme, which now encompasses physical, mental and social well-being, with initiatives ranging from regular health checks to help with family care and advice on maintaining a healthy work-life balance.

Anti-Money Laundering

We accelerated and strengthened our AML remediation programme in 2019. Since then the programme has expanded significantly. We currently have more than 4,000 employees working on AML. We are now moving into a new phase under the AML NXT programme. In this phase, we will aim to be smarter and more efficient in the way we work, focusing on higher-risk transactions and automating more of our processes. Costs associated with AML peaked in 2021 but during the past year we were able to reduce the number of staff working in this area by nearly 20%. Although we are making progress in our AML remediation programmes, ongoing efforts are required to complete the programmes by the end of 2023 and embed the ongoing AML set-up and execution for ABN AMRO.[1]

[1] In April 2021, ABN AMRO accepted a settlement with the Netherlands Public Prosecution Service for shortcomings in the bank's anti-money laundering activities. To address these shortcomings, the bank put in place remediation programmes in coordination with the Dutch central bank.

Collective Labour Agreement

After several months of negotiations, we agreed a new two-year collective labour agreement (CLA) with the trade unions. The CLA, which covers most of our employees in the Netherlands, includes a pay increase of 4% from October 2022 and a further 2.5% from July 2023. It also includes a one-off payment of EUR 2,000 for each employee[1] and increases in working-from-home and commuting allowances to help employees manage the rising cost of living.

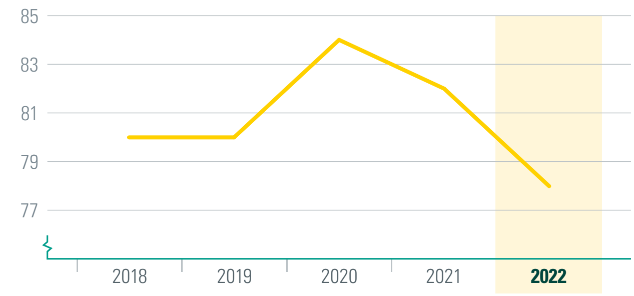
Employee engagement

Having an engaged, motivated workforce will help us attract and retain the skills we need to execute our strategy. Every year, we conduct an employee engagement survey. The results for 2022 showed a decline in our overall engagement score to 78 (compared to 82 in 2021), below our target of 82 for the year; there were lower scores in all categories, but the largest decreases were in senior management and vision & direction. A total of 68% of employees took part in the survey, down from 70% in 2021.

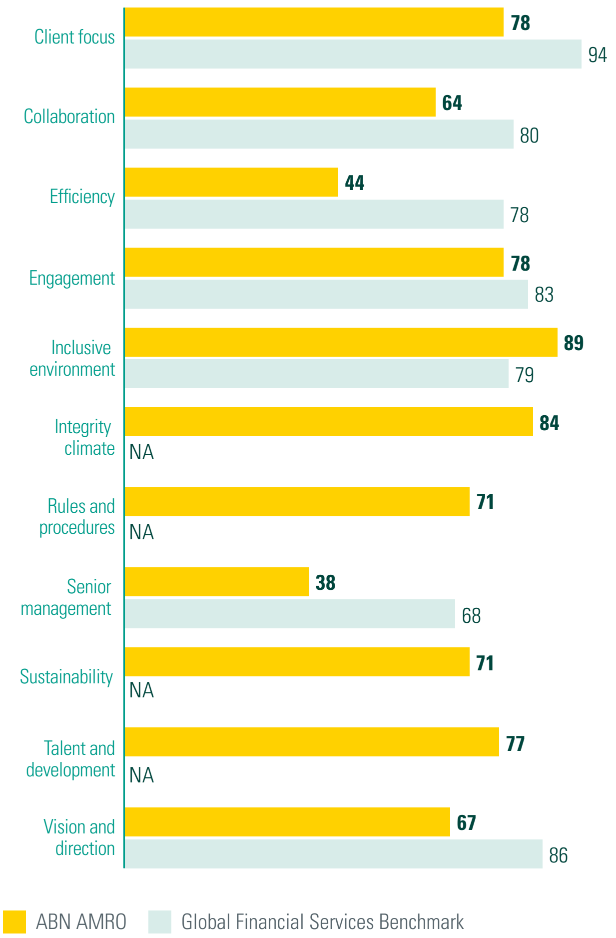
Responses from employees highlighted pay and personal recognition as areas where the bank could do better. At the same time, there was appreciation for learning & development and recent improvements to employees' work-life balance.

As in previous years, the survey results were broken down by team, and discussed within each team to decide on specific follow-up actions. Going into 2023, senior management will focus on strengthening engagement and a sense of connection with the bank among employees, which is particularly important in the current period of organisational change.

Employee engagement
(in %)



Breakdown of employee engagement survey results



Scores above are based on ABN AMRO's annual Employee Engagement Survey.
The latest survey was conducted in October 2022; 18,137 employees took part.
During the year, we also carried out a separate pulse survey, covering 25% of employees.

[1] On a full-time basis.

Ethics and integrity

It is important that we uphold the highest ethical standards so as to maintain trust both in ABN AMRO and the banking sector as a whole. Without this trust, we will not be able to meet the goals of our strategy or live up to our purpose. For us, this means doing:

- **What we have to do** – complying with all relevant laws and regulations.
- **What we can do** – being able to pursue commercial opportunities, and
- Importantly, **what we want to do** – behaving in a morally responsible way.

Please refer to our Leadership & governance section (pages 179-235) for further details of our internal policies and controls, and our approach to compliance.

To further strengthen our approach in this area in 2022, we rolled out our updated Code of Conduct and a new, bank-wide Behavioural Risk Policy. We also pressed ahead with our Speak-Up programme to reinforce a speak-up culture within the bank, so that employees feel safe reporting violations or discussing ethical dilemmas. We encourage employees to speak out if they know of risks or behaviours that may violate our principles or standards. Employees can discuss concerns with their manager or report their suspicions through, for example, the bank's whistle-blower procedure, also open to external parties. On financial crime, we continued to implement our remediation programmes (see opposite) and work closely with the police and judicial authorities to help fight fraud, corruption and money laundering. We also decided to expand our reporting of potential violations of our standards to include all investigations into allegations of wrongdoing within the bank and the action we took where appropriate.

Reported violations, 2022

Category	Number of violations or potential violations	Reprimanded	Left the bank	Status FBEE[1]
		Sanctions taken by ABN AMRO		
Share trading irregularities	4	2	2	Settled, with follow-up measures
Nepotism (favouring yourself, friends, family or loved ones)	5	1	4	Pending
Fraud	3	0	3	Pending
Unlawful transmission of/access to private data	4	1	3	Pending
Forgery or counterfeit	3	2	1	Pending
Professional irregularities in carrying out work	2	0	2	Pending
Total	**21**			

[1] Status refers to FBEE follow-up investigation.

This table shows violations reported by ABN AMRO to the Independent Foundation for Banking Ethics Enforcement (FBEE). The FBEE enforces the Code of Conduct enshrined in the Banker's Oath, which is obligatory for all banking sector employees in the Netherlands. Status refers to the FBEE follow-up investigation – all potential or actual violations are investigated to establish if there has been a breach of the Banking Sector Disciplinary Regulations. This is the first year ABN AMRO has published these figures. Future years will also include year-on-year comparisons.

Financial crime

Like other banks, ABN AMRO has an important role as a gatekeeper to help protect the wider financial system against crime and fraud. To do this, we look to improve internal policies, processes and controls so as to comply with regulations and minimise risk for the bank and its stakeholders.

Combating bribery, corruption and fraud

Corruption undermines fair business, hampers trade, reduces investor confidence and may affect economic growth and stability. Our responsibility is to conduct business free of bribery and corruption. To do so, and in line with relevant regulatory requirements, we monitor risks associated with bribery, corruption, fraud, money laundering and terrorist financing. We also maintain a strong framework of internal controls, including annually assessing risks in our Systematic Integrity Risk Analysis (SIRA).

Due diligence

We carry out extensive due diligence with regard to clients and other third parties to minimise the risk of being involved in financial wrongdoing. We monitor clients' activities and report suspicious or unusual transactions to the relevant authorities. Clients in high-risk situations are subject to enhanced due diligence, including those with political exposure, or living and active in countries or sectors with a higher incidence of financial crime.

Unacceptable risks may lead to a prospective client or third party being rejected or – in the case of existing clients – to an 'exit' from the bank. We have a dedicated AML programme to further strengthen controls on money laundering and terrorist financing.

Employees are also trained to recognise warning signs of financial crime and are required immediately to report all incidents, both actual and suspected, as well as any irregularities relating to bribery or corruption.

Responsible tax

ABN AMRO sees tax not just as a cost, but also as a means of creating social cohesion, sustainable growth and long-term prosperity. We are committed to complying with the letter, intent and spirit of tax legislation in all the countries we operate in. This means paying the right amount of tax at the right time.

Our basic principles are aligned with the Confederation of Netherlands Industry and Employers' (VNO-NCW) Tax Governance Code:

- We use business structures that result from commercial decisions, are in line with business activities and have genuine commercial purpose.
- Our relations with tax authorities are characterised by respect, transparency and trust.
- We provide regular information to stakeholders[1] on our approach and the taxes we pay.

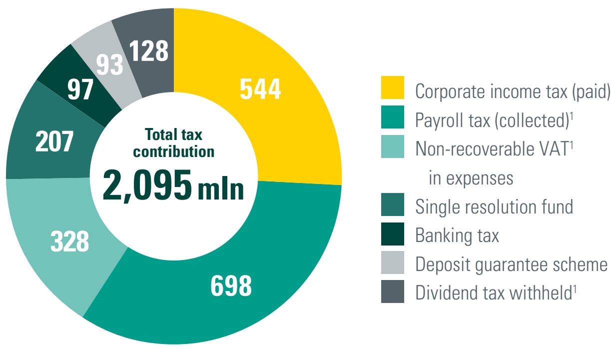
Governance

Our Executive Board oversees management of tax issues. Tax is also discussed regularly in the Supervisory Board's Audit Committee (see pages 198-199). We have tax principles, contained in our tax policy, that guide our actions and decision-making.

We report taxable income and income taxes paid for each country we operate in[2] and file a country-by-country report to the Dutch tax authorities.

The following pie chart shows the various taxes paid and collected by ABN AMRO. Where indicated, this information is limited to the Netherlands for VAT, payroll taxes and dividend tax withheld. The other taxes are global.

Total taxes paid/borne and collected 2022
(in millions)



[1] For this tax the scope is: The Netherlands.

We are committed to improving the level of transparency further in future years.

We comply with transparency rules with respect to clients, including the worldwide Common Reporting Standard (CRS) and the US Foreign Account Tax Compliance Act (FATCA). We also report aggressive and potentially aggressive cross-border arrangements under the EU Directive on Mandatory Disclosure Rules DAC6.

Managing tax risk

We have a Tax Control Framework, which is updated when necessary to reflect changes in regulations or stakeholder interests. Tax is also integrated into our broader risk management cycle, and included in risk assessments for new products or business activities. We monitor compliance with our tax policy and have controls in place to ensure that tax returns are filed in good time and that tax positions are promptly identified and reported.

We engage pro-actively with tax authorities to ensure we fully understand our tax obligations. With the rise in new technologies, we regularly exchange information with tax authorities, in line with domestic and international regulations. We expect these requirements to be extended further in view of the introduction of more automated tax filing.

Client tax integrity

Client tax integrity has grown in importance in recent years. Our standards in this area are based on ABN AMRO's core values and moderate tax risk appetite and are in compliance with our wider risk profile and the expectations of the Dutch central bank.

We organise training to ensure staff remain aware of integrity risks, given changing international tax rules. In the case of clients, we look to steer clear of aggressive tax planning and tax avoidance; our intention is always to offer products complying with the letter, intent and spirit of tax legislation and that are commercially sound rather than tax-driven. This approach is included in our tax policy, tax principles and product approval process, and monitored through our Tax Control Framework.

International developments

Over 100 countries have stated that they support the introduction of a global minimum tax of 15%. ABN AMRO is currently looking into the implications of this new regime, known as Pillar 2. The current expectation is that this will have limited impact on our effective tax rate.

[1] These stakeholders include investors, policymakers, employees, contractors, civil society and the general public.
[2] See Note 11 to the Consolidated Annual Financial Statements, showing our revenue, tax expenses and income taxes paid for each country.

Our financial performance

2022 was once again a challenging and volatile year. Coming out of the Covid-crisis, we started the year with positive energy. We were excited about our strong foundation to build and grow from. Then the war in Ukraine started, which completely changed the dynamics. We were confronted with a new set of circumstances, including rising energy prices, high inflation, and a return to positive interest rates and we once again demonstrated our resilience in a challenging environment.

Key indicators

(in millions)	2022	2021	Change
Net interest income	5,422	5,210	4%
Net fee and commission income	1,778	1,664	7%
Other operating income	640	724	-12%
Operating income	**7,841**	**7,597**	**3%**
Personnel expenses	2,458	2,324	6%
Other expenses	2,968	3,482	-15%
Operating expenses	**5,425**	**5,806**	**-7%**
Operating result	**2,415**	**1,791**	**35%**
Impairment charges on financial instruments	39	-46	
Profit/(loss) for the period	**1,867**	**1,234**	**51%**
Other indicators			
Common Equity Tier 1 ratio	15.2%	16.3%	
Common Equity Tier 1 ratio (Basel IV)	16%	16%	
Net interest margin (NIM) (in bps)	129	127	
Return on average Equity[1]	8.7%	5.8%	
Dividend per share (in EUR)[2]	0.99	0.61	

1 Annualised profit/(loss) for the period, excluding payments attributable to AT1 capital securities and results attributable to non-controlling interests, divided by the average equity attributable to the owners of the company excluding AT1 capital securities.
2 Interim/final dividend per share over the relevant period as declared/proposed by the company, subject to approval at the annual general meeting (AGM).

We delivered a strong financial performance. The financial results for 2022 were marked by the normalisation of the interest rate environment and low impairments, while fee income increased by 6%. Our return on equity for 2022 was 8.7%. The normalised interest rate environment creates an easier relationship with our clients, and it has a very positive impact on our net interest income. We also saw strong performance in our fee businesses, driven by higher payment volumes, pricing, and the increased diversification of our revenue base. At Wealth Management, asset management fees fell as last year's stock market losses pushed down our AUM. But this was offset by Clearing, which benefited from higher transaction volumes on the back of the increased market volatility.

All our three client units did better than in the previous year. In corporate loans, our loan portfolio grew as we continued to pass on the benefits from TLTRO to our clients. In mortgages, we became the market leader in the Netherlands, as we benefited from our ability to target different market segments with our various labels and our strong relationship with intermediaries. At the same time, growth in sustainability financing in our core segments was strong enabling us to maintain the overall size of our loan portfolio.

Overall, we are demonstrating strict discipline on costs, but we have to work much harder to manage the impacts of inflation on our cost base. The pressure on costs was intensified across the board. We are starting to see the cost

Large incidentals

Please find below an overview of the largest incidentals affecting our results for the year. More detailed information on other large incidentals disclosed can be found in the quarterly reports.

Provision for variable interest compensation

In 2021, a cumulative provision of EUR 306 million was booked in Personal & Business Banking for the compensation scheme regarding revolving consumer credit with floating interest rates. In 2022, the Appeals Board of the Dutch Financial Services Complaints Authority (Kifid) ruled that clients with interest rates that were not sufficiently aligned with market rates should also be compensated for compound interest (interest on interest) and the provision was increased by EUR 110 million for client compensation.

TLTRO

The 2022 figures include EUR 189 million discount from the TLTRO programme (until 23 November 2023), which was recorded in net interest income. The figures for 2021 include EUR 93 million. Most of this benefit is being passed to our clients.

During last quarter of 2022, ECB announced that TLTRO III terms and conditions changed from 23 November 2022 onwards. As a results of this change, the hedge held for interest rate sensitivity was no longer effective and led to a loss of EUR 319 million, which was booked in Other Operating Income at Group Functions.

AML

In 2022 EUR 84 million was added to the provisions for the AML remediation programmes. The scope of the provision was further updated to incorporate additional requirements agreed with the Dutch central bank (DNB) and, after a review, more AML remediation related activities were added to the provision.

In 2021, ABN AMRO accepted a settlement offer from the Netherlands Public Prosecution Service following the latter's investigation into the bank's anti-money laundering (AML) activities in the Netherlands. As part of the settlement, ABN AMRO agreed to pay a fine of EUR 300 million and a disgorgement of EUR 180 million.

Sale and leaseback of head office in Amsterdam

In 2021, ABN AMRO completed the sale and leaseback of its head office at the Gustav Mahlerlaan in Amsterdam for a total consideration of EUR 765 million. The transaction resulted in a gain of EUR 327 million (EUR 245 million net of tax) in other operating income at Group Functions.

reduction benefits from the wind-down of CB non-core. We also made very good progress in our AML-remediation, which will help alleviate costs going forward. We are on track to complete the program in 2023, after which we will approach AML on a business-as-usual basis. This is already visible in the number of people dedicated to the program, which fell by more than 15% last year.

Our capital position remains very strong, with a fully-loaded Basel III CET1 ratio of 15.2% and a Basel IV CET1 ratio of around 16%. In line with our capital framework, we propose a final cash dividend equivalent to EUR 0.67 per share. In addition, we have announced a share buyback of EUR 500 million, superseding the conditional share buyback permission announced in Q2. Our strong capital position enables us to consider further share buybacks. We are aiming for a gradual reduction of capital over time, in constructive dialogue with our regulator.

Looking forward, for 2023 the financial results will also depend on economic developments. The European economy is proving more resilient than expected, but we still expect slower growth and remain cautious about the longer-term effects of inflation. In the Netherlands higher interest rates will continue to put pressure on the housing market, but excess savings post-Covid and a still very strong labour market are dampening the impact of inflation. More likely than not, inflationary pressures will continue and, as a bank, we will probably have to manage higher risk costs due to an increase in unemployment and bankruptcy filings. Also, we need to be prepared for further surprises coming out of the war in Ukraine. We haven't yet seen a significant deterioration in asset quality. If the situation worsens, we are well positioned to navigate this environment. We maintain very strong capital and liquidity buffers and we have taken a proactive approach to loan loss provisions to cushion the impact should it materialize.

Financial performance by client unit

Personal & Business Banking

(in millions)	2022	2021	Change
Operating income	3,334	2,974	12%
Operating expenses	2,658	2,677	-1%
Operating result	**676**	**297**	**128%**
Impairment charges on financial instruments	73	-23	
Profit/(loss) for the period	**459**	**228**	**101%**

Operating income rose 12% in 2022 reflecting 8% higher net interest income mainly due to improved deposit margins following the increase in interest rates.Net fee and commission income increased by 17% reflecting higher payment income and higher credit card usage after the pandemic. Operating expenses remained flat year-on-year and as impairments were modest, the profit for 2022 doubled to EUR 459 million.

ABN AMRO's market share of new residential mortgages increased to 17%, up from 16% the year before. Client loans rose by EUR 1.8 billion to EUR 158.4 billion during 2022. Total client assets (EUR 99.0 billion) decreased slightly by EUR 0.7 billion as lower financial markets led to lower assets under management.

Wealth Management

(in millions)	2022	2021	Change
Operating income	1,477	1,283	15%
Operating expenses	1,007	956	5%
Operating result	**470**	**327**	**44%**
Impairment charges on financial instruments	29	-6	
Profit/(loss) for the period	**347**	**238**	**46%**

Overall, the profit for Wealth Management was 46% higher. Operating income from our Wealth Management business rose 15% in 2022, mainly from higher net interest income due to improved deposits margins resulting from higher interest rates. Net fee and commission income remained broadly stable despite the impact from lower equity markets, leading to lower assets under management. Operating expenses were up 5% and included salary increases as part of the CLA.

Clients loans increased in 2022 by EUR 1.1 billion to EUR 17.1 billion. Total client assets (EUR 202.2 billion) were EUR 11.7 billion lower reflecting the effect of lower financial markets on assets under management. Net new assets were EUR 3.6 billion for the year.

Corporate Banking

(in millions)	2022	2021	Change
Operating income	3,246	2,709	20%
Operating expenses	1,750	1,746	0%
Operating result	**1,496**	**963**	**55%**
Impairment charges on financial instruments	-68	-15	
Profit/(loss) for the period	**1,199**	**730**	**64%**

Operating income from our Corporate Banking unit is 20% higher in 2022, driven by business growth and improved deposit margins as a result of higher interest rates, partly offset by a EUR 52 million decrease in income from non-core activities as we continued the wind-down of our non-core activities outside Europe. Fees and commissions also increased, with market volatility leading to higher income from our Clearing business. Other operating income also rose because of large incidentals and volatile items in both years.

Operating expenses remained flat, with higher personnel costs offset by a decrease in expenses from our non-core activities. As impairments showed a net release in 2022 – mainly due to stage 3 model-based and individual releases during the year, the profit for 2022 improved by 64%.

Corporate Banking client loans grew by EUR 2.0 billion to EUR 64.5 billion despite the economic environment and the effect of the non-core wind-down.

ABN AMRO shares

Dividends and share buybacks

ABN AMRO's share price (depositary receipts) at the 2022 year-end remained flat compared to 31 December 2021. Over the same period, the STOXX Europe 600 Bank index – our principal benchmark – decreased by 3.2%. The total dividend proposed for 2022 is EUR 0.99 per share, representing a dividend payout of 50% of reported net profit, after deduction of AT1 coupon payments and minority interests. This consists of an interim dividend of EUR 0.32, paid in September 2022, and a proposed final dividend of EUR 0.67 per share, subject to approval at the upcoming Annual General Meeting. On 9 February 2022, we announced an inaugural share buyback programme of EUR 500 million, which was completed in May. In February 2023, ABN AMRO announced a EUR 500 million share buyback programme, which is expected to end no later than June 2023.

Listing information and substantial holdings

A total of 449.7 million shares, or 50.1% of the total, are held by STAK AAB (Stichting Administratiekantoor Continuïteit ABN AMRO Bank). STAK AAB has issued depositary receipts representing such shares, which are listed on Euronext Amsterdam. Netherlands Financial Investments (NLFI), on behalf of the Dutch government, holds 57.0 million (6.4%) of these depositary receipts and, in its capacity as holder of depositary receipts only, has waived any meeting or voting rights attached to the depositary receipts other than the right to vote at the ABN AMRO shareholders' meeting. The remaining 447.9 million shares (49.9%) are held directly by NLFI. In February 2023, NLFI announced that it planned to sell depositary receipts so as to reduce its stake in ABN AMRO to slightly below 50%. Other than STAK AAB and NLFI, ABN AMRO is not aware of any current or potential shareholders or owners of depositary receipts with an interest of 3% or more as at 31 December 2022. For more information on our shareholder structure, listing information and substantial holdings, see Leadership & governance (page 179) or visit our website at abnamro.com. Depositary receipts trade under ISIN code NL0011540547, Reuters ticker 'ABNd.AS' and Bloomberg ticker 'ABN:NA'.

(in millions)	31 December 2022	31 December 2021
Share count		
Total shares outstanding/issued and paid-up shares	898	940
- of which held by NLFI (shares and depositary receipts)	*505*	*529*
- of which held by other investors (depositary receipts)	*392*	*411*
- as a percentage of total outstanding shares	*44%*	*44%*
Average number of shares	908	940
Average diluted number of shares	908	940
Key indicators per share (EUR)		
Earnings per share[1]	1.96	1.21
Shareholder's equity per share	23.20	21.28
Tangible shareholder's equity per share	23.08	21.15
Dividend per share[2]	0.99	0.61
Share price development (EUR)		
Closing price (end of period)	12.93	12.92
High (during the period)	13.22	13.26
Low (during the period)	8.80	7.66
Market capitalisation (end of period, in billions)	11.60	12.14
Valuation indicators (end of period)		
Price/Earnings	6.60x	10.68x
Price/Tangible book value	0.56x	0.61x
Dividend payout ratio[1,2]	50%	50%

1 Earnings per share: Profit for the period excluding reserved coupons for AT1 capital securities (net of tax) and results attributable to other non-controlling interests divided by the average outstanding and paid-up ordinary shares.
2 Dividend per share and payout ratio subject to approval of the annual general meeting in April 2023. For 2020, no dividend was paid given the full year loss. Payment of the 2019 final dividend was postponed following ECB guidance on dividends in light of the Covid-19 pandemic. In September 2021 this dividend (EUR 0.68 per share) was paid.

Additional financial performance

Balance sheet

(in millions)	31 December 2022	31 December 2021
Cash and balances at central banks	60,865	66,865
Financial assets held for trading	907	1,155
Derivatives	5,212	3,785
Financial investments	39,034	43,165
Securities financing	20,032	16,138
Loans and advances banks	2,982	2,801
Loans and advances customers	243,927	258,251
Other	6,622	6,955
Total assets	**379,581**	**399,113**
Financial liabilities held for trading	641	687
Derivatives	4,148	4,344
Securities financing	9,652	9,494
Due to banks	17,509	38,076
Due to customers	255,015	251,218
Issued debt	56,259	59,688
Subordinated liabilities	7,290	7,549
Other	6,253	6,059
Total liabilities	**356,767**	**377,114**
Equity attributable to the owners of the parent company	22,812	21,994
Equity attributable to non-controlling interests	2	5
Total equity	**22,814**	**21,999**
Total liabilities and equity	**379,581**	**399,113**
Committed credit facilities	53,873	54,642
Guarantees and other commitments	7,651	7,598

Main developments in assets compared with 31 December 2021

Total assets declined by EUR 19.5 billion, totalling EUR 379.6 billion at 31 December 2022. The decline was mainly caused by TLTRO III programme repayments, fair value adjustments from hedge accounting and the decrease in professional lending.

Cash and balances at central banks decreased by EUR 6.0 billion due to TLTRO repayments; we participated in the TLTRO III facility from June 2020 onwards.

Loans and advances customers decreased by EUR 14.3 billion, totalling EUR 243.9 billion at 31 December 2022, largely due to a decrease of EUR 8.4 billion in professional lending (with several Clearing clients reducing their positions and self-financing their deposit and margin contributions) and to a decrease in fair value adjustments from hedge accounting. This was partially mitigated by an increase in client loans.

Client Loans increased by EUR 5.0 billion to EUR 240.1 billion at 31 December 2022. The increase was mainly attributable to an increase in residential mortgages, reflecting strong operational capabilities, and corporate loans, mainly in Corporate Banking core and in line with our strategic objectives for Northwest Europe.

(in millions)	31 December 2022	31 December 2021
Residential mortgages	150,762	146,351
Consumer loans	10,232	10,794
Corporate loans to clients[1]	79,085	77,965
- of which Personal & Business Banking	*8,962*	*9,920*
- of which Corporate Banking	*63,886*	*62,230*
Total client loans[2]	**240,079**	**235,110**
Loans to professional counterparties and other loans[3]	15,209	23,605
Total loans and advances customers[3]	**255,288**	**258,715**
Fair value adjustments from hedge accounting	-9,335	1,951
Less: loan impairment allowance	2,026	2,416
Total loans and advances customers	**243,927**	**258,251**

1 Corporate loans excluding loans to professional counterparties.
2 Excluding fair value adjustment from hedge accounting.
3 Loans to professional counterparties and other loans includes loans and advances to governments, official institutions and financial markets parties.

Main developments in liabilities compared with 31 December 2021

Total liabilities decreased by EUR 20.3 billion, totalling EUR 356.8 billion at 31 December 2022, mainly driven by a decline in due to banks.

Due to banks decreased by EUR 20.6 billion to EUR 17.5 billion, mainly related to TLTRO repayments.

Due to customers increased by EUR 3.8 billion, totalling EUR 255.0 billion at 31 December 2022. This was mainly caused by an increase in client deposits (due to increasing economic uncertainty, leading to more saving and less spending).

Issued debt decreased by EUR 3.4 billion to EUR 56.3 billion. At 31 December 2022, issued debt included EUR 23.8 billion in covered bonds, EUR 8.2 billion in senior preferred funding, EUR 9.5 billion in senior non-preferred funding and EUR 14.7 billion in commercial paper and certificates of deposit. EUR 4.4 billion in outstanding long-term funding and EUR 14.7 billion in outstanding short-term funding mature within 12 months.

Total equity increased by EUR 0.8 billion to EUR 22.8 billion at 31 December 2022. This increase was mainly attributable to the inclusion of profit for the period and an increase in accumulated other comprehensive income.

Equity attributable to owners of the parent company amounted to EUR 22.8 billion at 31 December 2022. Excluding AT1 securities, it increased by EUR 0.8 billion to EUR 20.8 billion at 31 December 2022.

Other information
Total Bank

	2022	2021
Net interest margin (NIM) (in bps)	129	127
Cost/income ratio	69.2%	76.4%
Cost of risk (in bps)[1]	3	-7
Return on average Equity[2]	8.7%	5.8%
Dividend per share (in EUR)[3]	0.99	0.61
Earnings per share (in EUR)[4]	1.96	1.21
Client assets (in billions)	301.2	313.6
Risk-weighted assets (in billions)	128.6	117.7
Number of employees (in FTEs)	20,038	19,957
Number of non-employees (in FTEs)	4,575	6,524

1 Annualised impairment charges on loans and advances customers divided by the average loans and advances customers (excluding at fair value through P&L) on the basis of gross carrying amount and excluding fair value adjustments from hedge accounting.
2 Annualised profit for the period excluding coupons attributable to AT1 capital securities and results attributable to non-controlling interests divided by the average equity attributable to the owners of the company excluding AT1 capital securities.
3 Interim/final dividend per share for the relevant period as declared/proposed by the company, subject to approval at the annual general meeting (AGM). For more information, please refer to Capital in the Risk, funding & capital section.
4 Profit for the period excluding coupons attributable to AT1 capital securities and results attributable to non-controlling interests divided by the average outstanding and paid-up ordinary shares.

Return on Equity for 2022 was 8.7%, compared with 5.8% in 2021.

Return on assets in 2022 was 0.4% (2021: 0.28%), mainly due to the higher return in 2022.

(in millions)	31 December 2022	31 December 2021
Personal & Business Banking	122,918	117,276
Wealth Management	64,556	63,333
Corporate Banking	60,563	64,427
Group Functions	6,978	6,182
Total due to customers	**255,015**	**251,218**

Personal & Business Banking

	2022	2021
Loans and advances customers (in billions)	157.8	155.8
-of which Client loans (in billions)[1]	*158.4*	*156.6*
Due to customers (in billions)	122.9	117.3
Risk-weighted assets (in billions)	38.9	40.3
Number of employees (in FTEs)	4,513	4,704
Total client assets (in billions)	99.0	99.7
- of which Cash	*88.6*	*87.3*
- of which Securities	*10.4*	*12.4*

1 Gross carrying amount excluding fair value adjustment from hedge accounting.

Loans and advances customers increased by EUR 2.0 billion to EUR 157.8 billion (2021: 155.8 EUR billion), mainly driven by an increase in residential mortgages.

Total client assets decreased by EUR 0.7 billion to EUR 99.0 billion (2021: EUR 99.7 billion), mainly driven by the decline in stock markets throughout 2022 that led to a lower value for securities client assets.

Wealth Management

	2022	2021
Loans and advances customers (in billions)	17.0	15.9
-of which Client loans (in billions)[1] [1]	*17.1*	*16.0*
Due to customers (in billions)	64.6	63.3
Risk-weighted assets (in billions)	11.3	10.6
Number of employees (in FTEs)	2,848	2,867
Total client assets (in billions)	202.2	213.9
- of which Cash	*64.6*	*63.3*
- of which Securities	*137.6*	*150.6*

1 Gross carrying amount excluding fair value adjustment from hedge accounting.

Loans and advances customers increased by EUR 1.1 billion to EUR 17.0 billion (2021: EUR 15.9 billion), mainly driven by an increase in residential mortgages and corporate loans.

Total client assets decreased by EUR 11.7 billion to EUR 202.2 billion (2021: EUR 213.9 billion), mainly driven by the decline in stock markets that led to a lower value for securities client assets.

Net new assets totalled EUR 3.6 billion, mainly driven by a securities inflow throughout the year.

(in billions)	31 December 2022	31 December 2021
Opening balance client assets	**213.9**	**189.6**
Net new assets	3.6	1.5
Market performance	-15.3	16.9
Divestments/acquisitions		6.0
Closing balance client assets	**202.2**	**213.9**
Breakdown by type		
Cash	64.6	63.3
Securities	137.6	150.6
- of which Custody	*35.4*	*37.2*
Breakdown by geography		
The Netherlands	60%	58%
Rest of Europe	40%	42%

Corporate Banking

	2022	2021
Loans and advances customers (in billions)	77.7	83.8
-of which Client loans (in billions)[1]	*64.5*	*62.5*
Due to customers (in billions)	60.6	64.4
Risk-weighted assets (in billions)	73.6	62.4
Number of employees (in FTEs)	3,595	3,857

[1] Gross carrying amount excluding fair value adjustment from hedge accounting.

Loans and advances customers decreased by EUR 6.1 billion, totalling EUR 77.7 billion at 31 December 2022, largely due to a decrease in professional lending (mainly Clearing) and CB non-core portfolio following our successful wind-down. This was partially mitigated by an increase in client loans (mainly corporates).

Due to customers decreased by EUR 3.6 billion as several Clearing clients self-financed their deposit and margin contributions.

RWA increased by EUR 11.2 billion, totalling EUR 73.6 billion at 31 December 2022. This increase was a result of a new model risk add-on and migration of specific portfolios from Advanced IRB model to Foundation IRB and Standardized Approach.

Group Functions

	2022	2021
Securities financing - assets (in billions)	13.5	10.5
Loans and advances customers (in billions)	-8.5	2.7
Securities financing - liabilities (in billions)	9.6	9.5
Due to customers (in billions)	7.0	6.2
Risk-weighted assets (in billions)	4.7	4.4
Number of employees (in FTEs)	9,082	8,528

Loans and advances customers Loans and advances customers decreased to EUR 8.5 billion negative in 2022. This decrease was attributable to a decrease in fair value adjustments from hedge accounting on residential mortgages, as a result of the sharp increase in long-term interest rates this year.

Interview with Mrs Karijadi, ABN AMRO Personal & Business Banking Client

Over the past year, the cost of living has risen sharply for many households in the Netherlands. We spoke to Mrs Karijadi about how she is working closely with her debt counsellor at ABN AMRO to ensure she can keep up with the bills.

"Every year, I sit down with a debt counsellor and we go through my finances. This year, the debt counsellor was Angela Brand. I currently have a service loan with ABN AMRO. Angela and I regularly look at how I'm doing: whether I need to cut my spending, or if I'm getting all the income I'm entitled to.

Every year, I sit down with a debt counsellor and we go through my finances

Just lately, I've seen prices really going up, particularly for groceries. Everyone is talking about the cost of living at the moment. I don't have any expenses that are out of the ordinary. Apart from the monthly repayments on my loan, I have my shopping, heating bills and insurance – just like everyone else. I'm lucky – I go to the same supermarket to buy food every day. Of course, I notice that costs have risen, but I haven't had to cut back.

Even so, I am on a tight budget. I used to work in the clothing industry. I retired from my job two years ago. I get the state pension. But that's not enough, so I also get healthcare and rental allowances. And I live on my own. There's nobody else bringing in money, so I have to rely on what I have.

This year, I spoke with Angela and, together, we thought I could actually increase my repayments. It's only a small increase, but it's reduced the duration of the loan by a third, which was a really nice surprise. It's great to have someone like Angela. She's very helpful. And we work together, that's important. She gives me a sense of control. At the moment, I've got no immediate money worries, and every reason to be optimistic about the future."

Mrs Karijadi
ABN AMRO Personal & Business Banking Client

Outlook

Going into 2023, we expect a tougher economic environment. The cost of living will remain a concern for thousands of households across the Netherlands. We also expect to see a further cooling-off in the Dutch housing market, continued skills shortages across the economy and ongoing political pressure to act on climate change.

Economic and business environment

The European economy has proven more resilient than expected. In 2023, however, we forecast slower growth for the Netherlands and a moderate recession for the eurozone as a whole. Activity is no longer being stimulated by pent-up demand or by the recovery of supply chains in the aftermath of lockdowns. We expect a small increase in corporate bankruptcies, after the record lows seen during the pandemic thanks to government support measures.

Household spending is being hampered by higher inflation. Though inflation is coming down as the upward effect of increased energy prices wanes, we expect the ECB will stick to its tightening stance. Interest rates have risen substantially on the back of tightened monetary policy. These higher interest rates will continue to put pressure on the Dutch housing market, where the number of transactions has dropped and prices have started to correct after increasing sharply during the Covid-19 pandemic.

Climate change and society

Policymakers will continue to focus on climate change. Pressure remains on governments to accelerate the phasing-out of fossil fuels to reach the +1.5°C global warming limit set out in the 2015 Paris Climate Agreement. We expect companies across the Netherlands and Europe to continue adopting more sustainable business models, supporting our strategy.

Skills shortages are likely to persist, especially in areas such as data analytics and digital technologies, which are in strong demand across the economy. With low unemployment, we expect the current tight labour market conditions to continue well into 2023.

Politically, the cost of living will remain a priority, with continued uncertainty about energy prices. However, the Dutch government support package announced in September 2022 is helping households to pay their energy bills.

Geopolitical concerns are likely to remain, with no immediate end in sight to the war in Ukraine and the prospect of continued tensions between the US and China.

Bank performance

Economic uncertainty could lead to lower demand for corporate loans as more companies put investment plans on hold. In the housing market, we expect a correction in house prices and pressure on the number of transactions, feeding through into lower demand for mortgages. In the coming year, we will continue to deliver on our strategic objectives. We aim to further diversify our income sources by increasing our fee income and realising further growth in our focus segments. We will finalise our remediation while increasing the efficiency of our AML processes. Cost discipline remains high on the agenda, given the pressure from higher inflation and additional investments. We are working hard to reach our cost target of below EUR 4.7 billion in 2024, though this has become more challenging in the current environment. For 2023, we expect non-core and AML-related costs to come down in line with our strategy. However, these cost savings will be largely offset by increasing investments. For example, we are building up our sustainable finance regulation capabilities. In addition, we are also investing in our data capabilities, for example, linked to risk models and further digitalisation of our processes.

> **The European economy has proven more resilient than expected**

For 2023, we expect non-core and AML-related costs to come down in line with our strategy. However, these cost savings will be largely offset by increasing investments. For example, we are building up our sustainable finance regulation capabilities. In addition, we are also investing in our data capabilities, for example, linked to risk models and further digitalisation of our processes.

Note on availability of resources and inputs

To operate, our business relies on certain resources being available: access to sufficient financial capital, for example, and skilled labour. Changes in our operating environment may affect the availability of these resources. We have listed the main risks below, relating each of these risks to one or more of the six <IR> capitals:[1]

- Economic slowdown, resulting in lower demand for the bank's products and services and in increased bankruptcy rates and impairments *(manufactured capital)*
- Continued skills shortages, particularly in data analytics and digital technologies *(human capital)*
- Rising operating costs because of higher inflation *(financial capital)*
- Significant data loss from more frequent and more sophisticated cyber attacks *(intellectual capital)*
- Financial market and economic dislocation from the continuing war in Ukraine, as well as possible energy shortages *(financial capital)*
- A worse-than-expected decline in house prices and an increasing risk of mortgage losses *(financial/social capital)*
- Financial distress among clients because of the rising cost of living *(social capital)*

Our business also faces other risks, including pandemic risk (from a resurgence of Covid-19 or bird 'flu, for example), sanctions resulting from political conflict and new regulations either restricting certain products or requiring banks to hold additional capital (to guard against the effect of climate change, for example). For further information on our risks and our approach to risk management, please see page 56.

[1] See our Abbreviations and definitions of important terms 2022 report for definitions of these capitals. The same six capitals are used in our value creation model on pages 26-27.

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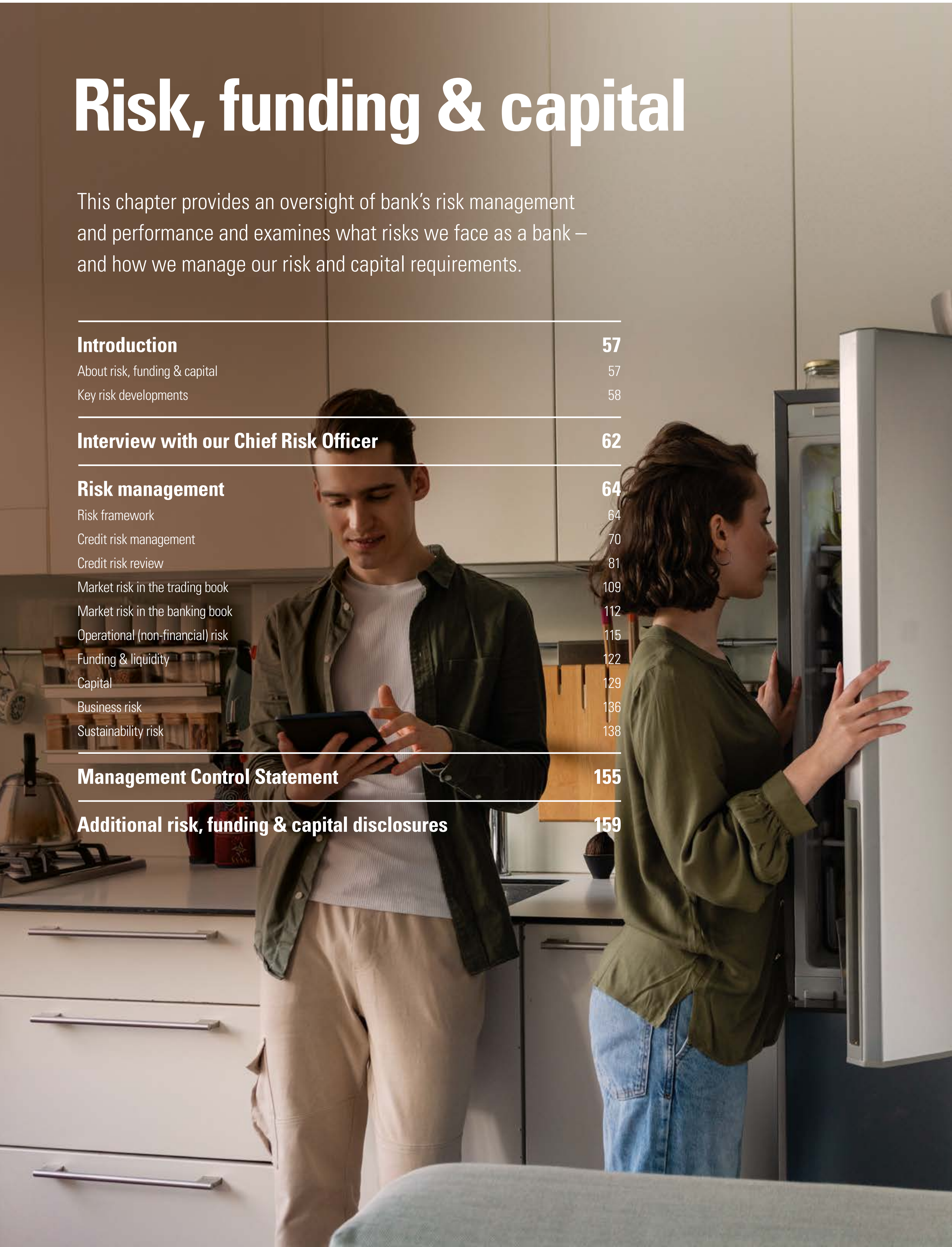

Risk, funding & capital

This chapter provides an oversight of bank's risk management and performance and examines what risks we face as a bank – and how we manage our risk and capital requirements.

Introduction

About risk, funding & capital

This section provides an introduction to the Risk, funding & capital chapter. As this chapter of the Integrated Annual Report contains information based on EU IFRS as well as CRD V/CRR2, this section provides more information on differences in scope and consolidation.

Regulatory requirements

The Risk, funding & capital chapter presents the disclosures required under the Dutch Financial Supervision Act (Wet op financieel toezicht – Wft), title 9 book 2 of the Dutch Civil Code and EU IFRS. ABN AMRO also embraces the Enhanced Disclosure Task Force (EDTF) principles and recommendations. For non-financial disclosures required under the Dutch Decree on non-financial disclosures, ABN AMRO follows the Non-Financial Reporting Directive (NFRD), including its guidelines. Certain disclosures in the Risk, funding & capital chapter are an integral part of the Consolidated Annual Financial Statements (AFS) and contain audited information. The audited parts concern risk disclosures of financial instruments (IFRS 7) and capital disclosures (IAS 1). Audited information in these sections is labelled as 'Audited' in the respective headings, including the sub headings. The audited section runs until the next heading of the same level is mentioned without an audited label.

Risk exposure measurement and scope differences

Risk measures vary according to the purpose for which the exposure is calculated: EU IFRS or the determination of regulatory or economic capital (CRD V/CRR2).

EU IFRS reporting scope

The objective of the financial statements is to provide the primary users of these financial statements with useful financial information about the bank to support their decisions. Financial information is useful when it is relevant and reliably represents what it purports to represent. Financial statements provide information about the financial position of the bank and the effects of transactions and other events that change the bank's financial position. The consolidation scope of ABN AMRO is determined in accordance with IFRS 10 Consolidated Financial Statements. More information can be found in Note 1 Accounting policies in the Consolidated Annual Financial Statements.

Regulatory reporting scope

The objective of regulatory reporting is to take a risk view on the bank's portfolio and to ensure that the bank maintains sufficient capital buffers to cover unexpected losses, and sufficient liquidity buffers. The scope of consolidation for the purpose of calculating regulatory and economic capital (based on the CRD V and CRR2) is generally the same as the consolidation scope under EU IFRS and includes subsidiaries that are directly or indirectly controlled by ABN AMRO and active in the banking and financial sectors. Subsidiaries consolidated under EU IFRS but active in sectors other than banking and finance are excluded from the regulatory scope of consolidation.

"The objective of the financial statements is to provide primary users with useful financial information about the bank to support their decisions"

Introduction
Strategy, value creation & performance
Risk, funding & capital
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Other

Key risk developments

Key figures

(in millions)	31 December 2022	31 December 2021
Total loans and advances, gross excluding fair value adjustments[1]	**258,212**	**261,421**
- of which Banks	*2,990*	*2,811*
- of which Residential mortgages	*150,762*	*146,351*
- of which Consumer loans	*10,232*	*10,794*
- of which Corporate loans[1]	*86,731*	*86,458*
- of which Other loans and advances customers[1]	*7,497*	*15,007*
On-balance sheet maximum exposure to credit risk	377,007	396,077
Total Exposure at Default (EAD)	**391,065**	**417,214**
- of which Personal & Business Banking	*173,419*	*173,402*
- of which Wealth Management	*20,571*	*20,521*
- of which Corporate Banking	*107,740*	*114,801*
- of which Group Functions	*89,335*	*108,490*
Credit quality indicators[1]		
Forbearance ratio	2.7%	4.3%
Past due ratio	0.8%	0.8%
Stage 3 ratio	2.0%	2.6%
Stage 3 coverage ratio	25.6%	28.3%
Cost of risk (in bps)[2]	3	-7
Regulatory capital		
Total RWA	128,593	117,693
- of which Credit risk[1]	*110,621*	*99,976*
- of which Operational risk	*15,967*	*16,049*
- of which Market risk	*2,005*	*1,668*
Total RWA/total EAD	32.9%	28.2%
Liquidity and funding indicators		
Loan-to-Deposit ratio	96%	103%
LCR[4]	143%	168%
NSFR	133%	138%
Capital ratios		
CET1 ratio	15.2%	16.3%
MREL	30.1%	27.9%
Fully-loaded leverage ratio (incl. central bank exposure)	5.2%	5.0%

1 Excluding fair value adjustments from hedge accounting.
2 Annualised impairment charges on loans and advances customers for the period divided by the average loans and advances customers on the basis of gross carrying amount and excluding fair value adjustment from hedge accounting.
3 RWA for credit value adjustment (CVA) is included in credit risk. CVA per 31 December 2022 is EUR 0.3 billion (31 December 2021 EUR 0.2 billion).
4 Consolidated LCR based on a 12-month rolling average.

Key risk figures per business segment

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	31 December 2022 Total
Total assets	159,469	18,856	101,068	100,189	379,581
Total Exposure at Default	173,419	20,571	107,740	89,335	391,065
RWA					
Credit risk[1]	30,991	8,992	67,362	3,275	110,621
Operational risk	7,907	2,329	4,274	1,458	15,967
Market risk		2	2,003		2,005
Total RWA	**38,898**	**11,322**	**73,640**	**4,733**	**128,593**
Total RWA/Total Exposure at Default	22.4%	55.0%	68.3%	5.3%	32.9%
Economic capital					
Credit risk	3,224	1,044	7,051	724	12,043
Operational risk	1,037	306	562	190	2,094
Market risk			124	2,515	2,639
Business risk	411	309	931		1,651
Other risk types[2]	207	174	84	1,811	2,276
Economic capital	**4,879**	**1,833**	**8,752**	**5,239**	**20,703**
					2022
Average risk exposure amount	39,347	10,417	72,857	4,637	127,259
Cost of risk (in bps)[3]	5	19	-4		3

1 RWA for credit value adjustment (CVA) is included in credit risk. CVA per 31 December 2022 is EUR 0.3 billion (31 December 2021 EUR 0.2 billion).
2 Other risk types include own funding spread risk, equity risk and property risk.
3 Annualised impairment charges on loans and advances customers for the period divided by the average loans and advances customers on the basis of gross carrying amount and excluding fair value adjustment from hedge accounting.

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	31 December 2021 Total
Total assets	157,495	18,405	104,856	118,357	399,113
Total Exposure at Default	173,402	20,521	114,801	108,490	417,214
RWA					
Credit risk[1]	31,425	8,611	56,909	3,031	99,976
Operational risk	8,896	1,939	3,839	1,374	16,049
Market risk		2	1,666		1,668
Total RWA	**40,321**	**10,552**	**62,415**	**4,406**	**117,693**
Total RWA/Total Exposure at Default	23.3%	51.4%	54.4%	4.1%	28.2%
Economic capital					
Credit risk	3,027	1,027	6,406	722	11,182
Operational risk	1,178	255	496	177	2,105
Market risk			108	3,259	3,367
Business risk	324	254	454		1,032
Other risk types[2]	278	183	60	831	1,352
Economic capital	**4,806**	**1,719**	**7,525**	**4,989**	**19,039**
					2021
Average risk exposure amount	33,986	9,983	62,085	4,460	110,515
Cost of risk (in bps)[3]	-3	-5	-13		-7

1 RWA for credit value adjustment (CVA) is included in credit risk. CVA per 31 December 2022 is EUR 0.3 billion (31 December 2021 EUR 0.2 billion).
2 Other risk types include own funding spread risk, equity risk and property risk.
3 Annualised impairment charges on loans and advances customers for the period divided by the average loans and advances customers on the basis of gross carrying amount and excluding fair value adjustment from hedge accounting.

Loans and advances

In 2022, total loans and advances decreased to EUR 258.2 billion (31 December 2021: EUR 261.4 billion). Other loans and advances showed the largest decrease, primarily driven by lower trading positions of Clearing clients at year-end 2022. Furthermore, lower commodity prices and outflows towards segregated client accounts caused a decrease in margin contributions for Clearing clients. This decrease in loans and advances was partly offset by an increase in residential mortgages.

Corporate Banking's non-core portfolio further decreased to EUR 1.2 billion at 31 December 2022 (31 December 2021: EUR 2.0 billion). Approximately EUR 0.5 billion of this portfolio was classified as stage 3 (31 December 2021: EUR 0.6 billion).

Exposure at Default

EAD decreased to EUR 391.1 billion (31 December 2021: EUR 417.2 billion), largely because of the decrease in loans and advances and, to a lesser extent, lower cash and balances at central banks due to repayment of TLTRO III facilities.

Credit quality indicators

With the exception of the stage 2 ratio, credit quality indicators improved in 2022. The forbearance ratio improved to 2.7% (31 December 2021: 4.3%). This improvement is especially evident in residential mortgages and corporate loans. Many clients for whom Covid-19-related forbearance measures were applied in 2020 came to the end of the two-year forbearance probation period during 2022 and ceased to be foreborne.

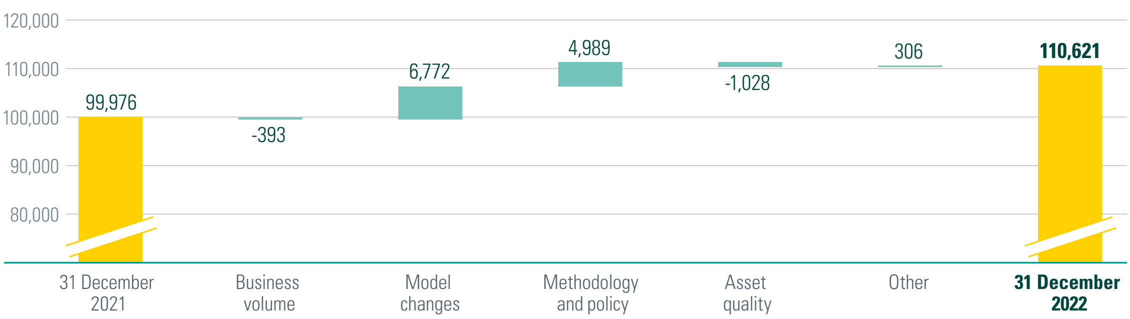
Compared to 31 December 2021, total arrears declined modestly from EUR 2.1 billion to EUR 2.0 billion, resulting in a past due ratio of 0.8% (unchanged). While the past due ratio for residential mortgages and consumer loans remained stable, the past due ratio for corporate loans declined further to 1.0%. A change in the past due accounting of the recourse portfolio at Asset Backed Finance contributed to this decline.

The stage 3 ratio decreased to 2.0% at 31 December 2022 (31 December 2021: 2.6%), attributable to the outflow of clients due to repayments and clients returning to stage 2. The stage 3 coverage ratio decreased from 28.3% to 25.6% due to the write-down or return to stage 2 of some highly provisioned loans.

Risk-weighted assets

Total RWA rose to EUR 128.6 billion (31 December 2021: EUR 117.7 billion), predominantly driven by credit risk RWA. Credit risk RWA was up as a result of a new model risk add-on and the migration of specific portfolios from the Advanced IRB approach to Foundation IRB and to the Standardised Approach, partly offset by model updates and changes in asset quality. Market risk RWA also increased over the year, but came down in the second half of the year. CVA risk RWA (counterparty credit risk) rose slightly over the year as a whole, while operational risk RWA remained relatively stable.

RWA flow statement credit risk
(in millions)



Economic capital

Economic capital (EC) rose to EUR 20.7 billion (31 December 2021: EUR 19.0 billion) reflecting higher own funding spread risk EC (EUR 1.0 billion), higher credit risk EC (EUR 0.9 billion) and higher business risk EC (EUR 0.6 billion), partly offset by lower market risk EC (EUR 0.7 billion). The increase in own funding spread risk EC is primarily attributable to changes in the balance sheet composition. EC for credit risk increased mostly due to additional credit risk model add-ons and business developments. The increase in business risk EC resulted from updated scenarios of future economic developments in the EC measurement. Market risk banking book EC decreased mainly due to a lower client behaviour risk contribution as a result of the higher interest rate environment. EC for operational risk remained relatively flat at a level of EUR 2.1 billion.

Liquidity and funding indicators

The Loan-to-Deposit (LtD) ratio decreased to 96% at 31 December 2022 (31 December 2021: 103%). Loans and advances to customers decreased, while due to customers showed an increase, reflecting a continued rising trend in client savings. The liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) both remained well above 100% throughout 2022.

Capital ratios

At 31 December 2022, the Basel III Common Equity Tier 1 (CET1), Tier 1 and total capital ratios were 15.2%, 16.7% and 20.9%, respectively (31 December 2021: 16.3%, 18.0% and 22.4%, respectively). The CET1 capital ratio decreased compared to 31 December 2021 due to an increase in RWA, partly offset by an increase in CET1 capital. The latter increased, mainly due to the net profit for 2022 (after dividend and AT1 coupon payments) and partly offset by the permission granted by the ECB to repurchase shares totalling EUR 500 million. All capital ratios were in line with the bank's risk appetite and were comfortably above regulatory requirements.

The leverage ratio increased to 5.2% at 31 December 2022 (31 December 2021: 5.0%), mainly due to a decrease in on-balance sheet exposures, including those due to TLTRO repayments, and an increase in CET1 capital, while MREL improved to 30.1% (31 December 2021: 27.9%), mainly due to issuances of senior non-preferred instruments and the increase in CET1 capital, partly offset by RWA increases.

Emerging risks

Identifying and mitigating emerging risks early on forms an important part of our risk management framework. Material emerging risks are recorded in our Risk Event Register and serve as input for our risk monitoring, stress testing and the review of our risk taxonomy. For more information on our Risk Taxonomy, please refer to the Risk framework section. During 2022, the following emerging risks were assessed to be material.

War in Ukraine

Our expectation is that the war in Ukraine will persist well into 2023 and that geo-political tensions and risks will continue to have an impact on energy and food supplies. Supply chain issues could remain in force in the upcoming year, which could be amplified by further sanctions and export restrictions. We will continue to monitor the impact on our clients and prudent buffers will remain in place. The direct impact of the war is low, given our limited exposure in Ukraine and Russia.

Cyber risks

The increase in cyber threats poses a risk to the business continuity of the bank. Given the increased use of data and cloud solutions, cyber-related attacks have the potential to significantly threaten our operational resilience. We see that the degree of sophistication demonstrated by hackers and in hacker tooling is increasing, making cyber defence more challenging. In addition, and without mitigating measures, increased dependence on third parties increases our vulnerability to cyber attacks. For details of our mitigating actions, please refer to the Operational (non-financial) risk section.

Inflation

Inflation has been rising, driven by the post-Covid economic effects and the war in Ukraine. Looking forward, inflationary pressures will remain significant, assuming a prolonged war, further geopolitical tensions and supply chain issues. This could impact on future economic growth and subsequently on our clients. We use our credit risk framework and additional reviews of our credit portfolio to monitor and assess the impact of increased inflationary pressure.

Rising interest rates

Given that central banks across the globe steadily raised interest rates in 2022, economic growth could be further hampered. The increases in interest rates, which are expected to continue in 2023, could further undermine economic recovery. However, the expected trajectory of interest rate increases will most likely decrease. We actively manage interest rate risk in our loan book. Potential second-order effects are covered in our macroeconomic scenarios, which form the basis for our expected credit loss (ECL) calculations.

ESG-related risks

Environmental, Social & Governance-related risks are gaining in importance and could create risks and also opportunities for our clients and the bank's business model. Conclusions from our materiality assessment on climate and environmental risks (CER) are elaborated in the subsequent risk chapters. In our home market, the Dutch government's nitrogen emission reduction targets could further impact on our clients active in the agricultural/livestock, construction and other emission-intensive industries. Management overlays on ECL have been taken for specific climate and environmental risk-related events that are not (or not yet) included in the macroeconomic forecasts.

Interview with our Chief Risk Officer

At the end of 2022, ABN AMRO published its climate strategy. How does this relate to your work as Chief Risk Officer?

"Our climate strategy shows how we plan to align our portfolios with our ambition to limit global warming to 1.5°C and support the transition to a net zero economy. This is crucial for the planet, but also for the bank and all our stakeholders. Even if we manage to limit global warming to 1.5°C, we will still experience more extreme weather conditions going forward. This entails a higher risk of property damage arising from flooding, storms or prolonged drought, which could have serious implications for our clients and our portfolios.

As we transition to a more sustainable economy, our clients have to ensure they can keep up with changes in regulations, consumer preferences and technology. The increased regulatory pressure in recent years has broadened the scope of our dialogue with clients. In conversations, we don't just talk about the financials, we also help clients understand the changing regulatory landscape to minimise their transition risk."

Apart from climate, what other risks have emerged in the past year?

"One thing is clear – 2022 was a year in which risks increased. We were faced with the war in Ukraine and inflationary pressures and, of course, we are now in a rising interest rate environment. As a result, it has become more expensive for clients to get funding, and we're already witnessing a price correction in the housing market. Add this to the increased macroeconomic uncertainty, and it's easy to see that the environment in which we operate has become much uncertain over the past year.

Another risk which, in our digital society, is continually growing is cybercrime. We are investing in our systems to improve our own cybersecurity and we are working closely with clients to increase their awareness about threats like malware, CEO fraud and phishing."

As you mentioned, the current environment has also increased risks for clients. What do you think about their performance in 2022?

"I'm very impressed with how clients found ways to adapt to changing circumstances. 2022 turned out to be a very different year than we had all anticipated. The war in Ukraine and the subsequent energy crisis created a much more challenging environment. Clients responded very well, for example by reducing their energy consumption.

What also helps are the changes in our portfolio. Our focus on Northwest Europe and the energy, mobility, and digital has helped reduce our exposure to the countries and sectors that were hit hardest by the crisis. At the same time, we benefited from growth among clients active in the transition sectors. In 2022, the increased resilience of our portfolio translated into very moderate loan impairments. As a result, we stayed well below our guidance for through-the-cycle cost of risk."

Still, risk-weighted assets increased by EUR 11 billion in 2022. How do you explain that?

"An important part of the increase credit risk is mainly due to changes in the models we use as we prepare for Basel IV, which is scheduled to take effect in 2025. Many of our outstanding loans will still be on our books then, which is why we decided to already bring our models in line with the upcoming changes. For some parts of our portfolio, Basel III is stricter than Basel IV, which is why our Basel III CET1 is lower than our Basel IV CET1."

How do you see the bank's risk profile as we go into 2023?

"I feel comfortable about our risk profile. Risks have increased, but this doesn't mean there will be issues for the bank if those risks materialise. We have stress-tested many negative scenarios, which showed that the bank is strong enough to withstand shocks. We are very well capitalised, and we have a strong liquidity position.

Of course, we are closely monitoring the macroeconomic situation. We have developed all kinds of scenarios, positive and negative, and applied them to the bank's balance sheet and profit and loss accounts to assess the possible implications. We also conduct more frequent deep dives into certain parts of our portfolio that might be more exposed, such as commercial real estate. There's a lot of uncertainty, but we feel comfortable that the provisions we have made are sufficient. Clients still have buffers. We are seeing resilience in our portfolio but also in society more generally, because of the buffers clients have."

You are personally involved in various Diversity & Inclusion activities at the bank. How do these efforts feed into your work as CRO?

"An inclusive work environment is incredibly important for good risk management. If people feel free to share unpleasant messages, risks will come to light sooner. It's also about including different perspectives: in a diverse and inclusive environment, multiple perspectives and opinions are brought to the table, which makes it more likely that we will be prepared for the unexpected."

Tanja Cuppen
CRO of ABN AMRO Bank N.V.

Risk management

Risk framework

Topics described in this section:
- Risk taxonomy
- Risk appetite
- Risk culture
- Risk governance
- Risk measurement

ABN AMRO is committed to being a well-capitalised and sufficiently liquid bank that focuses on delivering sustainable value to all of its stakeholders. This is defined by our strategic risk appetite statement and ensured by our risk management framework, which is further explained in this chapter.

Risk taxonomy Audited

The ABN AMRO risk appetite follows from the ABN AMRO risk taxonomy, which ensures that all identified material risks are defined and incorporated into the risk governance framework. The visual below summarises these risks. The risk taxonomy is reviewed and updated on an annual basis, or sooner if any new material risk type emerges and requires an update.

The financial impact is assessed on the basis of capital and net profit. The key financial risk types related to our business model are credit risk, market risk in the banking book and liquidity risk. The non-financial impact is determined by the Net Promoter Score (NPS), sustainability (acceleration) asset volume and environmental and social footprint. In 2022, ABN AMRO recognised sustainability risk as a standalone risk type and defined it in the broader context of Environmental, Social and Governance-related risks factors.

Risk taxonomy Audited

External causal factors
Politics, (macro-)economy, society, technology, environmental, social and governance (ESG e.g. physical - and transition risk), legislation, regulation

Internal causal factors
People, processes, systems, balance sheet, products, clients, reputation and behaviour

Enterprise risk

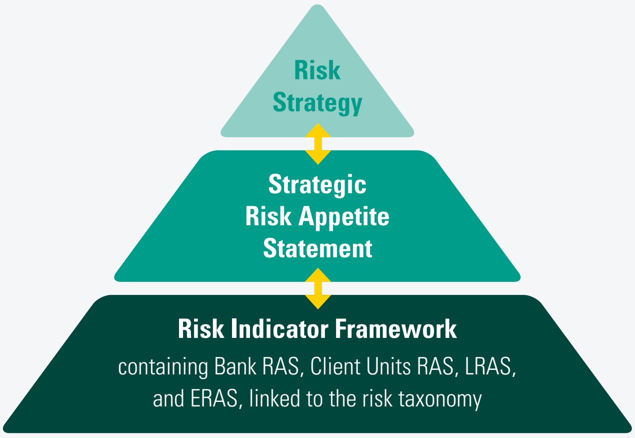
Financial risk
- Credit risk
- Liquidity risk
- Market risk in the Banking Book
- Business risk
- Market risk in the Trading Book
- Sustainability risk

Operational (non-financial) risk
- HR risk
- Information risk
- Fraud risk
- Data & Processing risk
- Change risk
- Compliance risk
- Model risk
- Legal risk
- Tax risk
- Behavioural risk

Value of the bank
- Financial
- Reputational

Risk appetite framework Audited

Our risk appetite determines the level of risk that the bank is willing to take in order to pursue its strategy, and safeguards our moderate risk profile. The risk appetite statement is regularly evaluated and updated to ensure continuous alignment with our strategy.



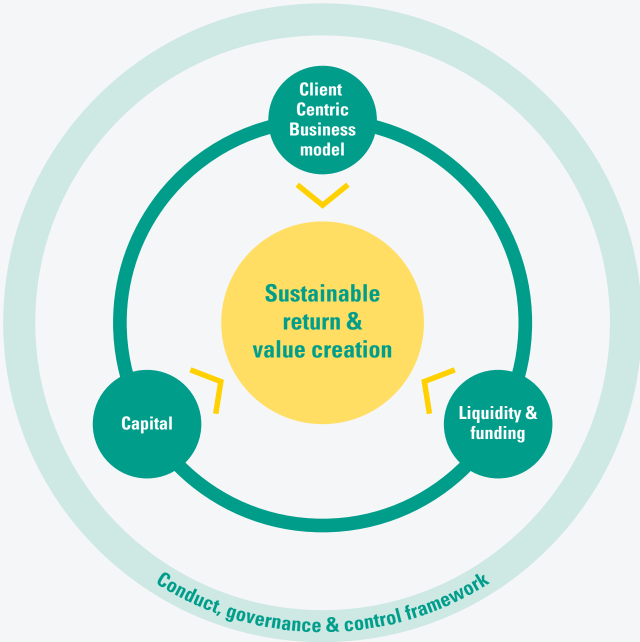
The Strategic Risk Appetite Statement cascades into the Risk Indicator Framework at every appropriate level: bank-wide (BRAS), client unit level RAS, local level (LRAS) and entity level (ERAS).

The Risk Indicator Framework consists of quantitative and/or qualitative key risk indicators (KRIs). For every KRI, a limit and checkpoint is set, against which the actual risk profile is monitored. Examples of KRIs in our risk appetite include: Regulatory and internal capital ratios;

- Risk-adjusted return measures;
- Concentration limits for single counterparties, sectors and countries;
- Economic capital and risk-weighted asset limits for various risk types;
- Liquidity ratios (LtD, LCR, NSFR);
- Market risk parameters (NII-at-Risk);
- Operational (non-financial) risk parameters (effectiveness of internal control environment);
- Reputational risk parameters (NPS, employee engagement score);
- A social risk indicator on facilitating financial inclusiveness.

The status of adherence to the risk appetite and the outlook are discussed monthly by the Executive Board and quarterly by the Supervisory Board, based on the Enterprise Risk Management report.

Strategic Risk Appetite Statement Audited



Risk culture

Strengthening our culture in the areas of risk, compliance and integrity was an important objective of ABN AMRO's strategy review. We place strong emphasis on sound risk control in our remuneration policies, which are in line with our risk profile. More details are provided in our Remuneration report, in the Leadership and governance chapter.

ABN AMRO enables and expects its employees to understand the need for and be willing to have a continuous focus on risk, compliance and integrity as an integral part of decision making. Pursuing a moderate risk profile is embedded in our culture by means of continuous communication, awareness, education and training, enabled through tools and systems, and is guided by performance management and management KPIs that help underpin our belief that mitigating risks is part of everybody's responsibility.

ABN AMRO runs a bank-wide Culture Change Plan to further enhance execution power and sound risk taking. The plan comprises various initiatives that are relevant to our risk culture and contribute to that objective. In June 2022, ABN AMRO's Executive Board articulated its vision on change in its Change Narrative and committed to implementing this vision by way of Leadership Reflection Dialogues throughout all functional layers of our organisation. These dialogues address and aim to change behavioural patterns that impact execution power and sound risk taking.

Code of Conduct

Employees are expected to act in line with ABN AMRO's core values and Code of Conduct, which define our standards of behaviour. Our core values are fundamental to everything we do and describe how we act as a bank, how we make decisions and how we deal with various dilemmas. The Code of Conduct was implemented through an impactful and inspiring global campaign. It is an integral part of our education and is supported by a well used interactive online platform that continuously creates awareness on topics in our code. We are intensifying our monitoring of compliance with the Code of Conduct, while our employees are also required to confirm their adherence to the Code annually. The Code of Conduct is transparently shared and published on our external website.

Risk governance Audited

Effective risk management requires organisation-wide risk governance. Our risk and control structure is based on the 'three lines of defence' governance model. This governance framework is designed in such a way that risk is managed in line with the risk appetite approved by the Executive Board and Supervisory Board.

Three lines of defence

The three lines of defence model aims to clarify the relationship between risk takers and the internal control functions, and provides clarity for all employees within the bank with regard to their risk management responsibilities. The three lines of defence model is applied across all risk types and covers the whole organisation, including the client units, functions, the Risk Management organisation, outsourced activities and distribution channels.

Three lines of defence Audited

1 1st Line of Defence	2 2nd Line of Defence	3 3rd Line of Defence
Risk Ownership	**Risk Control & Oversight**	**Risk Assurance**
Responsible for ▶ Delivering value-added services to clients ▶ Taking primary ownership to identify and assess, measure, mitigate, monitor and report the risk that it incurs ▶ Striking the right balance between return and risk in its decisions ▶ Seeking outside-in views and advice, where necessary ▶ Ensuring systems, processes and reporting capabilities are commensurate to its activities and risk appetite	**Responsible for** ▶ Setting the bank-wide risk management framework ▶ Setting risk policies and ensures regulations are translated into policies ▶ Maintaining risk control and oversight through monitoring, reporting and escalating, where necessary ▶ Providing independent challenge and expertise to the First Line ▶ Proactively opining on how to identify and mitigate risks ▶ Providing outside-in views and ensures consistency in risk management practices across First Line ▶ Consolidated risk reporting to the Executive Board on all areas of risk	**Responsible for** ▶ Protecting and enhancing organisational value by providing risk-based and objective assurance, insight and added value to support the achievement of our objectives ▶ Evaluating the design and effectiveness of Governance, Risk Management & Control processes, agrees with management on remediation and monitors follow-up

- The first line of defence (3LoD) consists of management within each client unit or function (such as Finance, Innovation & Technology, HR, Asset & Liability Management / Treasury), who are responsible for managing the risks they incur in conducting their activities and for the design and execution of effective and efficient controls.
- The second line of defence consists of dedicated departments in the Risk Management organisation, who are responsible for setting the risk management framework within which the first line must operate.
- The third line of defence consists of Group Audit, which evaluates the effectiveness of the governance, risk management and control processes, in order to strengthen management's solution focus and accountability. Group Audit has a coordinating role towards the external auditor and the supervisor.

Board level oversight

The Executive Board and Supervisory Board of ABN AMRO define the governance arrangements designed to ensure effective and prudent management of the bank, and oversee the implementation of these arrangements. The Boards are accountable for setting, approving and overseeing the implementation of the bank's risk management framework, including:

- an adequate and effective internal governance and control framework. This includes a clear organisational structure and effective independent internal control functions (Risk Management, Compliance and Group Audit) that have sufficient authority, stature and resources to perform their functions;
- the three lines of defence model at all levels of the bank;
- a risk culture that addresses risk awareness and risk-taking behaviour in the bank;
- key policies of the bank within the applicable legal and regulatory framework;
- the bank's overall strategy, risk strategy and risk appetite;
- the amounts, types and distribution of internal capital and regulatory capital that are required to ensure that the bank's exposure to risks is adequately covered;
- targets for the bank's liquidity and funding management.

The Risk Management organisation operates under the direct responsibility of the Chief Risk Officer, who is a member of the Executive Board.

Executive risk committees

The Executive Board is responsible for setting, monitoring and reviewing the bank's mission, vision, strategy, risk appetite and risk framework, and for the realisation thereof, with a view to creating long-term value for the bank and ensuring that effective internal risk management and control systems are in place. In the risk decision-making framework, the Executive Board has set up three executive risk management committees: the Group Risk Committee, the Group Central Credit Committee and the Group Regulatory Committee, each of which is chaired by the Chief Risk Officer. The mandates of the executive risk committees are summarised below.

Group Risk Committee

The Group Risk Committee (GRC) is mandated by the Executive Board to monitor, assess and manage the bank's risk profile within the approved risk appetite. The GRC monitors and approves all material risks as defined in the bank's risk taxonomy. The GRC has delegated specific approval powers to sub-committees, including Business Risk Committees for the bank's main client units, the Financial Crime Risk Committee, the Methodology Acceptance Group, the Scenario and Stress Testing Committee, and the Impairment and Provisioning Committee.

Group Central Credit Committee

The Group Central Credit Committee (CCC) is mandated by the Executive Board to make decisions on the acceptance of credit and counterparty risk in respect of individual persons, legal persons and public administrative bodies relating to credit proposals falling within the scope of the risk appetite and limits determined by the Executive Board. In addition, the CCC is also responsible for approving and monitoring large intercompany credit facilities.

Group Regulatory Committee

The Group Regulatory Committee is mandated by the Executive Board to ensure a good understanding and adequate overview of regulatory changes. This Committee makes choices and decisions on matters relating to timely compliance with new and changing national and international legislation and regulations affecting the bank.

For further information on governance, please refer to the Leadership and governance chapter.

Risk measurement

We develop and use internal models to quantify the risk for most risk types in the risk taxonomy. The models for credit, operational, market, liquidity and business risk are the most widely used to measure the level of risk. They support day-to-day decision making, as well as periodic monitoring and reporting on developments in the bank's portfolios and activities. In many cases, models quantify the probability and severity of an event, i.e. the likelihood that an event will occur and the loss the bank may suffer as a consequence of that event occurring. This outcome of the models serve as the basis for ABN AMRO's internal measures of risk (economic capital) and as key input for calculating the minimum regulatory capital requirements according to the Basel framework (regulatory capital).

New models require approval before being implemented and used. Internal approval for the use (or continued use) of a model is obtained from the Methodology Acceptance Group (MAG), a sub-committee of the Group Risk Committee. This approval usually follows the validation performed by independent model validators, who highlight the potential risks and deficiencies of the models and formulate an advice to the MAG accordingly. If required, external approval is requested from the supervisor. Supervisory approval is always required for Pillar 1 new models and models that witness a material change due to redevelopment.

The independent model risk management department validates internal models. The model risk management framework, which includes model validation standards and procedures, ensures that models are validated in a consistent manner. Model data, methodology, performance and implementation are checked according to these standards and reviewed against internal and regulatory requirements.

Capital measurement

Regulatory capital (CRD V/CRR2) Audited

Under the Basel framework as implemented in European legislation (CRD V and CRR2), banks are required to hold capital to cover for financial and non-financial risks. As an intermediate step in determining the minimum level of capital, banks need to calculate risk exposure amounts for three major risk types (credit, operational and market risk). The outcome of the internal models serve as input for this calculation. The capital requirements are stated as a percentage of RWA. Under Pillar 1, banks are required to hold a regulatory fixed percentage of RWA in capital. Under Pillar 2, supervisors impose a bank-specific percentage of RWA in addition to the Pillar 1 requirement.

Economic capital

For Pillar 2, we calculate the economic capital (EC) in addition to regulatory required capital. The economic capital covers all risk types in our risk taxonomy for which capital is deemed to be the mitigating instrument to cover unexpected losses, and is used as the key metric for internal risk measurement and management. It is the amount of capital we reserve in order to achieve a sufficient level of protection against large unexpected losses that could result from extreme market conditions or events.

Internal models are used to calculate EC at a 99.95% confidence level and a one-year time horizon. This implies that the estimated capital figure for the coming year is sufficient to cover a level of loss that will be exceeded in only 0.05% of all possible cases. The confidence level is aligned with the definition of total available financial resources (total AFR). In addition, the ratio of core AFR versus EC is monitored. Core AFR is the amount of capital that is available to cover losses on a continuity-based approach (i.e. excluding AT1, Tier 2 and senior non-preferred instruments).

EC is aggregated for all risk types (without applying inter-risk diversification) to determine the total EC at bank level and to support capital adequacy assessment, capital allocation, ex-post performance measurement and risk appetite setting, such as industry concentration risk limits.

Stress testing and scenario analysis Audited

ABN AMRO uses stress testing and scenario analysis as an important risk management instrument, looking at profitability, capital and liquidity from a bank-wide perspective in various scenarios on a regular basis. The stress testing framework covers both internal and external stress test requirements. In addition, sub-portfolio and risk type-specific stress testing and scenario analyses are performed.

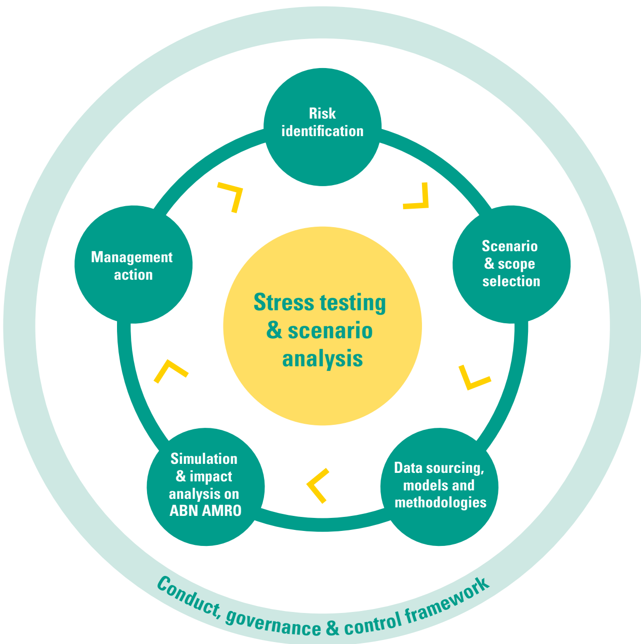
Stress testing purposes

ABN AMRO applies stress testing for several purposes, including:

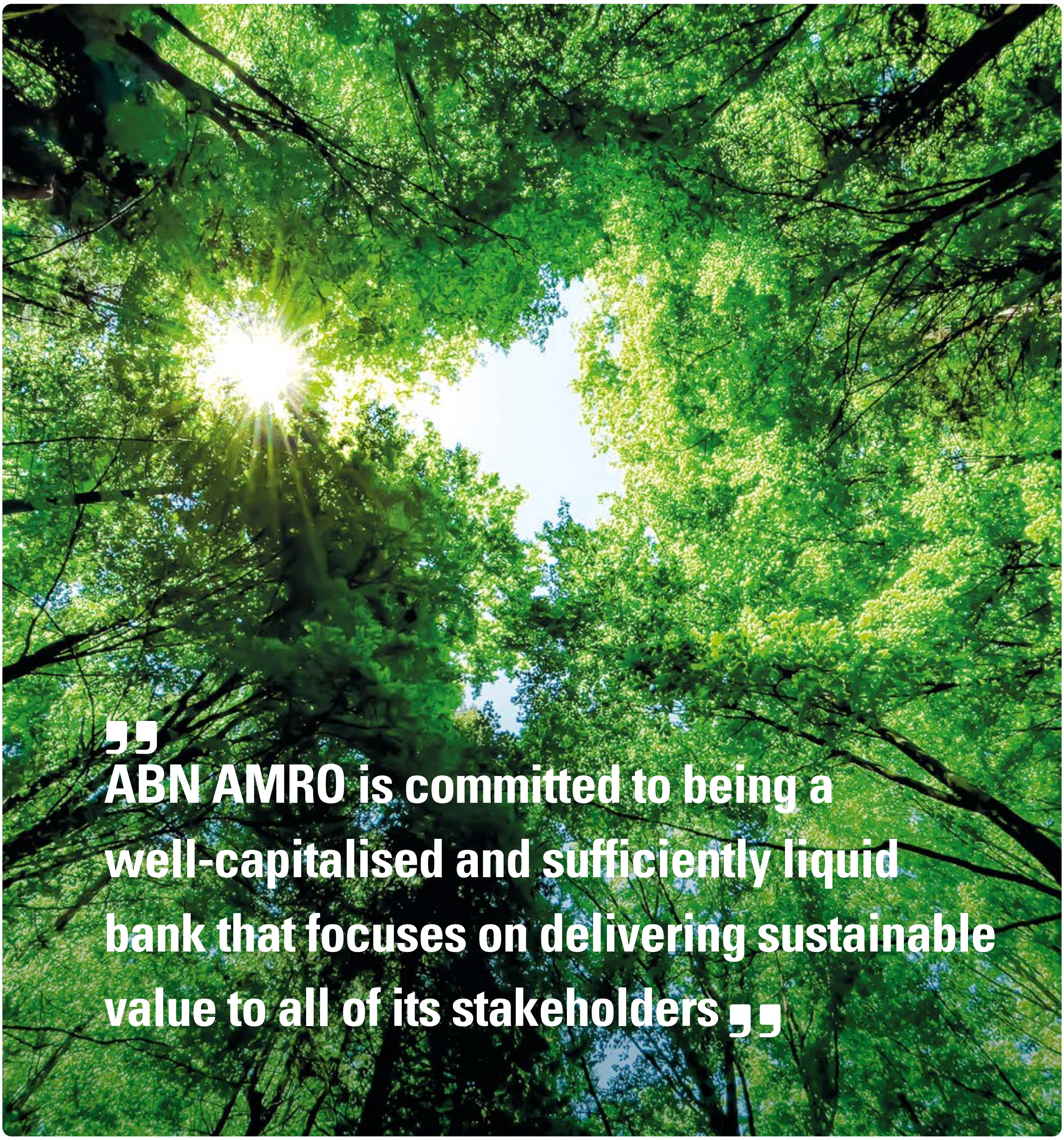
- Business planning: various macroeconomic scenarios for budget purposes;
- Capital planning: stress testing is used to gain insight into the resilience of our capital under adverse changes in the economic environment and ABN AMRO-specific circumstances;
- Risk appetite setting and monitoring: the outcome of stress testing is used for setting and monitoring risk appetite limits and targets, including limits under stress;
- Contingency planning: stress testing is used to assess and strengthen the triggers and measures in the liquidity and capital contingency and recovery plans. Reverse stress testing is performed to gain deeper insight into plausible events that could put the continuity of ABN AMRO under pressure;
- Risk type-specific and client unit stress testing, such as market risk trading and banking book and mortgage stress testing;
- Supervisory stress testing, based on prescribed scenarios and assumptions. This includes stress test programme of the European Banking Authority (EBA), designed to assess banks' resilience to adverse economic or financial developments, and ECB economy-wide climate stress test aimed at evaluating the impact of alternative climate scenarios on the resilience of the bank over a time horizon of 30 years in the future.

The figure below shows the stress testing and scenario analysis cycle.

Stress test & scenario analysis cycle Audited



Scenario projections for stress testing purposes are based on quantitative models as well as expert opinion procedures. In general, the results are presented excluding and including potential mitigating actions, taking into account contingency plans. The stress testing framework also comprises the sensitivity scenarios that address the impact of various severe events on specific portfolios, countries and/or sectors, as well as the annual reverse stress test in line with regulatory requirements. Moreover, climate related and environmental risks are incorporated into our bank-wide stress testing framework through inclusion of specific events related to physical risks and drivers of transition risk, such as carbon prices (for definitions of physical and transition risks, see the sustainability risk chapter). In 2022, ABN AMRO took part in the EU-wide ECB Climate Stress Test. This exercise was aimed at identifying vulnerabilities and industry best practices, and assessed the challenges faced by banks due to increasing climate risks. Even though the exercise was of a regulatory nature, it did not have any capital or SREP implications. The results and lessons learned from the ECB Climate Stress Test will be integrated into a more robust framework to improve methodology, internal scenario development and data collection, and will also be used further in the Internal Capital Adequacy Assessment Process (ICAAP).



Credit risk management

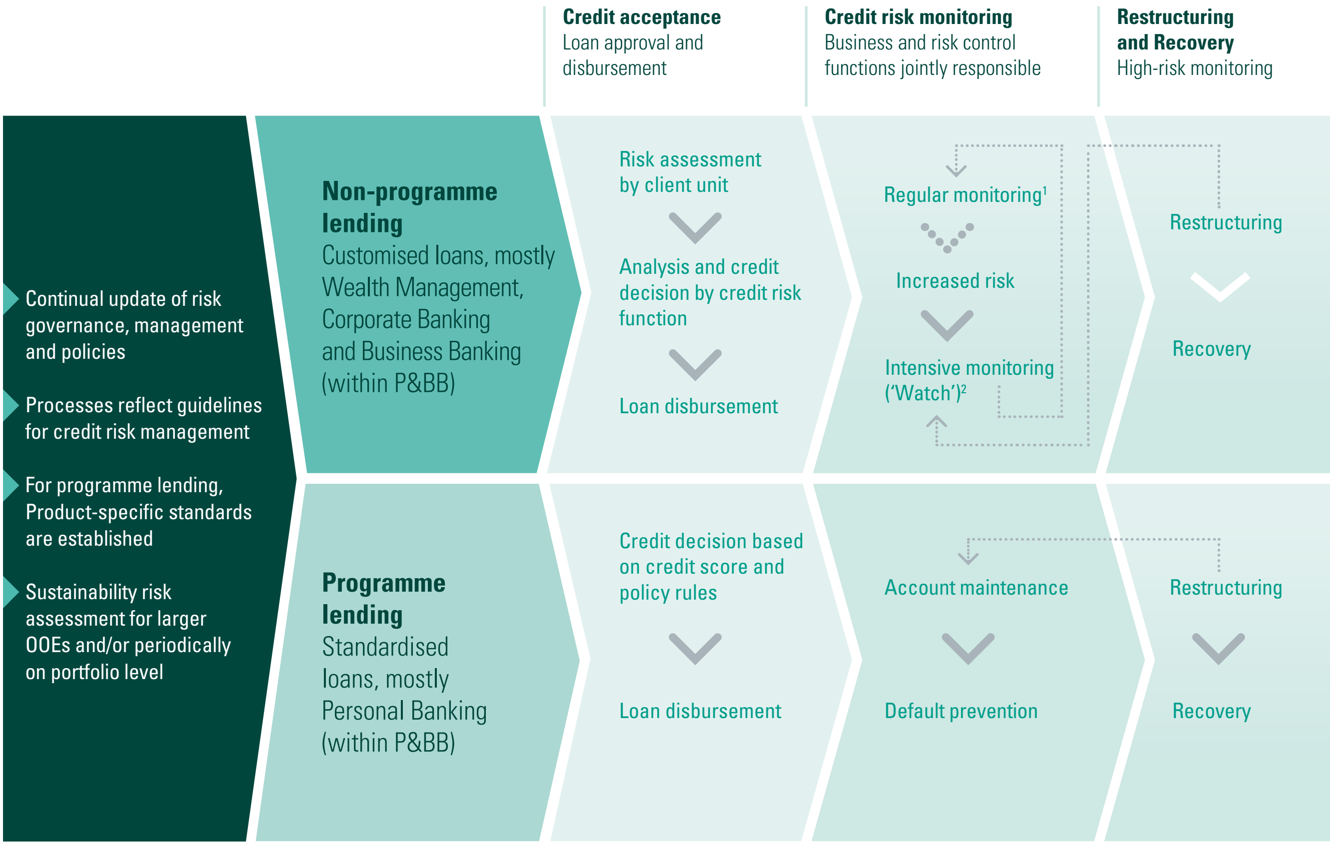
This section provides information on:
- Credit risk management approach
- CER materiality assessment
- Credit concentration risk
- Credit risk quality and impairment
- Credit risk measurement
- Credit risk mitigation

Credit risk management approach Audited

Credit risk constitutes a key risk in our business model. ABN AMRO employs two separate approaches to managing credit risk, which reflect the bank's way of doing business. Standardised products and processes are managed on a pooled basis (programme lending), to which uniform risk criteria are assigned. For customised lending to counterparties (non-programme lending), risks are assessed on an individual basis. Climate risks are integrated into our risk management practices via risk appetite limits at bank level and lending criteria at product level.

Credit risk management process Audited

The following figure presents a simplified overview of the credit risk management process.



1 Daily monitoring or (semi-) annual credit review.
2 'Watch': status assigned to counterparties with an increased risk.

For more insight on our credit portfolio, please refer to the Credit risk review section.

Planning

Within programme lending, the credit cycle starts with a product planning phase, during which the product is designed and/or reviewed. The goal is to optimise the key drivers of risk and return within the context of ABN AMRO's strategy, risk appetite, the client's best interests and sustainability. For non-programme lending, the lending product is customised and not subject to a product planning phase.

Credit acceptance

For a credit approval decision within programme lending, client-specific aspects and internal and external data are taken into consideration to calculate a credit score (scorecard). The credit decision is based on the outcome of the scorecard and policy rules.

Client assessment

ABN AMRO makes an assessment of every client during the onboarding stage and regularly thereafter in terms of KYC rules and regulations, and the bank's ESG risk criteria. Lending clients are subject to more stringent rules, for which client assessment tools and processes are in place.

CASY NextGen

CASY NextGen is a client assessment tool for assessing the ESG performance of companies that the bank finances. The tool collects relevant data to help safeguard the bank against sustainability and reputational risks, and provides a basis for having strategic discussions on sustainability with clients. At a client level, CASY NextGen includes a questionnaire that addresses clients' compliance with the bank's sustainability risk framework by focusing on ESG-related regulations, sustainability commitments and the capacity to manage sustainability risks and track records and is mandatory for all corporate clients with an exposure above EUR 1 million. Depending on the client's level of compliance with the bank's sustainability risk framework, the outcome of a CASY assessment will be above, on or below par, and will serve as the basis for further engaging with the company.

Credit Risk Sustainability

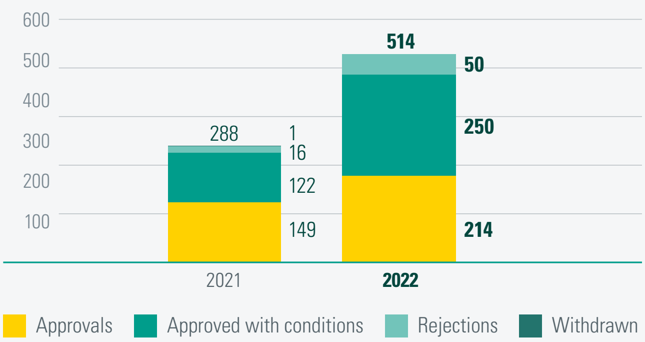
Credit Risk Sustainability, as the second line of defence, conducts client-level due diligence and oversees engagement both for lending and non-lending clients. Clients with a high sustainability risk level require an additional second-line advice from Credit Risk Sustainability, which validates the first-line assessments conducted through CASY NextGen and assesses clients against the bank's sustainability risk framework.

If a client is not fully compliant with the sustainability risk framework, but demonstrates sufficient commitment and capacity to comply, the second line could accept the client relationship or credit line, subject to certain conditions. These conditions are established in order to determine that a client is moving towards full compliance with the sustainability risk framework. Non-compliance is then considered a driver of credit risk, which could negatively impact a counterparty's creditworthiness or collateral and result, for example, in physical and transition risk or in prosecution for health and safety breaches. Typically, the conditions require clients to be more transparent and guide them towards better management of risks related to biodiversity, climate mitigation, climate adaptation, human rights and animal rights.

If a client does not demonstrate sufficient capacity or commitment to comply with the bank's sustainability risk framework, the Credit Risk Sustainability process could result in a negative conclusion. This means that the credit committee is advised to exit the relationship and, given the bank's inclusive strategy, is the risk response of last resort.

The cases for which advice was given in 2022 comprised 50 rejected cases, 214 approved cases and 250 cases in which approval was subject to conditions. In 2022, second-line sustainability advice included 157 information conditions, 90 monitoring conditions and 207 engagement conditions. The rise in the number of cases for which advice was given in 2022, compared to 2021, is due to the inclusion of advice given for non-lending clients in the overview for 2022.

Conclusion of advice



Within non-programme lending, the credit acceptance phase of a credit proposal starts with an assessment of the proposal by the relevant client unit. The qualitative and quantitative details of the credit risk associated with the loan are assessed prior to approval. Information must be provided on matters such as the purpose, details and structure of the proposed credit facility, the borrower and other counterparties, the industry and geography, management and owners, and financial and non-financial analyses. Compliance with internal policies is checked. After the assessment, an analysis is performed by Risk Management. The credit decision is based on independent assessments by both the commercial and the credit risk functions.

Credit risk monitoring

Consistent and regular monitoring of counterparties, exposures, risk mitigants and ongoing compliance with internal policies helps to safeguard the bank's position in relation to all risks associated with the counterparty, credit type or portfolio. Monitoring starts when the credit facility is granted and periodically continues throughout the lifecycle of the credit facility and the relationship with the counterparty until the exposure is repaid and/or the limit is cancelled.

Credit facilities are subject to an annual review to assess whether the credit risk is still acceptable. The review takes into consideration changes in risk profile, financial position

CER materiality assessment

In 2022, we assessed the materiality of climate-related and environmental risk in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for credit risk are summarized below.

	Climate Risk		Environmental Risk	
Credit Risk	Physical risk	Transition Risk	Physical risk	Transition risk

The quantitative materiality assessment performed in 2022 showed that the impact of climate and environmental risk on credit risk is material on the longer term and, to a lesser extent, on the short term.

The materiality assessment for climate risk has been based on a combination of the outcomes of the climate risk heatmap, the climate scenario analyses for four key portfolios in the bank and the ECB climate stress test (CST). The basis for the materiality assessment for environmental risk was a combination of the environmental risk heatmap and a set of pollution-based risk coefficients, derived from academic literature on the subject of environmental risk in prudential regulation.

Climate physical risk

The impact of climate physical risk on total bank level is expected to gradually materialise over a long-term horizon (up to 2050) and in particular impacts the mortgage and commercial real estate (CRE) portfolio due to physical damage on collateral caused by severe flooding events and the gradual increase of foundation issues (e.g. pole rot).

Climate transition risk

Climate transition risk impacting the corporate lending portfolio materialises on the short, medium and long term through a potential deterioration of the creditworthiness of certain clients in GHG emission intensive sectors due to possibly not meeting the necessary GHG emission reduction requirements. Sectors contributing the most to the materiality of climate risk in these scenarios are the manufacture of animal protein food products, manufacture of chemicals and chemical products, construction, electric power generation, shipping and commercial real estate activities. The latter three are the largest in terms of credit exposure and therefore included in the first wave of our climate strategy, published in December 2022.

Environmental risk

For environmental physical and transition risk the materiality assessment showed a gradually increasing material impact on the corporate lending sectors due to their impact and dependency on biodiversity, eco system and clean air, water and soil.

Mitigating actions

Financial impact on the short term can be mitigated by adequate capitalization and provisioning. The materiality assessment on credit risk cannot be used for this purpose due to the uncertainties surrounding the applied scenarios and the lack of (historical) data, and therefore constitutes the first step in our enterprise risk management framework, being risk identification. We will further investigate possibilities to understand potential (capital) impact.

ABN AMRO is also taking steps to incorporate ESG factors and associated risks into its credit acceptance process for both programme lending and non-programme lending. In 2022 we performed various activities to gain deeper insight into how climate risk influences our clients. This included identifying transmission channels, which are the causal chains through which climate factors represent financial risks to ABN AMRO, for four strategically important portfolios:

- Real Estate
- Energy (including oil & gas, power generation and renewables)
- Shipping
- Agriculture

Finally, we included three of the sectors most contributing to the materiality of climate transition risk into the first wave of sectors, for which we defined carbon reduction targets in our climate strategy, aimed at achieving net zero by 2050.

or creditworthiness compared to the criteria and the assessment at the point of loan origination. For programme lending portfolios, the entire risk management framework defined in a product programme must be reviewed at least annually. Individual credit reviews are performed based on pre-defined triggers for risk based credit reviews. For non-programme lending all counterparties are subject to at least an annual review.

If a situation arises in which an individual counterparty shows signs of credit risk deterioration and action is required in order to avoid the credit risk evolving into a default classification, a 'watch' status is assigned. A 'watch' status indicates that a counterparty is subject to increased monitoring and appropriate follow-up measures in order to prevent further deterioration or a default. Indicators for this status are changes in risk profile, liquidity problems, management issues, the market outlook, potential breach of a credit agreement, solvency issues and uncertain continuity.

Restructuring & Recovery

Credit facilities that are subject to a default event are mandatorily transferred to the Financial Restructuring & Recovery department (FR&R). Credit facilities identified as having a significantly high risk can be transferred to FR&R if specialised restructuring knowledge is required. If a 'going concern' approach is applicable and return to a performing status is considered likely, the credit facility is transferred to the Restructuring team, which then devises a plan aimed either at rehabilitation or at enhancing the likelihood of full repayment. In all other cases, the credit facility is transferred to the Recovery team. Programme lending contracts are transferred to the Restructuring team if a default status is assigned because payments have been past due for more than 90 days or because another default trigger applies. If restructuring is ultimately ineffective, the client is transferred to other internal departments or external parties (such as Flanderijn) for debt collection. Once a client is considered able to meet its future payment obligations and the involvement of FR&R is no longer required, the client is transferred back to the client unit. FR&R plays a significant role in the execution of the bank's non-performing exposure (NPE) strategy. Policies on the management of NPE include valuation of collateral, monitoring of the NPE ratio and ensuring this ratio remains well below the threshold of 5%. We have set NPE targets for each business segment and specific strategies for sectors with increased levels of non-performing loans.

Counterparty credit risk

Counterparty credit risk (CCR) refers to the risk that the counterparty to a transaction defaults before final settlement of the transaction's cash flows. In line with the regulatory definition of CCR, ABN AMRO incurs counterparty credit risk in two business activities: firstly through over-the-counter (OTC) derivatives and securities financing transactions with corporate clients and financial institutions (including positions taken to manage our interest rate hedging and liquidity position) and secondly in the business of ABN AMRO Clearing.

To manage these risks, credit limits are set in accordance with the bank's risk appetite. Limit requirements are set against the creditworthiness of the counterparty and take into account a range of factors, including the mark-to-market value and the potential future exposure (PFE) of the transactions. The effectiveness of the limits is verified by monitoring trades and exposures at the second line of defence and by escalating limit breaches to the competent management levels when necessary. The bank can use credit risk mitigants to reduce the size of the credit risk exposure or likelihood of suffering losses. Counterparty credit risk mitigation includes the use of proper legal documentation, collateralisation, netting, trade or portfolio compression and central clearing.

Credit concentration risk Audited

Credit concentration risk is the risk of loss arising from large exposures, relative to the bank's total risk exposure, to a single counterparty or to counterparties that are positively and highly correlated. As limiting excessive concentrations is fundamental to our credit risk strategy, we aim to keep the credit risk portfolio sufficiently granular and diversified. To avoid excessive credit risk concentrations, Risk Management sets maximum levels for subgroups in the following categories:

- Single counterparty and groups of related counterparties (counterparty concentration);
- Countries (geographic concentration);
- Industries (industry concentration);
- Products (product concentration).
- Counterparty concentration

Counterparty concentration credit risk is the risk of loss arising from relatively large exposures to counterparties belonging to the same risk group. The One Obligor Exposure (OOE) is the exposure to a risk group and includes all drawn and undrawn credit facilities granted, plus all indirect exposure to the risk group, including guarantees and any other recourse claims.

A risk group is an interrelated group of counterparties with a high degree of dependency on each other due to a control relationship. This control relationship may be attributable to direct or indirect majority interests being held by the same shareholder or group of shareholders.

Counterparty credit concentration risk is measured by the OOE and the Economic Capital (EC) per counterparty. The bank limits its counterparty credit risk by setting OOE and EC limits. Additionally, all credit applications with an OOE and/or EC above a certain threshold are reviewed by the Executive Board.

Geographic concentration

We recognise geographic concentration in our books for climate risks in the Netherlands and for cross-border risks outside the Netherlands. ABN AMRO has branches and subsidiaries located outside the Netherlands, as well as clients who operate internationally. Consequently, the bank is exposed to country risk, which is the risk of credit losses arising from country-specific events or circumstances.

Management of country risk focuses on cross-border risk, which includes the risk that funds, goods or services cannot be transferred out of a country as a result of actions by local authorities in that country or other events. These risks are managed by setting country credit limits, based on individual country analyses by economic, compliance and country risk experts.

Country limits are reviewed at least once a year. Each country also has an annually reviewed internal credit rating, which is an important factor in managing country concentration risks. As the Netherlands is our home country, it is not included in any concentration risk appetite statement or setting of credit limits. Since the bank's strategic shift in 2020 and its redefined focus on Northwest Europe, ABN AMRO's country risk exposure has declined significantly.

For managing climate risks in the residential mortgages book, the bank monitors and limits the percentage of properties with relatively high climate risks in the portfolio and relatively high-risk clients within a severe climate risk area.

Industry concentration

Industry concentration risk is the risk of loss arising from a relatively large credit exposure to counterparties active in a single industry. Industry concentration risk arises when deterioration in a specific industry has an effect on all credit exposures relating to that industry. ABN AMRO manages its industry concentrations by setting limits on economic capital (EC) for credit risk in each industry as a percentage of total EC for credit risk. Industries with a concentration limit are financial institutions, industrial transportation, industrial engineering and food & beverages. In addition to the EC limits, EC concentration checkpoints are set to facilitate timely and sufficient management interventions so as to avoid limits being breached.

Product concentration

Product concentration risk is the risk of loss arising from relatively large credit exposures in a specific asset or product class. This asset or product class concentration occurs e.g. in residential mortgages, commercial real estate and leveraged loans. In line with our risk appetite, ceilings are defined per product type and breaches of these concentration ceilings are managed through credit risk insurance.

Credit risk quality and impairment Audited

We continuously monitor the credit portfolio for signs indicating that the counterparty may become credit impaired in the future. Loans at risk are classified into different risk categories for individual counterparties and into days-in-arrears buckets for groups of aggregated counterparties in order to optimise the monitoring and review of these loans.

Forbearance

Forbearance is the process of making concessions to clients who are or will soon be experiencing financial difficulty (such as Covid-19-impacted clients), with the intention of bringing them back within their payment capacity. A forborne asset is any contract that has been entered into with a counterparty who is in or about to face financial difficulty, and that has been refinanced or modified on terms and conditions that we would not have accepted if the counterparty had been financially healthy.

Forbearance measures can be applied to contracts on which the counterparty has already defaulted, as well as to contracts that are still performing. If the contract is considered to be performing at the time the forbearance measure is taken, an assessment is made to determine whether the counterparty will be able to meet the revised conditions of the contract and whether full repayment of the credit facility is expected. A forborne contract will cease to qualify as forborne only when all the following conditions are met:

- The contract is considered performing;
- A minimum probation period of at least two years has passed since the last forbearance measure and/or the date the forborne contract was considered performing (whichever is later);
- Regular and timely payments of more than an insignificant amount of principal or interest have been made during at least half of the probation period;
- The counterparty does not have any contract, within the credit agreement, that is more than 30 days past due at the end of the probation period.

If the forborne contract is or has become non-performing at the time of the forbearance measure, a mandatory cure period of at least one year applies to the contract before it is returned to performing status. The cure period starts when the contract becomes non-performing or, if the contract was already non-performing, when the last forbearance measure was taken.

Past due credit exposures

A financial asset is past due if a counterparty fails to make a payment on the contractual due date or if the counterparty has exceeded an agreed credit limit. ABN AMRO starts counting days past due from the first day that a counterparty is past due on any financial obligation.

Accounting policy for measuring allowances for expected credit losses (ECL)

The IFRS 9 impairment requirements are applicable to financial assets measured at amortised cost or fair value through other comprehensive income (FVOCI), loan commitments, lease receivables and contract assets and financial guarantee contracts. At each reporting date, these financial instruments are classified into one of three risk stages, depending on current credit quality, or as purchased or originated credit-impaired (POCI).

POCI assets, which are credit-impaired at initial recognition, are accounted for at fair value (i.e. net of the initial lifetime ECLs) and do not carry an impairment allowance. Instead, a credit-adjusted effective interest rate (EIR), which is calculated using expected cash flows including initial lifetime ECLs, is applied to the amortised cost. Subsequently, the cumulative changes in lifetime ECLs since initial recognition, which are discounted at the credit-adjusted effective interest rate, are recognised in the profit or loss statement as an impairment gain or loss, and presented under impairment charges on financial instruments.
Once a financial asset is classified as POCI, it retains that classification until it is derecognised (in the event that a substantial modification loss larger than 10% is applicable). For this reason, POCI stage is not included in the following figure.

Change in credit quality since initial recognition

	Stage 1	Stage 2	Stage 3
	Performing (Initial recognition)	**Credit quality deteriorated** (Assets with significant increase in credit risk since initial recognition)	**Default = Impaired** (Credit impaired assets)
Recognition of ECL	12 month ECL	Lifetime ECL	Lifetime ECL
Interest income	Effective interest on gross carrying amount	Effective interest on gross carrying amount	Effective interest on amortised cost (gross carrying amount less loss allowance)

Classification in stage 2

We use quantitative and qualitative stage triggers to determine whether a financial instrument should be classified as stage 1 or stage 2.

Quantitative stage triggers

The key quantitative metric that determines when a financial instrument is transferred from stage 1 to stage 2 is the deterioration in the lifetime probability of default

(LPD) from the date of origination to the reporting date, based on internal data. The LPD represents the likelihood that a counterparty will default during the lifetime of the financial instrument and depends on credit risk drivers such as:
- product characteristics (e.g. repayment and interest terms, term of the product);
- the financial condition of the borrower;
- the number of days past due;
- expected developments in the economy.

The lifetime PD deterioration (LPDD) measures the relative difference between the remaining lifetime PD at reporting (LPDR) and the remaining lifetime PD at origination (LPDO) as LPDD = LPDR/LPDO. If the LPD deterioration of an exposure is above a predefined threshold, the LPD is considered to be significantly deteriorated. The exposure is then transferred to stage 2 and impairment allowances equal to the lifetime expected credit loss are recognised. If the LPD deterioration subsequently reduces and falls below the threshold, the client is transferred back to stage 1. When determining the thresholds, ABN AMRO distinguishes between various portfolios within consumer lending, residential mortgages and corporate loans. A specific threshold is calculated for each portfolio, based on a statistical method. The following table shows LPD deterioration thresholds that triggered transfers to stage 2 as at 31 December 2022. The table provides ranges, as each product class uses multiple ECL models and thresholds are determined for each ECL model.

Range of lifetime PD deterioration thresholds Audited

Product class	Range
Consumer lending	1.8x-5.2x
Residential mortgages	1.7x-2.0x
Corporate loans	1.3x-5.8x

Qualitative stage triggers
The bank transfers a financial instrument from stage 1 to stage 2 if the instrument meets any one of the following qualitative triggers:
- Forborne status of a borrower;
- Watch status of a borrower. ABN AMRO assigns the watch status to counterparties with an increased credit risk. This process comprises intensive monitoring, early detection of deterioration in the credit portfolio and appropriate follow-up measures;
- A delinquency-based regulatory backstop is in place, such that the credit risk of financial assets that are more than 30 days past due will be assumed to have significantly increased.

Reclassification to stage 1
As a general rule, favourable changes in credit risk are recognised consistently with unfavourable changes, and a financial instrument is transferred back to stage 1 if quantitative or qualitative triggers are no longer met. In some cases, a probation period applies:
- Forborne financial instruments are transferred back from stage 2 to stage 1 only after a probation period of at least two years has ended, in line with the ABN AMRO forbearance policy. Stage 3 forborne instruments transfer back to stage 2 after a cure period of at least one year;
- For financial instruments that are 30 days past due, a three-month probation period is applied for transfers from stage 2 to stage 1.

Classification in stage 3
A transfer to stage 3 will always be the result of the default of a financial instrument. Our definitions of default and impaired are aligned and comply with the European Banking Authority (EBA) guidelines on the application of the definition of default.

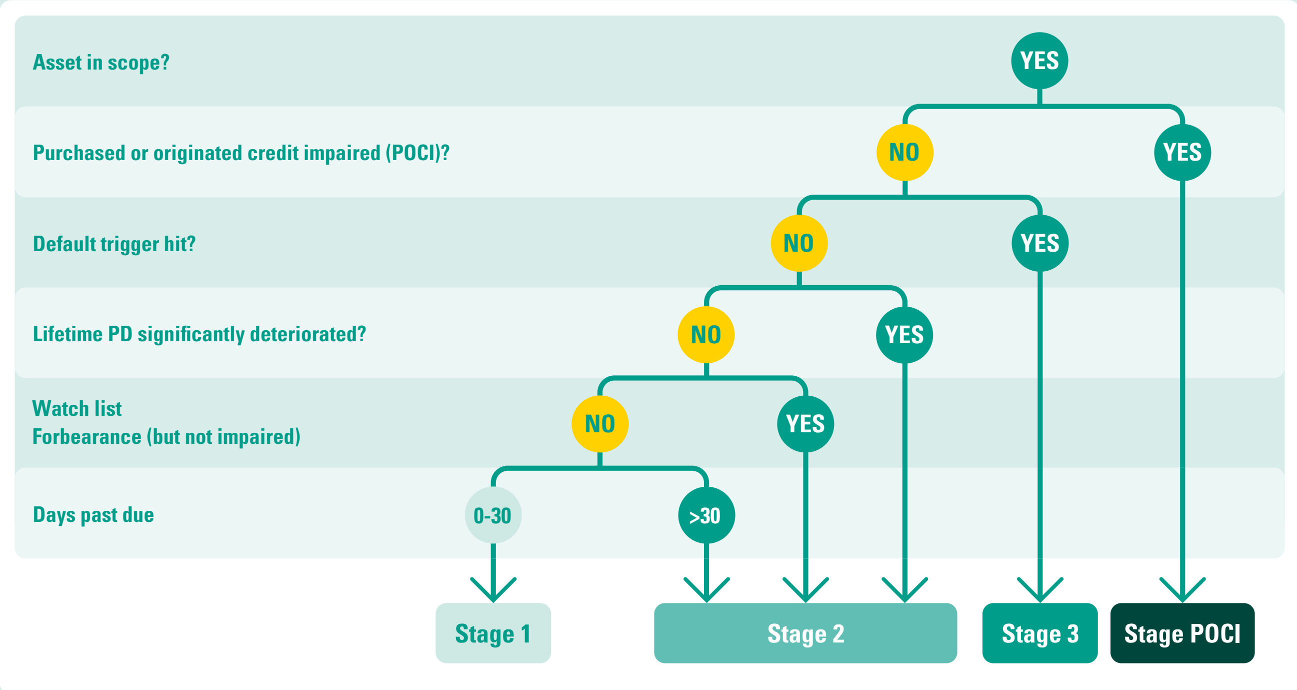
All models use a consistent definition of default, which has been specified in line with regulations. A default is deemed to have occurred when:
- the counterparty is past due by more than 90 days on any material financial credit obligation to the bank; or
- the bank considers the borrower to be unlikely to meet its contractual obligations (unlikely to pay, or UTP).

The materiality of a financial obligation past due is assessed against an absolute and a relative threshold, in line with regulatory standards. To determine unlikeliness to pay, the bank has specified both mandatory default triggers (always resulting in the assignment of a default status, whereby no additional expert judgement is allowed) and judgemental triggers (requiring an assessment by credit risk managers to determine whether the UTP indications should result in a default classification).

The mandatory triggers include the reporting of a forborne exposure under probation as non-performing for being 30 days past due or owing to an additional forbearance measure being applied. As a result, the definitions of non-performing and default are materially aligned.

Reclassification to stage 2

The default classification for non-forborne exposures ends when the default triggers no longer apply and a (probation) cure period of at least three months has passed since the default trigger was last applied. For forborne exposures, a twelve-month cure period starts from the moment the last forbearance measure or default trigger was applied. After the cure period, an assessment is performed to establish whether the improvement in the credit quality is factual and permanent (including, for example, no remaining past due amounts).



Calculation method

ABN AMRO recognises loss allowances based on the Expected Credit Loss model (ECL) of IFRS 9, which is designed to be forward-looking. The amount of ECL is based on the probability-weighted present value of all expected cash shortfalls over the remaining life of the financial instrument for both on- and off-balance sheet exposures. ABN AMRO distinguishes between two types of calculation methods for credit loss allowances:

- Individual Lifetime ECL (LECL) for credit-impaired (stage 3) financial instruments with exposures above EUR 3 million;
- Collective 12-month ECL (stage 1) and LECL (stage 2 and 3) for financial instruments that have similar credit risk characteristics (e.g. residential mortgages, consumer loans and SME loans) are clustered in portfolios and collectively assessed for impairment losses. A collective impairment calculation approach based on individual parameters is also applied to stage 3 exposures below EUR 3 million. ABN AMRO has models to quantify the Probability of Loss (PL), Loss Given Loss (LGL) and Exposure at Loss (EAL) for the purpose of calculating the collective 12-month ECL and LECL for these financial instruments.

Lifetime expected credit loss

ABN AMRO defines the lifetime of credit as the maximum contractual period during which the bank is exposed to credit risk; we do not apply a longer period, even if that longer period is consistent with business practice. For some contracts, such as overdraft facilities or credit cards, no end date is specified or amounts can be contractually withdrawn by the lender at short notice. In these cases, ABN AMRO uses behavioural maturity models that rely on historical client behaviour to determine future expected exposures.

Forward-looking information

For expected credit loss calculations, ABN AMRO uses three different scenarios of future economic developments: a baseline (or most likely) scenario, a negative scenario and a positive scenario. The three scenarios are incorporated into the expected credit loss calculation and risk stage determination in a probability-weighted manner. In order to incorporate the latest economic outlook, the scenarios and their weights are reviewed each quarter and adjusted if necessary. Details of the scenarios and their weights used in the reporting period can be found in the Credit risk review section. The baseline scenario entails our Group Economics analysts' current macroeconomic base scenario, which usually covers the current year and subsequent year. For the purpose of scenario analysis under IFRS 9, this baseline is extended by three additional calendar years, after which it is assumed that macroeconomic variables (MEVs) gradually move to their potential or equilibrium values. At least once every quarter, Group Economics compares its forecasts with those of institutions like CPB, DNB, ECB, IMF or OECD, in order to determine possible differences and to analyse whether it can underpin those. This external benchmarking exercise is a standard input to the Scenario Booklet that is presented to the bank's Scenario and Stress Testing Committee for approval. Group Economics also develops a negative and a positive scenario. These scenarios are designed to give an impression of the bandwidth within which the economy, interest and FX rates, and other relevant variables are likely to move in the next four to five years, with a probability of around 85% (roughly corresponding to a standard deviation of plus and minus one and a half). Hence, these scenarios produce upper and lower boundaries, with a resulting bandwidth between the outcomes of the negative ('bad weather' in terms of financial results of the bank) and positive ('good weather') scenarios. To determine these boundaries, Group Economics may look at historical developments, medium-term (non-baseline) scenarios made by the aforementioned institutions, and other relevant developments.

Management overlays and other adjustments

Where necessary to reflect the credit risk dynamics not captured by our models, management judgement is applied via a management overlay or other IFRS 9 adjustment. A management overlay is a temporary adjustment in a loss allowance until a long-term solution (e.g. model adjustment) is effective, and must be an amount commensurate to the model limitation. All overlays require a decision of the Impairment and Provision Committee (IPC). The main types of management overlays that ABN AMRO distinguishes are: post-model adjustments (adjustments to model outcomes), adjustments in the weightings of macroeconomic scenarios and stage overrides. Other adjustments such as adjustments to model parameters or input data are not considered management overlays, but follow the same internal approval process.

Climate and environmental risks in ECL

Incorporating climate risk explicitly into ECL models is challenging due to the lack of historical data and the horizon on which climate and environmental risks are expected to materialise. We are taking steps to gain deeper insight into how climate and environmental risks affect our clients, and to eventually embed them into our IFRS 9 ECL models. The target state is to have CER reflected in all four modelling frameworks (IRB models, IFRS, stress testing and EC).

Although the impact of climate risk on ECL can only be estimated with a high degree of uncertainty regarding amounts of losses and the time horizon on which it will materialize, it is partially embedded into our ECL estimates through our macroeconomic forecasts. Climate and environmental risks are playing an increasing role in government policies and macroeconomic developments. To capture climate and environmental risks in ECL and related scenario processes, each macroeconomic scenario is accompanied by an overview that illustrates which of these risks are included in the various projected macroeconomic indicators. For short term identifiable events that are not (yet) included in the macroeconomic forecasts, management overlays on ECL can be taken. These are currently limited to an overlay for the potential impact of the government's nitrogen reducing measures. With the combination of macroeconomic scenarios and this management overlay we deem to be adequately provisioned for climate and environmental risks.

Cured financial assets

When a credit impaired financial asset cures, the interest that was previously unrecognised is reported as an impairment release in the impairment charge rather than as a credit to the interest income calculated using the effective interest method.

Write-off

- For non-programme lending, a write-off must be recorded if all possible means of recovery have been exhausted and it has become clear that there is a low probability of recovering the debt, either in part or full.
- Most of the programme lending facilities are automatically written-off after 1,080 days in default.

Such loans are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off are credited to impairment charges on financial instruments in the income statement.

Credit risk measurement Audited

The models used for measuring and managing credit risk vary from purely statistical to expert-based models and employ both quantitative and qualitative risk drivers. All models are subject to the bank's model risk management framework. They undergo initial validation by the independent model validation function before their first use, and annually thereafter. Independent validation is also required when a model undergoes a material change.

Probability of default

The Probability of Default (PD) indicates the likelihood that a counterparty or exposure defaults within a one-year time orizon. For the non-programme lending portfolio, the model score is mapped to and expressed as an internal uniform counterparty rating (UCR). The UCR rating scale consists of 14 performing ratings, each representing a fixed PD range. The indicative mapping of the internal UCR rating scale to external rating agency ratings is shown in the following table.

Internal rating scale mapped to external ratings

Grade Category	UCR (internal rating)	Low PD%	Mid PD%	High PD%	Standard & Poor's equivalent	Moody's equivalent	Fitch equivalent
Investment grade	UCR 1	0.000	0.03	0.035	AAA to A+	Aaa to Aa3	AAA to AA-
	UCR 2+	0.035	0.04	0.045	A+	A1	AA-
	UCR 2	0.045	0.05	0.071	A	A1 to A2	A+
	UCR 2-	0.071	0.10	0.127	A-	A3	A to A-
	UCR 3+	0.127	0.16	0.200	BBB+	Baa1	BBB+
	UCR 3	0.200	0.25	0.300	BBB	Baa2	BBB
	UCR 3-	0.300	0.36	0.465	BBB-	Baa3	BBB-
Sub-investment grade	UCR 4+	0.465	0.60	0.775	BB+	Ba1	BB+
	UCR 4	0.775	1.00	1.285	BB	Ba2	BB
	UCR 4-	1.285	1.65	2.225	BB-	Ba3 to B1	BB- to B+
	UCR 5+	2.225	3.00	4.243	B+ to B	B2	B
	UCR 5	4.243	6.00	8.485	B-	B3 to Caa1	B-
	UCR 5-	8.485	12.00	16.971	CCC/C	Caa2 to Caa3	CCC/C
	UCR 6+	16.971	24.00	99.999	CCC/C	Ca	CCC/C
Default	UCR 6-8		100		D	C-D	D

Rating assignment

For non-programme lending, the ratings are individually assigned to each counterparty (PD) and facility (LGD) by the business account manager (first line) and approved by credit risk (second line). For programme lending, exposures ratings are not assigned individually but assigned to pools with similar characteristics. For all exposures, the EAD estimation is assigned automatically based on the facility type and the undrawn part of the facility.

Loss given default

Loss Given Default (LGD) models estimate the amount the bank would lose if the counterparty were to default. LGD is expressed as a percentage of the outstanding amount at default. For credit facilities that are not in default, LGD estimates are influenced by the risk mitigating techniques used by the bank (such as collateral coverage and/or third party protection), the credit facility's seniority and structure, and the bank's view on the creditor-friendliness of the relevant country's legal framework.

Exposure at default

Exposure at Default (EAD) models estimate the expected exposure at the time a counterparty defaults. If all or a part of a facility is undrawn (i.e. the outstanding amount is less than the approved limit) at the time of the EAD calculation, a portion of the undrawn amount is added to the exposure to reflect the tendency of counterparties to utilise larger portions of their approved credit facilities when nearing default.

Capital for credit risk

Regulatory capital

For the purpose of determining capital requirements for credit risk, ABN AMRO applies the Advanced Internal Rating Based (A-IRB) approach to most of its portfolios. Under this approach, the previously described internal estimates for PD, EAD and LGD are used to calculate Credit Risk RWA. For a number of smaller portfolios and the large Central Governments and Central Banks portfolio, RWA is determined according to the Standardised Approach (SA). This approach prescribes the risk weights to be applied to the exposure value in order to calculate RWA.

Economic capital

The EC model for credit risk uses a Monte Carlo simulation to determine a full portfolio loss distribution, taking into account specific portfolio characteristics and diversification effects. Loan facilities are valued on an economic value (mark-to-market) basis to ensure that loss estimates can be based not only on defaulting borrowers, but also on possible credit migrations and changes associated with the market values of loans.

Credit risk mitigation

Credit risk mitigation techniques are used by the bank to reduce the credit risk associated with its credit exposures. Such techniques relate mainly to collateral management and guarantees, offsetting financial assets and liabilities, and enforcing master netting agreements or similar instruments. In our acceptance policy, we currently do not actively make use of credit risk mitigation for physical risks.

Credit risk mitigation techniques themselves entail risks and, as such, have to meet certain requirements so they can be used effectively and in line with the bank's risk appetite. For this reason, ABN AMRO has established mandatory, bank-wide policies governing the use and management of credit risk mitigation techniques. These are in line with regulatory requirements, as well as the needs of the bank and its clients. These bank-wide policies provide the overarching rules to be met by business-specific procedures and processes related to credit risk mitigation.

Collateral management and guarantees

Collateral and guarantees represent assets with material value that have been received by (or pledged to) the bank to secure obligations under a credit facility or other exposure. To be effective, such security must give the bank the right to appropriate and liquidate collateral on time and without impediment so that losses on the exposure at default are minimised.

In addition to minimising exposure risk, eligible collateral and guarantees can also reduce the regulatory and economic capital the bank is required to hold as a buffer for unexpected losses. The Capital Requirements Regulation prescribes the criteria that collateral must meet to become eligible for capital reduction. These criteria, which provide for legal effectiveness and for the enforceability, valuation and monitoring of collateral, are aimed at the effective and timely realisation of collateral.

Residential mortgages, followed by commercial real estate, represent the largest collateral category in our books. We manage our collateral risk through lending criteria such as Loan to Value, and for commercial real estate financing we apply a minimum energy label.

Accounting policy for offsetting financial assets and liabilities Audited

Financial assets and liabilities are offset, and the net amount is reported on the EU IFRS balance sheet, if there is a legally enforceable right to set off the recognised amounts and there is an intention either to settle on a net basis or to realise the asset and settle the liability simultaneously. The bank applies netting to debtor and creditor balances, such as current accounts, where offsetting is justified by formal agreement with the client, provided they meet the applicable criteria.

Accounting policy for enforceable master netting agreements or similar instruments Audited

Enforceable master netting arrangements take into account all agreements containing conditions that allow offsetting in the event of default. In addition, agreements are enforceable if the bank has a legally enforceable right to offset and no ability and/or intention to realise the asset and settle the liability simultaneously. These arrangements include derivative clearing agreements, global master repurchase agreements and global master securities lending agreements.

Credit risk review

This section provides information on:
- Credit risk exposure
- Credit risk concentration
- Forborne, past due and credit-impaired loans
- Credit risk mitigation
- Developments in specific portfolios

Credit risk exposure

We measure our credit risk exposure in two ways, depending on the purpose for which the exposure is calculated: EU IFRS or the determination of regulatory or economic capital (CRD-V/CRR2). This section shows our exposure to credit risk according to both frameworks and provides further details on risk-weighted assets and credit quality.

Credit risk overview Audited

(in millions)		31 December 2022		31 December 2021
Cash and balances at central banks		60,865		66,865
Financial assets held for trading		907		1,155
Derivatives		5,212		3,785
Financial investments[1]		39,034		43,165
Securities financing		20,032		16,138
Loans and advances banks		2,982		2,801
Loans and advances customers		243,927		258,251
Other assets	4,473		4,263	
Less: Other[1]	425		345	
Other assets		4,047		3,919
On-balance sheet maximum exposure to credit risk		**377,007**		**396,077**
Off-balance sheet				
Committed credit facilities	53,873		54,642	
Guarantees and other commitments	7,651		7,598	
Revocable credit facilities	34,347		31,737	
Off-balance sheet credit facilities and guarantees		**95,872**		**93,977**
Maximum exposure to credit risk[2]		**472,879**		**490,055**
Adjustments on assets[2,3]		4,705		167
Valuation adjustments[4]		9,797		12,550
Offsetting and netting		-26,557		-20,970
Off-balance sheet credit facilities and guarantees		-95,872		-93,977
Off-balance sheet exposure fraction expected to be drawn prior to default (credit conversion factors)		26,112		29,389
Total Exposure at Default		**391,065**		**417,214**
Credit risk RWA / Total Exposure at Default		28.3%		24.0%

1 This contains non-credit obligation assets and assets on accounts which are out of scope for credit risk.
2 Adjustment on assets includes equity positions.
3 Main adjustments on assets relate to selected financial assets held for trading and fair value adjustments from hedge accounting.
4 Adjustments on valuation include loan impairment allowances.

The above table shows the maximum exposure to credit risk and reconciliation with the total exposure at default. Exposure at default is predominantly used for the determination of regulatory and economic capital.

Overall credit risk EAD and RWA Audited

						31 December 2022	
	Original EAD	Less: Netting/ EAD mitigation[3]	EAD	- of which:		RWA	RWA/EAD
(in millions)				Derivatives	Securities financing transactions		
Credit risk IRB							
Central governments and central banks							
Institutions[1]	8,900	917	7,983	695	1,618	1,847	23.1%
Corporates	134,776	33,693	101,083	1,709	1,471	53,501	52.9%
Retail	165,991	5,466	160,525			16,891	10.5%
- of which secured by immovable property	*156,003*	*829*	*155,174*			*15,431*	*9.9%*
- of which qualifying revolving exposures	*5,292*	*3,965*	*1,328*			*136*	*10.3%*
- of which other retail	*4,696*	*673*	*4,023*			*1,323*	*32.9%*
Securitisation positions	2,043		2,043			253	12.4%
Subtotal	**311,711**	**40,077**	**271,634**	**2,404**	**3,089**	**72,492**	**26.7%**
Equities not held for trading	824		824			3,091	375.2%
Other[2]	1,970		1,970			24,835	1260.9%
Total IRB	**314,504**	**40,077**	**274,428**	**2,404**	**3,089**	**100,418**	**36.6%**
Credit risk SA							
Central governments and central banks	91,310	-2,177	93,487	85	96	515	0.6%
Institutions[1]	26,166	13,511	12,656	4,105	3,314	939	7.4%
Corporates	21,583	14,790	6,793	1,233	827	5,854	86.2%
Retail	5,787	2,697	3,090			2,272	73.5%
Secured by mortgages on immovable property	438	4	434			152	35.1%
Exposures in default	467	344	123			158	128.4%
Credit valuation adjustment						274	
Subtotal	**145,751**	**29,169**	**116,582**	**5,423**	**4,237**	**10,164**	**8.7%**
Other[2]	55		55			39	70.5%
Total SA	**145,806**	**29,169**	**116,637**	**5,423**	**4,237**	**10,203**	**8.7%**
Total	**460,310**	**69,245**	**391,065**	**7,827**	**7,327**	**110,621**	**28.3%**

[1] Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
[2] Other includes default fund contribution under the IRB approach and non-credit obligation assets under the IRB and Standardised Approach.
[3] Consists mainly of netting, secured funding trades, guarantees, credit conversion factors and impairments under the Standardised Approach.

(in millions)	Original EAD	Less: Netting/ EAD mitigation[3]	EAD	- of which: Derivatives	Securities financing transactions	RWA	RWA/EAD
					31 December 2021		
Credit risk IRB							
Central governments and central banks	100,874	-2,278	103,152	272	70	840	0.8%
Institutions[1]	8,606	1,572	7,034	547	1,828	1,589	22.6%
Corporates	136,174	32,920	103,254	2,857	1,530	52,211	50.6%
Retail	175,948	6,404	169,544			16,574	9.8%
- of which secured by immovable property	*164,659*	*1,324*	*163,334*			*14,847*	*9.1%*
- of which qualifying revolving exposures	*5,359*	*4,038*	*1,321*			*140*	*10.6%*
- of which other retail	*5,930*	*1,041*	*4,888*			*1,588*	*32.5%*
Securitisation positions	1,016		1,016			116	11.4%
Subtotal	**422,618**	**38,619**	**384,000**	**3,676**	**3,429**	**71,331**	**18.6%**
Equities not held for trading	841		841			3,364	399.8%
Other[2]	1,778		1,778			15,336	862.3%
Total IRB	**425,238**	**38,619**	**386,619**	**3,676**	**3,429**	**90,030**	**23.3%**
Credit risk SA							
Central governments and central banks	6,437	-10	6,447			2	0.0%
Institutions[1]	25,831	12,032	13,799	2,091	4,313	1,248	9.0%
Corporates	19,567	13,260	6,307	1,200	1,010	5,636	89.4%
Retail	7,562	4,142	3,421			2,495	72.9%
Secured by mortgages on immovable property	414	12	403			145	36.1%
Exposures in default	531	398	133			173	129.6%
Credit valuation adjustment						202	
Subtotal	**60,343**	**29,833**	**30,510**	**3,290**	**5,323**	**9,900**	**32.4%**
Other[2]	84		84			46	54.0%
Total SA	**60,428**	**29,833**	**30,595**	**3,290**	**5,323**	**9,946**	**32.5%**
Total	**485,666**	**68,452**	**417,214**	**6,966**	**8,751**	**99,976**	**24.0%**

1 Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
2 Other includes default fund contribution under the IRB approach and non-credit obligation assets under the IRB and Standardised Approach.
3 Consists mainly of netting, secured funding trades, guarantees, credit conversion factors and impairments under the Standardised Approach.

Credit quality by exposure class Audited

(in millions, Exposure at Default)	Investment grade	Sub-investment grade	Impaired	Total
				31 December 2022
Central governments and central banks				
Institutions[1]	7,813	170		7,983
Corporates	48,776	48,823	3,483	101,083
Retail	132,134	26,933	1,457	160,525
- of which secured by immovable property	*129,785*	*24,115*	*1,274*	*155,174*
- of which qualifying revolving exposures	*1,162*	*142*	*24*	*1,328*
- of which other retail	*1,188*	*2,676*	*159*	*4,023*
Securitisation positions	2,043			2,043
Total IRB[2]	**190,767**	**75,927**	**4,940**	**271,634**
Total SA[3]				116,582
Total IRB and SA[2,3]				**388,216**

	Investment grade	Sub-investment grade	Impaired	Total
				31 December 2021
Central governments and central banks	103,059	88	5	103,152
Institutions[1)]	6,697	328	9	7,034
Corporates	49,127	49,309	4,818	103,254
Retail	138,073	29,772	1,699	169,544
- of which secured by immovable property	*134,658*	*27,252*	*1,423*	*163,334*
- of which qualifying revolving exposures	*1,149*	*144*	*28*	*1,321*
- of which other retail	*2,265*	*2,376*	*247*	*4,888*
Securitisation positions	1,016			1,016
Total IRB[2]	**297,972**	**79,497**	**6,531**	**384,000**
Total SA[3]				30,510
Total IRB and SA[2,3]				**414,510**

1 Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
2 Total Exposure at Default does not include EAD calculated for equities not held for trading and other non-credit obligations.
3 Exposure at Default does not include EAD calculated for other non-credit obligations.

EAD decreased to EUR 391.1 billion (31 December 2021: EUR 417.2 billion), largely because of the decrease in loans and advances and, to a lesser extent, because of lower cash and balances at central banks due to repayment of TLTRO III facilities.

Credit quality by internal rating scale mapped to stages Audited

The following table presents the gross carrying amount of loans and the contractual amount of undrawn loan commitments, classified by internal rating and risk stage. In order to classify a client as stage 2, several qualitative triggers are needed, which are not necessarily dependent on internal ratings.

(in millions)	PD scale	UCR range	31 December 2022 Stage 1	Stage 2	Stage 3[3]	Total	31 December 2021 Stage 1	Stage 2	Stage 3[3]	Total
Residential mortgages										
	0.000 - < 0.035	1	43			43	107			108
	0.035 - < 0.127	2	64,113	1,438		65,551	59,392	1,194		60,586
	0.127 - < 0.465	3	50,689	2,286		52,975	55,040	1,861		56,900
	0.465 - < 2.225	4	24,677	2,442		27,119	21,376	2,172		23,548
	2.225 - < 16.971	5	889	2,518		3,407	1,119	2,294		3,413
	16.971 - < 100	6+	38	486		524	28	504		532
	100	6-8			1,143	1,143			1,264	1,264
Total residential mortgages			**140,450**	**9,169**	**1,143**	**150,762**	**137,063**	**8,025**	**1,264**	**146,351**
Consumer loans										
	0.000 - < 0.035	1	661	4		665	630	3		634
	0.035 - < 0.127	2	1,492	6		1,498	1,459	9		1,468
	0.127 - < 0.465	3	2,748	130		2,878	2,717	165		2,882
	0.465 - < 2.225	4	3,444	223		3,667	3,708	291		3,999
	2.225 - < 16.971	5	280	290		570	326	415		741
	16.971 - < 100	6+	496	96		591	508	154		662
	100	6-8			363	363			409	409
Total consumer loans			**9,121**	**749**	**363**	**10,232**	**9,348**	**1,037**	**409**	**10,794**
Corporate loans										
	0.000 - < 0.035	1	8,964	122		9,086	9,221	83		9,304
	0.035 - < 0.127	2	9,677	253		9,931	9,839	343		10,182
	0.127 - < 0.465	3	16,678	2,499		19,178	15,722	978		16,701
	0.465 - < 2.225	4	27,925	7,042		34,967	28,393	5,433		33,826
	2.225 - < 16.971	5	3,137	3,478		6,615	3,345	4,484		7,830
	16.971 - < 100	6+	2,721	568		3,289	2,843	753		3,597
	100	6-8			3,666	3,666			5,019	5,019
Total corporate loans			**69,103**	**13,963**	**3,666**	**86,731**	**69,364**	**12,075**	**5,019**	**86,458**
Other loans[1]										
	0.000 - < 0.035	1	14,776	37		14,813	21,289			21,289
	0.035 - < 0.127	2	8,988			8,988	9,012	1		9,012
	0.127 - < 0.465	3	4,607			4,607	2,539			2,539
	0.465 - < 2.225	4	1,946			1,946	883			883
	2.225 - < 16.971	5	71			71	66	26		92
	16.971 - < 100	6+	53	36		90	112	20		132
	100	6-8			4	4			9	9
Total other loans[1]			**30,442**	**73**	**4**	**30,519**	**33,900**	**47**	**9**	**33,956**
Loan commitments and financial guarantee contracts										
	0.000 - < 0.035	1	5,232			5,233	5,256	6		5,262
	0.035 - < 0.127	2	13,299	254		13,553	12,188	175		12,363
	0.127 - < 0.465	3	14,156	1,691		15,847	16,688	885		17,573
	0.465 - < 2.225	4	15,582	3,333		18,915	11,025	3,750		14,775
	2.225 - < 16.971	5	1,136	816		1,952	1,197	1,043		2,240
	16.971 - < 100	6+	781	114		895	3,843	161		4,004
	100	6-8			700	700			1,271	1,271
Total loan commitments and financial guarantee contracts[2]			**50,187**	**6,209**	**700**	**57,095**	**50,199**	**6,019**	**1,271**	**57,488**
Total										
	0.000 - < 0.035	1	29,677	163		29,840	36,504	92		36,596
	0.035 - < 0.127	2	97,570	1,951		99,521	91,891	1,721		93,612
	0.127 - < 0.465	3	88,879	6,606		95,486	92,706	3,889		96,595
	0.465 - < 2.225	4	73,575	13,040		86,615	65,385	11,646		77,031
	2.225 - < 16.971	5	5,513	7,102		12,615	6,054	8,263		14,317
	16.971 - < 100	6+	4,089	1,300		5,389	7,335	1,592		8,926
	100	6-8			5,874	5,874			7,971	7,971
Total			**299,303**	**30,162**	**5,874**	**335,339**	**299,874**	**27,202**	**7,971**	**335,048**

1 Includes Banks, Securities Financing and Government and official institutions.
2 Total loan commitments and financial guarantee contracts exclude performance letters of credit as these facilities are not in scope of IFRS 9.
3 Including POCI.

The largest part of ABN AMRO's portfolio continues to be classified in stage 1 and in the highest and medium internal rating classes. Compared to 31 December 2021, the share of the portfolio with an investment grade (UCR 1 to UCR 3 bucket) decreased marginally, mainly in mortgages and corporate loans. Approximately 2% of the bank's portfolio is reported in UCR 6+. Clients where revision of the UCR is overdue are classified as UCR 6+ until a new rating is available. During that time, the mid-PD of UCR 6+ is used for capital and provision calculation purposes.

Credit risk concentration Audited

Geographic concentration

The exposures in the following table have been classified on the basis of the geographical regions where clients are domiciled. The bank actively manages and monitors the development of its country risk exposures, based on the country at risk. The country at risk may be different from the country of domicile, for example if the bank finances a project in a country other than the borrower's country of incorporation.

Geographic concentration by EAD Audited

(in millions, Exposure at Default)	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						31 December 2022
Central governments and central banks						
Institutions[1]	1,151	4,903	1,268	222	439	7,983
Corporates	62,957	31,255	1,532	727	4,611	101,083
Retail	159,910	475	45	64	31	160,525
- of which secured by immovable property	*154,613*	*426*	*45*	*61*	*29*	*155,174*
- of which qualifying revolving exposures	*1,328*					*1,328*
- of which other retail	*3,970*	*48*		*3*	*2*	*4,023*
Securitisation positions	2,043					2,043
Total IRB[2]	**226,062**	**36,633**	**2,846**	**1,013**	**5,081**	**271,634**
Total SA[3]	71,755	29,882	9,753	3,286	1,906	116,582
Total	**297,817**	**66,514**	**12,599**	**4,299**	**6,987**	**388,216**
Percentage of total IRB and SA[2,3]	76.7%	17.1%	3.2%	1.1%	1.8%	100.0%

	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						31 December 2021
Central governments and central banks	70,875	22,219	6,659	2,156	1,243	103,152
Institutions[1]	1,077	4,514	675	198	570	7,034
Corporates	69,464	26,236	2,457	792	4,304	103,254
Retail	168,956	453	37	57	41	169,544
- of which secured by immovable property	*162,809*	*396*	*37*	*53*	*39*	*163,334*
- of which qualifying revolving exposures	*1,321*					*1,321*
- of which other retail	*4,825*	*57*		*4*	*2*	*4,888*
Securitisation positions	1,016					1,016
Total IRB[2]	**311,388**	**53,423**	**9,828**	**3,203**	**6,158**	**384,000**
Total SA[3]	9,996	16,161	2,979	820	555	30,510
Total	**321,384**	**69,583**	**12,807**	**4,023**	**6,713**	**414,510**
Percentage of total IRB and SA[2,3]	77.5%	16.8%	3.1%	1.0%	1.6%	100.0%

1 Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
2 Total Exposure at Default does not include EAD calculated for equities not held for trading and other non-credit obligations.
3 Exposure at Default does not include EAD calculated for other non-credit obligations.

Exposure at default (EAD) concentrated in the Netherlands increased to 76.7% of the bank's portfolio in 2022 (2021: 77.5%). EAD in the Netherlands decreased to EUR 297.8 billion at 31 December 2022 (31 December 2021: EUR 321.4 billion). The exposure to central governments and central banks is now treated under the Standardised Approach, which causes significant changes in the categories Central governments and central banks and Total SA.

Industry concentration

ABN AMRO applies industry concentration limits in line with the Industry Classification Benchmark (ICB). In the exposure table, non-material industry clusters are aggregated under Other. Industry concentration limits are established within the bank's risk appetite, with the thresholds for concentrations being based on relative risk, the importance of the industry to the Dutch economy and expert opinion. The table shows the industry in which the original obligor, i.e. the counterparty with whom ABN AMRO has the contractual relationship, has its main activity.

Industry concentration Audited

	31 December 2022		31 December 2021	
(in millions)	Gross carrying amount[3,4]	Percentage of total	Gross carrying amount[3,4]	Percentage of total
Loans and advances banks	**2,990**	**1.2%**	**2,811**	**1.1%**
Financial services[1]	21,734	8.4%	30,145	11.5%
Industrial goods and services	16,763	6.5%	16,918	6.5%
Real estate	16,953	6.6%	15,309	5.9%
Oil and gas	2,565	1.0%	3,162	1.2%
Food and beverage	9,953	3.9%	10,804	4.1%
Retail	4,478	1.7%	4,477	1.7%
Healthcare	3,736	1.4%	3,616	1.4%
Construction and materials	3,010	1.2%	3,041	1.2%
Travel and leisure	3,012	1.2%	3,452	1.3%
Utilities	2,214	0.9%	2,788	1.1%
Automobiles and parts	1,525	0.6%	1,545	0.6%
Technology	1,709	0.7%	1,112	0.4%
Other[2]	7,292	2.8%	7,213	2.8%
Total industry classification benchmark	**94,943**	**36.8%**	**103,581**	**39.6%**
Private individuals (non-industry classification benchmark)	159,650	61.8%	154,593	59.1%
Public administration (non-industry classification benchmark)	629	0.2%	436	0.2%
Total non-industry classification benchmark	**160,279**	**62.1%**	**155,029**	**59.3%**
Total loans and advances customers	**255,222**	**98.8%**	**258,611**	**98.9%**
Total loans and advances[3]	**258,212**	**100.0%**	**261,421**	**100.0%**

[1] Financial services include asset managers, credit card companies and providers of personal financial services and securities and brokers.
[2] Other includes personal and household goods, basic resources, media, chemicals, telecommunication and insurance, in addition to unclassified.
[3] Excluding loans at fair value through P&L.
[4] Excluding fair value adjustments from hedge accounting.

The total decrease in loans and advances by industry was largely explained by decreases in financial services. These were largely driven by business developments in Clearing. Our exposure to the oil and gas sector decreased further, while exposure to the real estate sector increased. The share of loans and advances to private individuals increased, largely as a result of an increase in residential mortgages.

Management of forborne, past due and credit-impaired loans Audited

Credit risk reporting scope

Although all financial assets on our balance sheet are subject to some form of credit risk, by far the largest part is in loans and advances. To provide a meaningful view of the credit risk in our lending book, the figures presented in this section therefore relate to loans and advances. Any credit risk outside the reported scope will be mentioned below the table. All figures are furthermore reported gross of loan impairment allowances and exclude fair value adjustments. The following table provides a comparison of gross carrying amounts presented in this section with the consolidated balance sheet.

(in millions)	Gross carrying amount[2]	Fair value adjustment from hedge accounting	Less: loan impairment allowance	Less: amortisation and depreciation[2]	Carrying amount	Gross carrying amount[2]	Fair value adjustment from hedge accounting	Less: loan impairment allowance	Less: amortisation and depreciation[2]	Carrying amount
	31 December 2022					31 December 2021				
Loans and advances banks	**2,990**		**8**		**2,982**	**2,811**		**10**		**2,801**
Residential mortgages	150,762	-9,489	153		141,121	146,351	1,442	82		147,711
Consumer loans	10,232		277		9,955	10,794		276		10,518
Corporate loans[1]	86,731	154	1,590		85,295	86,458	509	2,053		84,915
Other loans and advances customers[1]	7,497		5		7,491	15,007		4		15,003
Total loans and advances customers[1]	**255,222**	**-9,335**	**2,026**		**243,861**	**258,611**	**1,951**	**2,416**		**258,146**
Total loans and advances[1]	**258,212**	**-9,335**	**2,034**		**246,844**	**261,421**	**1,951**	**2,426**		**260,947**
Other	138,201	-3,119	123	2,222	132,738	139,580	1,636	146	2,903	138,166
Total assets	**396,414**	**-12,454**	**2,157**	**2,222**	**379,581**	**401,001**	**3,587**	**2,572**	**2,903**	**399,113**
Loans and advances customers[1]	255,222	-9,335	2,026		243,861	258,611	1,951	2,416		258,146
Corporate loans at fair value through P&L	66				66	99				99
Other loans at fair value through P&L						5				5
Total loans and advances customers	**255,288**	**-9,335**	**2,026**		**243,927**	**258,715**	**1,951**	**2,416**		**258,251**

[1] Excluding loans at fair value through P&L.
[2] Compared to 2021, the presentation changed. In the line Other the fair value adjustment from hedge accounting, impairment allowances not in scope of IFRS 9 and amortisation and depreciation are now taken into consideration for the calculation of the gross carrying amount. Comparative figures have been adjusted accordingly.
[3] Excluding fair value adjustments from hedge accounting.

Forborne exposures Audited

Clients in (or potentially in) financial difficulty and whose contracts have been amended in ways that are regarded as concessions on the part of the bank are accounted for as forborne assets. The following table provides an overview of forborne assets, broken down into performing and non-performing assets, and classified by the type of forbearance measure.

Overview of forborne assets Audited

31 December 2022

(in millions)	Gross carrying amount[1]	Performing assets: Temporary modification	Performing assets: Permanent modification	Performing assets: Refinancing	Total performing forborne assets	Non-performing assets: Temporary modification	Non-performing assets: Permanent modification	Non-performing assets: Refinancing	Total non-performing forborne assets	Total forborne assets	Forbearance ratio
Loans and advances banks	**2,990**										**0.0%**
Residential mortgages	150,762	545	22	2	569	489	15		503	1,072	0.7%
Consumer loans	10,232	32	57	1	91	53	23	15	91	181	1.8%
Corporate loans[1]	86,731	585	2,258	374	3,217	383	1,774	282	2,439	5,655	6.5%
Other loans and advances customers[1]	7,497										0.0%
Total loans and advances customers[1]	**255,222**	**1,162**	**2,337**	**377**	**3,876**	**924**	**1,812**	**296**	**3,033**	**6,909**	**2.7%**
Total loans and advances[1]	**258,212**	**1,162**	**2,337**	**377**	**3,876**	**924**	**1,812**	**296**	**3,033**	**6,909**	**2.7%**

[1] Excluding loans at fair value through P&L.
[2] Gross carrying amount excludes fair value adjustments from hedge accounting.

31 December 2021

(in millions)	Gross carrying amount[3]	Performing assets: Temporary modification	Performing assets: Permanent modification	Performing assets: Refinancing	Total performing forborne assets	Non-performing assets: Temporary modification	Non-performing assets: Permanent modification	Non-performing assets: Refinancing	Total non-performing forborne assets	Total forborne assets	Forbearance ratio
Loans and advances banks	**2,811**										**0.0%**
Residential mortgages	146,351	2,445	18	1	2,464	590	24	2	616	3,080	2.1%
Consumer loans	10,794	60	47	4	111	86	26	12	124	235	2.2%
Corporate loans[1]	86,458	1,173	2,937	484	4,594	380	2,237	659	3,276	7,870	9.1%
Other loans and advances customers[1]	15,007										0.0%
Total loans and advances customers[1,2]	**258,611**	**3,678**	**3,002**	**490**	**7,170**	**1,057**	**2,287**	**673**	**4,016**	**11,186**	**4.3%**
Total loans and advances[1,2]	**261,421**	**3,678**	**3,002**	**490**	**7,170**	**1,057**	**2,287**	**673**	**4,016**	**11,186**	**4.3%**

[1] Excluding loans at fair value through P&L.
[2] ABN AMRO changed its presentation compared to previous reports. The table now shows total loans and advances to be more consistent with other risk disclosures in this report.
[3] Gross carrying amount excludes fair value adjustments from hedge accounting.

Total forborne assets decreased from EUR 11.2 billion at 31 December 2021 to EUR 6.9 billion at 31 December 2022, mainly for residential mortgages and corporate loans. This decrease is specifically attributed to loans for which a payment deferral was granted after the outbreak of Covid-19 in 2020 and that came to the end of their two-year forbearance probation period. Under the forbearance rules, these loans ceased to be forborne if they were performing in accordance with the payment conditions. On 31 December 2022 the exposure subject to Covid-19 related forbearance measures was EUR 0.8 billion.

Past due exposures Audited

When a counterparty is past due or exceeds its credit limit, all loans and advances (total gross carrying amount) in the related credit arrangement are considered to be past due. The absolute and relative materiality thresholds used for determining a defaulted status do not apply for the purposes of classification as past due. Below these thresholds, arrears of more than 90 days are reported as past due.

Past due not classified as stage 3 Audited

31 December 2022

(in millions)	Gross carrying amount[2]	Assets not classified as stage 3 or POCI	Days past due: ≤ 30 days	Days past due: > 30 days & ≤ 90 days	Days past due: > 90 days[3]	Total past due, but not stage 3 or POCI	Past due ratio
Loans and advances banks	**2,990**	**2,990**					**0.0%**
Residential mortgages	150,762	149,619	879	52	7	939	0.6%
Consumer loans	10,232	9,869	104	50	23	178	1.7%
Corporate loans[1]	86,731	83,066	635	181	84	900	1.0%
Other loans and advances customers[1]	7,497	7,493	4		17	21	0.3%
Total loans and advances customers[1]	**255,222**	**250,047**	**1,623**	**284**	**131**	**2,038**	**0.8%**
Total loans and advances[1]	**258,212**	**253,038**	**1,623**	**284**	**131**	**2,038**	**0.8%**

[1] Excluding loans at fair value through P&L.
[2] Gross carrying amount excludes fair value adjustments from hedge accounting.
[3] Materiality thresholds are applied for counterparties transferring to stage 3. Below these thresholds, amounts are reported on > 90 days past due.

							31 December 2021
				Days past due			
(in millions)	Gross carrying amount[3]	Assets not classified as stage 3 or POCI	≤ 30 days	> 30 days & ≤ 90 days	> 90 days[4]	Total past due but not stage 3 or POCI	Past due ratio
Loans and advances banks	**2,811**	**2,811**					**0.0%**
Residential mortgages	146,351	145,087	759	49	12	820	0.6%
Consumer loans	10,794	10,385	133	29	26	188	1.7%
Corporate loans[1]	86,458	81,439	874	178	23	1,075	1.2%
Other loans and advances customers[1]	15,007	14,998	24			24	0.2%
Total loans and advances customers[1,2]	**258,611**	**251,910**	**1,789**	**256**	**61**	**2,106**	**0.8%**
Total loans and advances[1,2]	**261,421**	**254,720**	**1,789**	**256**	**61**	**2,106**	**0.8%**

1 Excluding loans at fair value through P&L.
2 ABN AMRO changed its presentation compared to previous reports. The table now shows total loans and advances to be more consistent with other risk disclosures in this report.
3 Gross carrying amount excludes fair value adjustments from hedge accounting.
4 Materiality thresholds are applied for counterparties which are transferred to impaired. Below these thresholds, amounts are reported on > 90 days past due.

Compared to 31 December 2021, total arrears declined modestly from EUR 2.1 billion to EUR 2 billion, accounting for an unchanged past due ratio of 0.8%. Arrears in residential mortgages rose by EUR 0.1 billion to EUR 0.9 billion. As this was proportional to the growth of the portfolio, the past due ratio for residential mortgages remained stable at 0.6%. Similarly, consumer loans in arrears came down in line with portfolio movements and recorded an unchanged past due ratio of 1.7%. This steady credit performance of personal banking products can be attributed to the high job retention rates in the Netherlands, despite the inflationary economic environment.

Arrears in corporate loans came down from EUR 1.1 billion to EUR 0.9 billion. A change in the past due accounting of the recourse portfolio at Asset Backed Finance contributed EUR 0.1 billion to this decline.

Coverage and stage ratios Audited

(in millions)	31 December 2022 Gross carrying amount[3]	Allowances for credit losses[4]	Coverage ratio	Stage ratio	31 December 2021 Gross carrying amount[3]	Allowances for credit losses[4]	Coverage ratio	Stage ratio
Stage 1								
Loans and advances banks	**2,953**	**8**	**0.3%**	**98.8%**	**2,808**	**10**	**0.4%**	**99.9%**
Residential mortgages	140,450	21	0.0%	93.2%	137,063	8	0.0%	93.7%
Consumer loans	9,121	30	0.3%	89.1%	9,348	23	0.2%	86.6%
Corporate loans[1]	69,103	256	0.4%	79.7%	69,364	130	0.2%	80.2%
Other loans and advances customers[1]	7,457		0.0%	99.5%	14,954		0.0%	99.6%
Total loans and advances customers[1]	**226,130**	**308**	**0.1%**	**88.6%**	**230,729**	**162**	**0.1%**	**89.2%**
Stage 2								
Loans and advances banks	**37**		**0.0%**	**1.2%**	**3**		**0.5%**	**0.1%**
Residential mortgages	9,169	57	0.6%	6.1%	8,025	22	0.3%	5.5%
Consumer loans	749	36	4.8%	7.3%	1,037	45	4.4%	9.6%
Corporate loans[1]	13,963	301	2.2%	16.1%	12,075	291	2.4%	14.0%
Other loans and advances customers[1]	36	2	5.6%	0.5%	44	1	3.2%	0.3%
Total loans and advances customers[1]	**23,917**	**396**	**1.7%**	**9.4%**	**21,181**	**360**	**1.7%**	**8.2%**
Stage 3 and POCI								
Loans and advances banks								
Residential mortgages	1,143	75	6.6%	0.8%	1,264	52	4.1%	0.9%
Consumer loans	363	211	58.2%	3.5%	409	208	50.8%	3.8%
Corporate loans[1]	3,666	1,033	28.2%	4.2%	5,019	1,632	32.5%	5.8%
Other loans and advances customers[1]	4	3	83.9%	0.0%	9	3	32.0%	0.1%
Total loans and advances customers[1]	**5,175**	**1,322**	**25.6%**	**2.0%**	**6,701**	**1,894**	**28.3%**	**2.6%**
Total of stages 1, 2, 3 and POCI								
Total loans and advances banks	**2,990**	**8**	**0.3%**		**2,811**	**10**	**0.4%**	
Residential mortgages	150,762	153	0.1%		146,351	82	0.1%	
Consumer loans	10,232	277	2.7%		10,794	276	2.6%	
Corporate loans[1]	86,731	1,590	1.8%		86,458	2,053	2.4%	
Other loans and advances customers[1]	7,497	5	0.1%		15,007	4	0.0%	
Total loans and advances customers[1]	**255,222**	**2,026**	**0.8%**		**258,611**	**2,416**	**0.9%**	
Total loans and advances[1,2]	**258,212**	**2,034**	**0.8%**		**261,421**	**2,426**	**0.9%**	

1 Excluding loans at fair value through P&L.
2 ABN AMRO changed its presentation compared to previous reports. The table now shows total loans and advances to be more consistent with other risk disclosures in this report.
3 Gross carrying amount excludes fair value adjustments from hedge accounting.
4 The allowances for credit losses excludes allowances for financial investments held at FVOCI (31 December 2022: EUR 1 million; 31 December 2021: EUR 1 million).

The stage 2 ratio increased to 9.4% (31 December 2021: 8.2%), mainly as a result of increases in stage 2 exposure, while total loans and advances decreased. Stage 2 exposure increased for corporate loans, partly because of clients who returned from stage 3. Inflow as a result of a weakening macroeconomic outlook led to an increase in stage 2 exposures for residential mortgages. The stage 2 coverage ratio remained stable at 1.7%.

The stage 3 ratio decreased to 2.0% at 31 December 2022 (31 December 2021: 2.6%), attributable to an outflow of clients due to repayments and clients returning to stage 2. The stage 3 coverage ratio decreased from 28.3% to 25.6% due to the write-off or return to stage 2 of some highly provisioned loans.

Purchased or Originated Credit Impaired (POCI)

On 31 December 2022, loans classified as POCI amounted to EUR 9 million. Due to the immateriality of the amount, this is included in the amount shown for stage 3 throughout this report.

Exposure and impairment flows Audited

This section provides more details on the exposure and impairment flows underlying the change in coverage and stage ratios shown in the previous section.

Total loans and advances Audited

	2022				2021			
(in millions)	Stage 1	Stage 2	Stage 3[3]	Total	Stage 1	Stage 2	Stage 3[3]	Total
Balance at 1 January	**233,537**	**21,183**	**6,701**	**261,421**	**220,705**	**25,602**	**8,474**	**254,781**
Transfer to stage 1	7,771	-7,662	-110		5,607	-5,517	-90	
Transfer to stage 2	-14,007	15,050	-1,044		-7,863	8,412	-549	
Transfer to stage 3	-864	-932	1,796		-890	-1,432	2,322	
Additional drawdowns and partial repayments	-25,287	-73	-71	-25,430	-20,683	1,029	11	-19,643
Originated or purchased	48,595			48,595	71,356			71,356
Matured or repaid	-21,365	-3,728	-1,515	-26,608	-36,312	-7,148	-2,538	-45,998
Write-offs			-622	-623	-11	-19	-1,087	-1,117
Foreign exchange	826	44	38	908	1,774	281	159	2,214
Other movements	-123	71	1	-51	-145	-24	-1	-171
Balance at 31 December	**229,084**	**23,954**	**5,175**	**258,212**	**233,537**	**21,183**	**6,701**	**261,421**

1 Excluding loans at fair value through P&L.
2 Gross carrying amount excludes fair value adjustments from hedge accounting.
3 Including POCI.

Total loans and advances decreased compared to 31 December 2021, mainly due to a sharp decrease in Clearing exposures, which was also visible in other loans. This was primarily as a result of lower trading positions of Clearing clients at year-end 2022 and a decrease in margin contributions, mainly at European Commodity Clearing (ECC). The decrease was offset by an increase in residential mortgages (EUR 4.4 billion) and foreign exchange movements, with the latter being due to the depreciation in the value of the EUR compared to the USD. As our portfolio is now more Northwest Europe-oriented (due to the wind-down of the former CIB non-core business), the effect of this was less pronounced than in 2021.

Transfers between stages were notably high for stage 2 exposures as a result of adjustments in the models' macroeconomic scenarios. Inflow in stage 3 was lower than the combined amount of write-offs, repayments and transfers to stage 2, leading to a strong reduction in stage 3 exposure.

Exposure flows per product class are presented in the section Additional risk, funding & capital disclosures.

Loan impairment charges and allowances Audited

							31 December 2022
(in millions)	Banks	Residential mortgages	Consumer loans	Corporate loans	Other loans	Total loans and advances	Off-balance
Balance at 1 January 2022	**10**	**82**	**276**	**2,053**	**4**	**2,426**	**153**
Transfer to stage 1		-3	-9	-21		-33	-2
Transfer to stage 2		4		11		15	4
Transfer to stage 3		17	37	98		152	
Remeasurements[1]	-3	9	27	-64		-30	-120
Changes in risk parameters		57	12	61		130	2
Originated or purchased		7	4	44		55	12
Matured or repaid		-18	-12	-88		-119	-7
Impairment charges (releases) on loans and advances	**-2**	**73**	**59**	**41**	**1**	**171**	**-110**
Write-offs		-3	-65	-556		-623	
Unwind discount / unearned interest accrued		1	5	25		32	
Foreign exchange and other movements			3	27		29	8
Balance at 31 December 2022	**8**	**153**	**277**	**1,590**	**5**	**2,034**	**51**
							2022
Impairment charges (releases) on loans and advances	-2	73	59	41	1	171	-110
Recoveries and other charges (releases)		-17	-45	-42		-103	82
Total impairment charges for the period	**-2**	**56**	**14**	**-1**	**1**	**67**	**-28**

1 Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.

(in millions)	Banks	Residential mortgages	Consumer loans	Corporate loans	Other loans	Total loans and advances	Off-balance
						31 December 2021	
Balance at 1 January 2021	**6**	**116**	**294**	**3,053**	**3**	**3,472**	**48**
Transfer to stage 1		-6	-7	-21		-33	-1
Transfer to stage 2			-3	31		27	7
Transfer to stage 3		21	51	107		179	
Remeasurements[1]	10	5	39	425	1	480	101
Changes in models	-2	-1	1	-15		-17	
Changes in risk parameters	-4	-31	-12	-54		-101	
Originated or purchased		4	5	46		55	6
Matured or repaid		-19	-27	-563		-610	-18
Impairment charges (releases) on loans and advances	**5**	**-28**	**47**	**-44**	**1**	**-20**	**94**
Write-offs		-6	-69	-1,042		-1,117	-3
Unwind discount / unearned interest accrued		1	4	16		22	
Foreign exchange and other movements		-1		69		69	14
Balance at 31 December 2021	**10**	**82**	**276**	**2,053**	**4**	**2,426**	**153**
							2021
Impairment charges (releases) on loans and advances	5	-28	47	-44	1	-20	94
Recoveries and other charges (releases)		-18	-44	-79		-141	22
Total impairment charges for the period	**5**	**-46**	**3**	**-124**	**1**	**-161**	**116**

[1] Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.

Loan impairment charges and allowances per stage Audited

(in millions)	Stage 1	Stage 2	Stage 3[2]	Total	Stage 1	Stage 2	Stage 3[2]	Total
				2022				2021
Balance at 1 January	**172**	**360**	**1,894**	**2,426**	**301**	**400**	**2,771**	**3,472**
Transfer to stage 1	57	-74	-16	-33	40	-62	-11	-33
Transfer to stage 2	-31	153	-107	15	-35	112	-50	27
Transfer to stage 3	-17	-40	209	152	-12	-38	228	179
Remeasurements[1]	50	23	-103	-30	-108	41	547	480
Changes in models					-3	-11	-3	-17
Changes in risk parameters	44	56	30	130	-34	-35	-32	-101
Originated or purchased	55			55	55			55
Matured or repaid	-14	-26	-79	-119	-19	-18	-573	-610
Impairment charges (releases) on loans and advances	**145**	**91**	**-66**	**171**	**-117**	**-10**	**107**	**-20**
Write-offs			-622	-623	-11	-19	-1,087	-1,117
Unwind discount / unearned interest accrued			32	32			22	22
Foreign exchange and other movements	-1	-55	84	29	-2	-11	82	69
Balance at 31 December	**316**	**396**	**1,322**	**2,034**	**172**	**360**	**1,894**	**2,426**
Impairment charges (releases) on loans and advances	145	91	-66	171	-117	-10	107	-20
Recoveries and other charges (releases)			-103	-103			-141	-141
Total impairment charges for the period	**145**	**91**	**-169**	**67**	**-117**	**-10**	**-34**	**-161**

[1] Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.
[2] Including POCI.

An addition of EUR 39 million (EUR 67 million on-balance and EUR -28 million off-balance) in impairments was recorded for 2022 (2021: release of EUR 46 million), resulting in a cost of risk of 3bps in 2022, compared to -7bps in 2021. Charges were attributable to a deteriorating economic outlook during the year, partly offset by releases from management overlays and releases for existing stage 3 clients. The releases in stage 3 can be largely attributed to the improved credit quality of the existing defaulted portfolio, repayments of stage 3 loans, outflow to the performing portfolio and recoveries.

For residential mortgages, charges of EUR 56 million were recorded in 2022, compared to a release of EUR 46 million in 2021. This was caused by the deteriorated macroeconomic outlook.

The deteriorated economic outlook was also the main driver of the EUR 14 million impairment charges for consumer loans (2021: EUR 3 million). Impairments for consumer loans were also attributable to the deterioration of risk parameters in our consumer lending portfolios.

A release of EUR 29 million (of which EUR 28 million was for off-balance exposures) was recorded for corporate loans in 2022 (2021: release of EUR 124 million). Impairment releases for corporate loans were recorded because of the improved credit quality of the existing defaulted portfolio, repayments of stage 3 loans, outflow to the performing portfolio and recoveries.

Individual and collective loan impairment allowances and management overlays Audited

	31 December 2022						
(in millions)	Banks	Residential mortgages	Consumer loans	Corporate loans	Other loans	Total loans and advances	Off-balance
Individual impairments							
Stage 3[1]			58	835	3	896	10
Total individual impairments			**58**	**835**	**3**	**896**	**10**
Collective impairments							
Stage 1	8	21	30	256		316	25
Stage 2		57	36	301	2	396	16
Stage 3[1]		75	153	198		427	
Total collective impairments	**8**	**153**	**219**	**755**	**2**	**1,138**	**41**
- of which management overlay		*26*	*9*	*294*		*328*	
Total impairments	**8**	**153**	**277**	**1,590**	**5**	**2,034**	**51**
Carrying amount of loans, determined to be impaired, before deducting any assessed impairment allowance		1,143	363	3,666	4	5,175	

[1] Including POCI.

	31 December 2021						
(in millions)	Banks	Residential mortgages	Consumer loans	Corporate loans	Other loans	Total loans and advances	Off-balance
Individual impairments							
Stage 3[1]			46	1,389	3	1,438	116
Total individual impairments			**46**	**1,389**	**3**	**1,438**	**116**
Collective impairments							
Stage 1	10	8	23	130		172	17
Stage 2		22	45	291	1	360	20
Stage 3[1]		52	162	243		456	
Total collective impairments	**10**	**82**	**230**	**664**	**1**	**988**	**37**
- of which management overlay		*24*	*46*	*354*		*424*	
Total impairments	**10**	**82**	**276**	**2,053**	**4**	**2,426**	**153**
Carrying amount of loans, determined to be impaired, before deducting any assessed impairment allowance		1,264	409	5,019	9	6,701	

[1] Including POCI.

Individual impairments decreased to EUR 896 million (31 December 2021: EUR 1,438 million) due to write-offs, repayments and transfers to stage 2. Total collective impairments amounted to EUR 1,138 million at year-end 2022 (31 December 2021: EUR 988 million) and included expected credit losses (ECL) as calculated by our IFRS 9 models and the management overlays we recorded. The ECL calculations take into account a probability weighted average of three economic scenarios. As the ECL model outcomes do not always reflect the current economic environment and circumstances, additional management overlays are applied to incorporate potential risks not fully captured by the model outcomes.

During 2022, management overlays decreased to a total of EUR 328 million (31 December 2021: EUR 424 million). Of this decrease, EUR -43 million was due to reclassification of overlays to input data and in-model adjustments and did not have P&L impact. The remaining management overlays were mainly recorded for risks in the corporate loans portfolios and comprised the following:

- A new management overlay was applied for potential effects of the war in Ukraine that are not fully captured by the latest projections in our macroeconomic scenarios and existing IFRS 9 models. An initial overlay for second-order impact on potentially vulnerable clients was cancelled after individual clients were reviewed and, where appropriate, reclassified. As the uncertainty in the macroeconomic outlook as a whole continues to be high, the initial overlay was replaced by an overlay on impairments for third-order effects, amounting to EUR 123 million at year-end 2022.
- A new management overlay of EUR 34 million was formed for the potential impact that the government's measures to reduce nitrogen emissions may have on clients in livestock farming businesses in the Netherlands.
- The existing overlays, which cover anticipated additional risk costs relating to the wind-down of portfolios, decreased in line with the reducing exposure to these portfolios.

Management overlays taken in previous years for the impact of Covid-19 decreased significantly:

- The management overlay applied for clients in sectors vulnerable to the impact of Covid-19-related restrictions was released after the Covid-19 restrictions were lifted in the Netherlands and analysis revealed there to be no material differences between the coverage ratios of vulnerable and non-vulnerable sectors.
- We also released a management overlay that captured expected credit risk deterioration due to Covid-19 in our Corporate Banking portfolio as we deem this effect to be largely incorporated into our credit risk parameters.
- A new management overlay was formed for potential underestimation of the delayed risk of Covid-19-related government support – especially tax deferrals – for corporate loans that are not individually managed.

Compared to 31 December 2021, management overlays for our mortgage portfolio were stable as:

- The management overlay that covers the refinancing risk of interest-only mortgages was increased to take into account changes in the affordability tests as a result of rising interest rates.
- The management overlay that addresses the impact of excessive increases in property prices on the outcome of the IFRS 9 models was reclassified as an in-model adjustment.

The management overlays within consumer lending portfolios decreased because the adjustment for modification losses was reclassified as an input data adjustment.

All management overlays represent best estimates of the risks involved. The underlying reasoning and calculations are documented and discussed and approved by the Impairments and Provisioning Committee (IPC). Relevant experience related to the impact of Covid-19 on the model outcomes will be used to improve the models over time and reduce the need for management overlays.

Macroeconomic scenarios and ECL sensitivity

The tables below show the scenarios used for calculating the expected credit loss (ECL) at 31 December 2022 and 31 December 2021. In 2022, ABN AMRO economists lowered their macroeconomic forecasts, reflecting the negative impacts of the ongoing war in Ukraine. The lingering energy crisis is expected to tip the eurozone and the Netherlands into recession. Inflation leads to a fall in real incomes, which is weighing down on consumer spending, while high energy prices and supply shortages are hampering industry. On the monetary front, central banks are tightening their policies to counter inflation. The rises in mortgage rates that we saw in 2022 are driving house prices downwards. Against this background, ABN AMRO economists expect the decline in house prices to continue. Climate and environmental risks are considered and partially reflected in the various projected macroeconomic indicators. Further incorporation of CER in our macroeconomic scenarios is foreseen over time.

Macroeconomic scenarios in 2022 Audited

(in millions)	Weight	Macroeconomic variable	2023	2024	2025	2026	Unweighted ECL[4]	Weighted ECL[4]
		Real GDP Netherlands[1]	2.8%	2.6%	2.3%	1.6%		
Positive	5%	Unemployment[2]	3.9%	3.8%	3.7%	3.6%	1,035	
		House price index[3]	1.0%	0.0%	1.0%	2.0%		
		Real GDP Netherlands	0.5%	1.2%	1.6%	1.4%		
Baseline	60%	Unemployment	4.3%	4.2%	4.0%	4.0%	1,087	1,138
		House price index	-2.5%	-2.5%	-2.0%	1.0%		
		Real GDP Netherlands	-1.8%	-0.4%	1.3%	1.8%		
Negative	35%	Unemployment	5.0%	4.9%	4.7%	4.7%	1,240	
		House price index	-8.0%	-12.0%	-11.0%	0.0%		

1 Real GDP Netherlands, % change year-on-year.
2 Unemployment Netherlands, % of labour force.
3 House price index Netherlands - average % change year-on-year.
4 Weighted and unweighted ECL are including all collective impairments. Previous reports showed ECL for stages 1 and 2 only. Comparative figures have been adjusted accordingly.

Macroeconomic scenarios in 2021 Audited

(in millions)	Weight	Macroeconomic variable	2022	2023	2024	2025	Unweighted ECL[4]	Weighted ECL[4]
		Real GDP Netherlands[1]	4.5%	2.9%	2.5%	1.6%		
Positive	10%	Unemployment[2]	2.7%	2.3%	2.3%	2.2%	924	
		House price index[3]	12.5%	5.0%	3.5%	3.0%		
		Real GDP Netherlands	3.8%	2.4%	2.0%	1.4%		
Baseline	60%	Unemployment	3.1%	2.8%	2.8%	2.8%	953	988
		House price index	10.0%	4.0%	3.0%	3.0%		
		Real GDP Netherlands	2.7%	0.7%	2.3%	1.6%		
Negative	30%	Unemployment	4.0%	4.2%	3.4%	3.2%	1,078	
		House price index	0.0%	-7.5%	-10.0%	-2.5%		

1 Real GDP Netherlands, % change year-on-year.
2 Unemployment Netherlands, % of labour force.
3 House price index Netherlands - average % change year-on-year.
4 Weighted and unweighted ECL are including all collective impairments. Previous reports showed ECL for stages 1 and 2 only. Comparative figures have been adjusted accordingly.

The scenario weights indicated in the above tables are in place for expected credit loss (ECL) calculation purposes only and are designed to capture prevailing uncertainties in the macroeconomic outlook in our ECL estimates. As the most recent macroeconomic indicators were more in line with the baseline than the negative scenarios, the adjustment to the weights used in the previous quarter was rolled back and weights were reset to their usual levels.

Forborne, past due and credit-impaired loans by geography and industry

Forborne, past due and credit-impaired loans by geography

					31 December 2022
(in millions)	Forborne exposure	Exposures past due, but not stage 3 or POCI	Stage 3 exposures[1]	Allowances for stage 3[1]	Stage 3 charges for the period[1]
The Netherlands	5,725	1,703	3,960	844	-264
Rest of Europe	972	241	820	301	44
USA	78	4	75		-22
Asia	3		134	92	94
Rest of the world	132	89	186	84	-21
Total loans and advances	**6,909**	**2,038**	**5,175**	**1,322**	**-169**

					31 December 2021
	Forborne exposure	Exposures past due, but not stage 3 or POCI	Stage 3 exposures[1]	Allowances for stage 3[1]	Stage 3 charges for the period[1]
The Netherlands	9,473	1,645	5,220	1,190	-157
Rest of Europe	1,293	367	930	349	101
USA	106	70	107	18	-30
Asia	3		220	190	-1
Rest of the world	311	24	223	147	52
Total loans and advances	**11,186**	**2,106**	**6,701**	**1,894**	**-35**

[1] Including POCI.

Forborne exposures are mainly concentrated in the Netherlands, where they decreased to EUR 5,725 million at 31 December 2022 (31 December 2021: EUR 9,473 million). In other regions, too, forborne exposures decreased.

The increase in past due exposures in the rest of the world relates predominantly to a single client, who returned to performing status in January 2023.

Forborne, past due and credit-impaired loans by industry

(in millions)	Gross carrying amount[3,4]	Forborne exposures	Forborne ratio	Exposures past due, but not stage 3 or POCI	Past due ratio	Stage 3 exposures[5]	Stage 3 ratio[5]	Allowances for impairments for identified credit risk	Stage 3 impairment charges for the period[5]
									31 December 2022
Loans and advances banks	**2,990**		**0.0%**						
Financial services[1]	21,734	172	0.8%	400	1.8%	109	0.5%	72	-10
Industrial goods and services	16,763	1,096	6.5%	129	0.8%	927	5.5%	233	-103
Real estate	16,953	431	2.5%	138	0.8%	157	0.9%	26	-40
Oil and gas	2,565	165	6.4%		0.0%	203	7.9%	103	-63
Food and beverage	9,953	1,021	10.3%	35	0.4%	606	6.1%	95	-22
Retail	4,478	432	9.7%	6	0.1%	444	9.9%	116	27
Healthcare	3,736	309	8.3%	9	0.2%	166	4.4%	24	-12
Construction and materials	3,010	247	8.2%	14	0.5%	261	8.7%	90	-10
Travel and leisure	3,012	1,026	34.1%	63	2.1%	289	9.6%	50	-20
Utilities	2,214	167	7.5%	23	1.0%	115	5.2%	39	23
Automobiles and parts	1,525		0.0%	34	2.2%	2	0.1%		
Technology	1,709	74	4.3%	9	0.5%	66	3.8%	32	8
Other[2]	7,292	512	7.0%	41	0.6%	394	5.4%	179	46
Subtotal industry classification benchmark	**94,943**	**5,653**	**6.0%**	**900**	**0.9%**	**3,738**	**3.9%**	**1,060**	**-175**
Private individuals (non-industry classification benchmark)	159,650	1,230	0.8%	1,111	0.7%	1,431	0.9%	260	5
Public administration (non-industry classification benchmark)	629	26	4.1%	27	4.2%	6	1.0%	3	1
Total non-industry classification benchmark	**160,279**	**1,256**	**0.8%**	**1,138**	**0.7%**	**1,437**	**0.9%**	**262**	**6**
Total loans and advances customers	**255,222**	**6,909**	**2.7%**	**2,038**	**0.8%**	**5,175**	**2.0%**	**1,322**	**-169**
Total loans and advances	**258,212**	**6,909**	**2.7%**	**2,038**	**0.8%**	**5,175**	**2.0%**	**1,322**	**-169**

1 Financial services include asset managers, credit card companies and providers of personal financial services and securities and brokers.
2 Other includes personal and household goods, basic resources, media, chemicals, telecommunication and insurance, in addition to unclassified.
3 Excluding loans at fair value through P&L.
4 Excluding fair value adjustments from hedge accounting.
5 Including POCI.

(in millions)	Gross carrying amount[3,5]	Forborne exposures	Forborne ratio	Exposures past due, but not stage 3 or POCI	Past due ratio	Stage 3 exposures[6]	Stage 3 ratio[6]	Allowances for impairments for identified credit risk	Stage 3 impairment charges for the period[5]
									31 December 2021
Loans and advances banks	**2,811**								
Financial services[1]	30,145	121	0.4%	208	0.7%	170	0.6%	94	5
Industrial goods and services	16,918	2,201	13.0%	398	2.4%	1,382	8.2%	457	-41
Real estate	15,309	506	3.3%	229	1.5%	325	2.1%	68	2
Oil and gas	3,162	126	4.0%		0.0%	428	13.5%	315	113
Food and beverage	10,804	1,328	12.3%	103	1.0%	854	7.9%	160	-65
Retail	4,477	742	16.6%	21	0.5%	519	11.6%	182	13
Healthcare	3,616	370	10.2%	13	0.4%	206	5.7%	36	-9
Construction and materials	3,041	250	8.2%	16	0.5%	299	9.8%	136	-12
Travel and leisure	3,452	1,416	41.0%	6	0.2%	480	13.9%	84	-2
Utilities	2,788	147	5.3%	1	0.0%	58	2.1%	9	-5
Automobiles and parts	1,545	151	9.8%	13	0.9%	5	0.3%	2	
Technology	1,112	56	5.0%	24	2.2%	36	3.3%	18	4
Other[2]	7,213	442	6.1%	54	0.8%	330	4.6%	94	-9
Subtotal industry classification benchmark	**103,581**	**7,857**	**7.6%**	**1,086**	**1.0%**	**5,091**	**4.9%**	**1,654**	**-5**
Private individuals (non-industry classification benchmark)	154,593	3,296	2.1%	996	0.6%	1,599	1.0%	238	-31
Public administration (non-industry classification benchmark)	436	33	7.7%	24	5.5%	10	2.4%	2	1
Total non-industry classification benchmark	**155,029**	**3,330**	**2.1%**	**1,020**	**0.7%**	**1,610**	**1.0%**	**240**	**-30**
Total loans and advances customers	**258,611**	**11,186**	**4.3%**	**2,106**	**0.8%**	**6,701**	**2.6%**	**1,894**	**-35**
Total loans and advances[3,4]	**261,421**	**11,186**	**4.3%**	**2,106**	**0.8%**	**6,701**	**2.6%**	**1,894**	**-35**

1 Financial services include asset managers, credit card companies and providers of personal financial services and securities and brokers.
2 Other includes personal and household goods, basic resources, media, chemicals, telecommunication and insurance, in addition to unclassified.
3 Excluding loans at fair value through P&L.
4 Excluding fair value adjustments from hedge accounting.
5 Including POCI.

Looking at the development in forborne exposure per sector, the decline in forborne exposures is mainly observed within Private Individuals-Non ICB and explained by residential mortgages ceasing to be forborne as a result of the terminating of collective payment deferrals (one of the Covid-19 support measures). Forborne exposures also declined significantly in the Industrial Goods & Services, Travel & Leisure, Retail and Food & Beverage sectors, which were hit by the Covid-19 pandemic in 2020.

Credit risk mitigation Audited

Collateral reporting is based on the net collateral value (NCV). The NCV represents the amount expected to be recovered from the collateral pledged to the bank if the client defaults. Where necessary, certain discounts are applied. The NCV is approached by an average recovery rate observed for the specific type of collateral and, where applicable, by applying haircuts, for example in the event of currency mismatches. Surplus collateral is the amount of over-collateralisation, calculated on an individual basis. A surplus is not included for guarantees as the debtor cannot be held liable for more than the maximum debt.

Financial assets: offsetting, netting, collateral and guarantees Audited

										31 December 2022
	Offset in the statement of financial position			Not offset in the statement of financial position						Net exposure[5]
(in millions)	Carrying amount before balance-sheet netting	Less: balance sheet netting with gross liabilities	Carrying amount[2]	Master netting agreement[3]	Financial instruments collateral	Property & equipment	Other collateral and guarantees	Total risk mitigation	- of which surplus collateral[4]	
Financial assets held for trading	**907**		**907**							**907**
Derivatives	**5,212**		**5,212**	**4,136**				**4,136**		**1,077**
Financial investments	**39,034**		**39,034**							**39,034**
Securities financing	**25,218**	**5,186**	**20,032**	**820**	**24,847**			**25,667**	**5,881**	**246**
Interest-bearing deposits	2,088	317	1,771	44			317	361		1,410
Loans and advances	934		934	537	1,793			2,330	1,793	396
Other	277		277							277
Total loans and advances banks	**3,300**	**317**	**2,982**	**582**	**1,793**		**317**	**2,692**	**1,793**	**2,083**
Residential mortgages	150,609		150,609		2,778	288,267	258	291,303	144,617	3,923
Consumer loans	9,959	4	9,955		3,741	6,787	386	10,913	4,387	3,428
Corporate loans	86,242	1,101	85,141	2,047	30,432	51,330	3,920	87,730	33,471	30,882
Other loans and advances customers	7,491		7,491	377		50	19	446	18	7,064
Fair value adjustment from hedge accounting	-9,335		-9,335							-9,335
Total loans and advances customers[1]	**244,966**	**1,105**	**243,861**	**2,424**	**36,951**	**346,434**	**4,583**	**390,392**	**182,492**	**35,962**
Loans at fair value through P&L	66		66							66
Total loans and advances customers	**245,032**	**1,105**	**243,927**	**2,424**	**36,951**	**346,434**	**4,583**	**390,392**	**182,492**	**36,028**
Other assets	**3,532**	**1**	**3,531**	**52**	**520**		**842**	**1,414**	**427**	**2,544**
Total on-balance sheet subject to netting and pledged agreements	**322,235**	**6,609**	**315,626**	**8,013**	**64,110**	**346,434**	**5,742**	**424,300**	**190,593**	**81,919**
Assets not subject to netting and pledged agreements	63,955		63,955							63,955
Total assets	**386,190**	**6,609**	**379,581**	**8,013**	**64,110**	**346,434**	**5,742**	**424,300**	**190,593**	**145,875**
Total off-balance sheet	95,872		95,872		4,095	8,576	1,279	13,951	5,471	87,392
Total on- and off-balance sheet	**482,062**	**6,609**	**475,453**	**8,013**	**68,205**	**355,011**	**7,021**	**438,251**	**196,064**	**233,267**

1 Excluding loans at fair value through P&L.
2 Carrying amount includes loan impairment allowances where applicable.
3 Collateral in the column Master netting agreement is mainly markets related and consists of master netting agreements which also includes cash collateral as part of these agreements. Cash collateral not part of master netting agreements has been reported under the column Financial instruments.
4 Surplus collateral is the amount of over-collateralisation, calculated on an individual basis.
5 Net exposure represents the portfolio corrected for the surplus amount and gives a view on the potential shortfall in collateral on the total portfolio.

31 December 2021

(in millions)	Offset in the statement of financial position			Not offset in the statement of financial position						Net exposure[5]
	Carrying amount before balance-sheet netting	Less: balance sheet netting with gross liabilities	Carrying amount[2]	Master netting agreement[3]	Financial instruments collateral	Property & equipment	Other collateral and guarantees	Total risk mitigation	- of which surplus collateral[4]	
Financial assets held for trading	**1,155**		**1,155**							**1,155**
Derivatives	**3,785**		**3,785**	**2,312**	**85**			**2,397**		**1,388**
Financial investments	**43,165**		**43,165**							**43,165**
Securities financing	**19,659**	**3,521**	**16,138**	**85**	**18,808**			**18,893**	**2,915**	**160**
Interest-bearing deposits	1,538	349	1,189	36	1		282	318		871
Loans and advances	1,355		1,355	967	927			1,893	923	385
Other	257		257							257
Total loans and advances banks	**3,150**	**349**	**2,801**	**1,002**	**927**		**282**	**2,211**	**923**	**1,513**
Residential mortgages	146,269		146,269		2,779	262,635	355	265,768	123,226	3,727
Consumer loans	10,519	1	10,518		3,856	6,465	28	10,349	4,107	4,276
Corporate loans	88,038	3,632	84,405	2,943	26,669	50,828	3,693	84,132	28,148	28,421
Other loans and advances - customers	15,003		15,003	163		75	28	267	44	14,779
Fair value adjustment from hedge accounting	1,951		1,951							1,951
Total loans and advances customers[1]	**261,779**	**3,633**	**258,146**	**3,105**	**33,304**	**320,003**	**4,103**	**360,516**	**155,525**	**53,155**
Loans at fair value through P&L	104		104							104
Total loans and advances customers	**261,884**	**3,633**	**258,251**	**3,105**	**33,304**	**320,003**	**4,103**	**360,516**	**155,525**	**53,259**
Other assets	**3,330**	**1**	**3,330**	**2**	**370**		**69**	**441**	**330**	**3,218**
Total on-balance sheet subject to netting and pledged agreements	**336,127**	**7,504**	**328,624**	**6,508**	**53,494**	**320,003**	**4,454**	**384,459**	**159,693**	**103,858**
Assets not subject to netting and pledged agreements	70,490		70,490							70,490
Total assets	**406,617**	**7,504**	**399,113**	**6,508**	**53,494**	**320,003**	**4,454**	**384,459**	**159,693**	**174,347**
Total off-balance sheet	93,977		93,977		4,683	8,130	1,961	14,774	5,022	84,225
Total on- and off-balance sheet	**500,594**	**7,504**	**493,091**	**6,508**	**58,178**	**328,133**	**6,415**	**399,233**	**164,714**	**258,572**

1 Excluding loans at fair value through P&L.
2 Carrying amount includes loan impairment allowances where applicable.
3 Collateral in the column Master netting agreement is mainly markets related and consists of master netting agreements which also includes cash collateral as part of these agreements. Cash collateral not part of master netting agreements has been reported under the column Financial instruments.
4 Surplus collateral is the amount of over-collateralisation, calculated on an individual basis.
5 Net exposure represents the portfolio corrected for the surplus amount and gives a view on the potential shortfall in collateral on the total portfolio.

Total risk mitigation increased, driven by an increase in property and equipment and in residential mortgages, mainly due to rising house prices. As a result, surplus collateral also increased. In the case of consumer loans, total risk mitigation was relatively stable and net exposure declined slightly. The increase in total risk mitigation for corporate loans was evidenced by an increase in collateral for financial instruments. This was mainly driven by an increase in marketable securities collateral in the context of securities financing, mostly between financial institutions.

The total net exposure of loans and advances customers decreased to EUR 36.0 billion in 2022 (31 December 2021: EUR 53.2 billion). This was primarily driven by other loans and advances and related to Clearing activities (i.e. posting cash collateral and default fund contributions). The decrease in exposure driven by fair value accounting from hedge accounting was due to the increase in interest rates.

Financial assets: offsetting, netting, collateral and guarantees for credit-impaired assets Audited

Collateral and guarantees for credit-impaired assets (stage 3 and POCI) represent credit risk mitigation based on the net collateral value (NCV) for clients in default. The carrying amount includes expected credit loss allowances, based on the probability-weighted present value of all expected cash shortfalls over the remaining life of the financial instrument for both on- and off-balance sheet exposures. The Financial Restructuring & Recovery department identifies the most likely scenarios for non-programme lending defaulted clients (going concern or gone concern) and estimates the amounts and timing of expected future cash flows. This explains why a net exposure remains after collateral pledged to the bank is taken into account.

										31 December 2022
	Offset in the statement of financial position			Not offset in the statement of financial position						Net exposure[4]
(in millions)	Carrying amount before balance-sheet netting	Less: balance sheet netting with gross liabilities	Carrying amount[1]	Master netting agreement[2]	Financial instruments collateral	Property & equipment	Other collateral and guarantees	Total risk mitigation	- of which surplus collateral[3]	
Loans and advances banks										
Residential mortgages	1,068		1,068		11	1,854	1	1,865	799	2
Consumer loans	151		151		23	71	11	105	32	79
Corporate loans	2,632		2,632	4	608	1,734	324	2,670	617	579
Other loans and advances customers	1		1							1
Total loans and advances customers	**3,852**		**3,852**	**4**	**641**	**3,659**	**336**	**4,640**	**1,449**	**661**
Total loans and advances	**3,852**		**3,852**	**4**	**641**	**3,659**	**336**	**4,640**	**1,449**	**661**
										31 December 2021
Loans and advances banks										
Residential mortgages	1,212		1,212		12	1,821	1	1,834	632	11
Consumer loans	201		201		12	103	3	118	33	117
Corporate loans	3,387		3,387	5	648	2,504	333	3,491	708	603
Other loans and advances customers	6		6				2	2		4
Total loans and advances customers	**4,806**		**4,806**	**5**	**672**	**4,428**	**340**	**5,445**	**1,373**	**735**
Total loans and advances	**4,806**		**4,806**	**5**	**672**	**4,428**	**340**	**5,445**	**1,373**	**735**

1 Carrying amount includes loan impairment allowances where applicable.
2 Collateral in the column Master netting agreement is mainly markets related and consists of master netting agreements which also includes cash collateral as part of these agreements. Cash collateral not part of master netting agreements has been reported under the column Financial instruments.
3 Surplus collateral is the amount of over-collateralisation, calculated on an individual basis.
4 Net exposure represents the portfolio corrected for the surplus amount and gives a view on the potential shortfall in collateral on the total portfolio.

In line with the decrease in the stage 3 carrying amount (including POCI) to EUR 3.9 billion (31 December 2021: EUR 4.8 billion), total risk mitigation decreased to EUR 4.6 billion in 2022 (31 December 2021: EUR 5.4 billion). This decrease was mainly observed in property and equipment and, to a lesser extent, other collateral and guarantees. The decline in property and equipment for corporate loans was partly offset by an increase for residential mortgages due to indexation. As the decrease in the stage 3 portfolio (including POCI) exceeded the decline in total risk mitigation, net exposure decreased by EUR 74 million to EUR 661 million at 31 December 2022.

During 2022 ABN AMRO obtained property and equipment by taking possession of collateral held as security for loans and advances. The total amount of such assets held on 31 December 2022 amounted to EUR 4 million (2021: EUR 4 million). ABN AMRO does not intend to use these assets in its operations and will pursue timely and orderly realisation of the collateral.

Financial liabilities: offsetting, netting, collateral and guarantees Audited

	31 December 2022							
	Offset in the statement of financial position			Not offset in the statement of financial position				Net exposure[3]
(in millions)	Carrying amount before balance-sheet netting	Less: balance sheet netting with gross assets	Carrying amount	Master netting agreement[1]	Financial instruments collateral	Total risk mitigation	- of which surplus collateral[2]	
Financial liabilities held for trading	**641**		**641**					**641**
Derivatives	**4,148**		**4,148**	**2,480**		**2,480**		**1,668**
Securities financing	**14,839**	**5,186**	**9,652**	**820**	**13,798**	**14,618**	**6,478**	**1,512**
Deposits	17,531	32	17,499	688		688		16,811
Other	10		10					10
Due to banks	**17,541**	**32**	**17,509**	**688**		**688**		**16,821**
Deposits	253,913	1,390	252,523	1,659		1,659		250,864
Other borrowings	2,491		2,491	2,367		2,367		124
Due to customers	**256,405**	**1,390**	**255,015**	**4,026**		**4,026**		**250,989**
Other liabilities	**5,187**	**1**	**5,187**					**5,187**
Total liabilities subject to netting arrangements	**298,761**	**6,609**	**292,152**	**8,013**	**13,798**	**21,812**	**6,478**	**276,818**
Remaining liabilities not subject to netting	64,616		64,616					64,616
Total liabilities	**363,376**	**6,609**	**356,767**	**8,013**	**13,798**	**21,812**	**6,478**	**341,434**

[1] Collateral in the column Master netting agreement is mainly markets related and consists of master netting agreements which also includes cash collateral as part of these agreements. Cash collateral not part of master netting agreements has been reported under the column Financial instruments.
[2] Surplus collateral is the amount of over-collateralisation, calculated on an individual basis.
[3] Net exposure represents the portfolio corrected for the surplus amount and gives a view on the potential shortfall in collateral on the total portfolio.

	31 December 2021							
	Offset in the statement of financial position			Not offset in the statement of financial position				Net exposure[3]
(in millions)	Carrying amount before balance-sheet netting	Less: balance sheet netting with gross assets	Carrying amount	Master netting agreement[1]	Financial instruments collateral	Total risk mitigation	- of which surplus collateral[2]	
Financial liabilities held for trading	**687**		**687**					**687**
Derivatives	**4,344**		**4,344**	**3,706**		**3,706**		**638**
Securities financing	**13,015**	**3,521**	**9,494**	**78**	**11,042**	**11,120**	**3,306**	**1,680**
Deposits	38,133	67	38,066	507		507		37,558
Other	10		10					10
Due to banks	**38,143**	**67**	**38,076**	**507**		**507**		**37,568**
Deposits	254,468	3,915	250,553	1,732		1,732		248,821
Other borrowings	665		665	484		484		181
Due to customers	**255,133**	**3,915**	**251,218**	**2,216**		**2,216**		**249,002**
Other liabilities	**4,758**	**1**	**4,757**					**4,757**
Total liabilities subject to netting arrangements	**316,079**	**7,504**	**308,575**	**6,508**	**11,042**	**17,550**	**3,306**	**294,332**
Remaining liabilities not subject to netting	68,538		68,538					68,538
Total liabilities	**384,617**	**7,504**	**377,114**	**6,508**	**11,042**	**17,550**	**3,306**	**362,870**

[1] Collateral in the column Master netting agreement is mainly markets related and consists of master netting agreements which also includes cash collateral as part of these agreements. Cash collateral not part of master netting agreements has been reported under the column Financial instruments.
[2] Surplus collateral is the amount of over-collateralisation, calculated on an individual basis.
[3] Net exposure represents the portfolio corrected for the surplus amount and gives a view on the potential shortfall in collateral on the total portfolio.

Developments in specific portfolios

The following section provides a more detailed overview of developments in specific portfolios and products.

Residential mortgages

Housing market developments

Higher inflation brought an end to the historically low interest rates seen in recent years, causing the ECB to hike interest rates which contributed to a cooling-off of the Dutch housing market. Clients' maximum borrowing capacity decreased due to higher interest rates; together with inflation and increased economic uncertainty, this resulted in the affordability of houses decreasing. House prices declined slightly in the second half of 2022. The number of properties available for sale increased to 3.2 houses for every potential buyer at the end of 2022 (2021: 1.3 houses).

The housing price index published by Statistics Netherlands (CBS) at the end of 2022 was 5.1% higher than at the end of 2021. According to the Dutch Land Registry (Kadaster), the number of transactions in the Dutch housing market in 2022 was 14.6% lower than in 2021, and 20.2% lower than the peak in 2017.

Residential mortgage indicators

(in millions)	31 December 2022	31 December 2021
Gross carrying amount excluding fair value adjustment from hedge accounting	150,762	146,351
- of which Nationale Hypotheek Garantie (NHG)	*29,474*	*31,557*
Fair value adjustment from hedge accounting	-9,489	1,442
Carrying amount excluding fair value adjustment from hedge accounting	150,609	146,269
Exposure at Default[1]	155,608	163,737
Risk-weighted assets (Credit risk)[1,2]	22,574	22,110
RWA/Exposure at Default	14.5%	13.5%
Forbearance ratio	0.7%	2.1%
Past due ratio	0.6%	0.6%
Stage 3 ratio	0.8%	0.9%
Stage 3 coverage ratio	6.6%	4.1%
Cost of risk (in bps)[3]	4	-3
Average LtMV (indexed)	54%	56%
Average LtMV - excluding NHG loans (indexed)	54%	56%
Total risk mitigation	291,303	265,768
Total risk mitigation/carrying amount excluding fair value adjustment from hedge accounting	193.4%	181.7%

1 The RWA (Credit risk) and Exposure at Default amounts are based on the exposure class Secured by immovable property. This scope is slightly broader than the residential mortgage portfolio.
2 Previous report presented total RWA. In this report, the comparative figures for 31 December 2021 have been adjusted to show credit risk RWA only.
3 Annualised impairment charges on loans and advances customers for the period divided by the average loans and advances customers on the basis of gross carrying amount and excluding fair value adjustment from hedge accounting.

The residential mortgage portfolio increased by 3% to EUR 150.8 billion in 2022 (31 December 2021: EUR 146.4 billion). ABN AMRO's market share of new mortgage production in 2022 was 17% (2021: 16%).

The proportion of amortising mortgages continued to increase, totalling 44% at 31 December 2022 (31 December 2021: 41%). Total redemptions were 10% lower than in 2021. Extra repayments in 2022 amounted to EUR 2.0 billion, a decrease of 16% compared to 2021. The share of mortgages covered by the National Mortgage Guarantee (NHG) scheme decreased slightly compared to 31 December 2021, from 22% to 20%.

Credit quality indicators

In general, the credit quality indicators for residential mortgages remained relatively stable. Despite media reports of consumers being impacted by higher energy prices, the mortgage arrears ratio remained stable at 0.6%. The coverage ratio for stage 3 increased to 6.6% (31 December 2021: 4.1%) mainly as a result of a deteriorated macroeconomic outlook.

Risk-weighted assets and EAD

The RWA for credit risk in the residential mortgage portfolio increased to EUR 22.6 billion (31 December 2021: EUR 22.1 billion). The increase in the RWA was mainly caused by portfolio growth. Exposure at default (EAD) decreased to EUR 155.6 billion (2021: EUR 163.7 billion), mainly caused by a large decrease in the fair value adjustment from hedge accounting, which amounted to EUR -9.5 billion at 31 December 2022.

Residential mortgages to indexed market value

(in millions)	31 December 2022 Gross carrying amount	Percentage of total	- of which guaranteed[1]	- of which unguaranteed	31 December 2021 Gross carrying amount	Percentage of total	- of which guaranteed[2]	- of which unguaranteed
LtMV category								
<50%	65,529	43.5%	8.9%	34.6%	55,593	38.0%	7.3%	30.7%
50% - 80%	65,547	43.5%	9.1%	34.4%	69,993	47.8%	11.8%	36.1%
80% - 90%	9,435	6.3%	0.9%	5.3%	11,803	8.1%	1.6%	6.4%
90% - 100%	7,252	4.8%	0.6%	4.2%	6,932	4.7%	0.8%	3.9%
>100%	2,366	1.6%	0.1%	1.5%	1,953	1.3%	0.1%	1.3%
Unclassified	632	0.4%			77	0.1%		
Total	**150,762**	**100%**			**146,351**	**100%**		

[1] NHG guarantees.

The gross carrying amount of mortgages with a loan-to-market value (LtMV) in excess of 100% increased in 2022 to total EUR 2.4 billion at the year end (2021: EUR 2.0 billion) and accounted for 1.6% of total mortgages, while approximately 3% of the extra repayments relate to this category. It should be noted that an LtMV in excess of 100% does not necessarily indicate a client in financial difficulties. New inflow of mortgages with an LtMV in excess of 100% relates to sustainable home improvements. ABN AMRO actively approaches clients with an interest-only mortgage in combination with a high LtMV to discuss changing their mortgage product. The long-term LtMV of the bank's portfolio is expected to increase slightly as a result of declining housing prices.

Breakdown of residential mortgage portfolio by loan type

(in millions)	31 December 2022 Gross carrying amount	Percentage of total	31 December 2021 Gross carrying amount	Percentage of total
Interest only (partially)	42,677	28%	41,953	29%
Interest only (100%)	22,025	15%	21,995	15%
Redeeming mortgages (annuity/linear)	66,417	44%	60,183	41%
Savings	9,474	6%	10,788	7%
Life (investment)	6,153	4%	7,223	5%
Other[1]	4,017	3%	4,208	3%
Total	**150,762**	**100%**	**146,351**	**100%**

[1] Other includes hybrid and unclassified mortgage types. The hybrid portfolio consists of a combination of savings and investment mortgages.

Residential mortgages to indexed market value for 100% interest-only

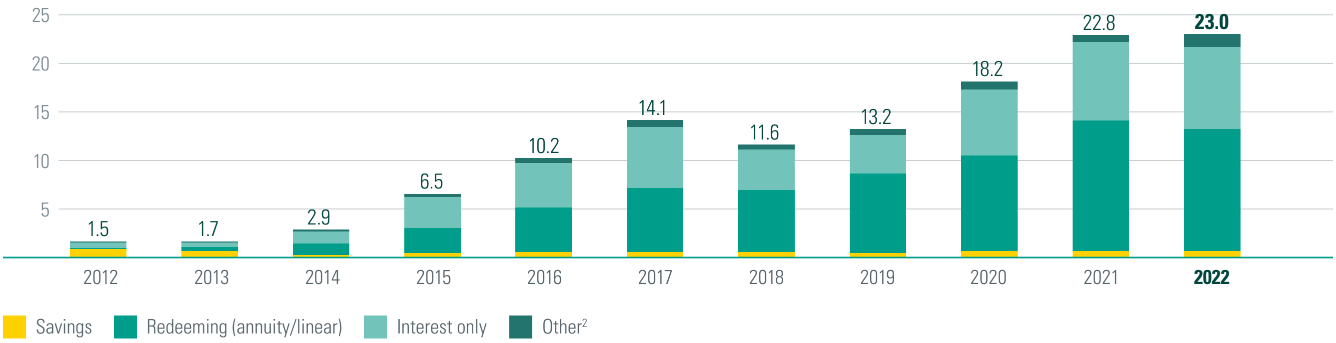
	31 December 2022 Percentage of total	31 December 2021 Percentage of total
Loan-to-Market Value category		
<50%	12%	12%
50% - 70%	2%	2%
70% - 100%	0%	1%
>100%	0%	0%
Total[1]	**15%**	**15%**

[1] Percentages of the total mortgage portfolio.

Fully interest-only mortgages remained relatively stable at 15% of the total mortgage portfolio in 2022, while approximately 19% of the extra repayments related to this type of loan. We have almost no fully interest-only mortgages with an LtMV in excess of 100%. The only category that increased in volume during the year was redeeming mortgages.

Breakdown of the residential mortgage portfolio by year of latest adjustment[1]

(in billions)



[1] Includes the new mortgage production and all mortgages with an adjustment date.
[2] Other includes universal life, life investment, hybrid and unclassified mortgage types. The hybrid portfolio consists of a combination of savings and investment mortgages.

The effects of the changes in the Dutch tax regulations are clearly reflected in the loan modification breakdown by year. Mortgage loan type originations in 2022 (defined as new production and mortgages with a loan type modification) comprised 37.0% interest-only, 54.7% redeeming mortgages and 2.6% savings mortgages. Interest-only and savings mortgages can still be produced for clients who want to refinance loans originated before 2013. The majority of the interest-only inflow is part of a mixed mortgage.

Residential mortgages - energy labels

Energy labels provide information about properties' energy consumption. The most energy-efficient category is 'higher than A' and the least energy-efficient category is label G. The EPC labels in the table below are from the Rijksdienst voor Ondernemend Nederland (RVO) and consist of a combination of energy labels under the old methodology (NEN7120, prior to 1 January 2021) and the new methodology (NTA8800). If no official energy label is available, business rules are applied to determine an estimated energy label. This mainly entails the use of preliminary energy labels, as issued by RVO in 2015.

	31 December 2022				31 December 2021	
	Gross carrying amount[1]			Percentage of total	Gross carrying amount[1]	Percentage of total
(in millions)		- of which EPC label	- of which estimated label			
Higher than A	6,546	1,866	4,680	4%	3,313	2%
A	35,320	27,057	8,263	23%	32,940	23%
B	21,344	10,071	11,272	14%	21,274	15%
C	31,827	14,991	16,835	21%	31,716	22%
D	12,129	7,639	4,489	8%	11,630	8%
E	8,928	5,263	3,665	6%	8,795	6%
F	13,038	4,612	8,426	9%	13,044	9%
G	15,285	4,397	10,887	10%	15,327	10%
No label	1,753			1%	3,166	2%
Unknown label	4,593			3%	5,145	4%
Total	**150,762**	**75,898**	**68,518**	**100%**	**146,351**	**100%**

[1] Including both energy labels based on the applicable regulation before and after 1 January 2021.

The proportion of residential mortgages with energy label A and higher increased compared to 2021. The increase in A and higher-than-A labels was mainly due to higher inflow and migration from lower energy labels to these categories. These movements are consistent with ABN AMRO's ambition, as expressed in our climate strategy, to reduce the carbon footprint of the residential mortgage portfolio. Potential house buyers also increasingly award value to energy efficient homes in a wider market, considering the increased energy prices. Over 2022 the percentage EPC labels versus estimated labels increased from 46% to 50%. This is mainly because new inflow usually has a final energy label, given that such a label is mandatory at the time of a sale or purchase transaction.

Commercial Real Estate (CRE)

Market developments

The sharp increase in interest rates in 2022 dramatically changed the market conditions for Dutch commercial real estate. Until the first half of 2022, investing was continuing on an upward trend. In the third quarter of 2022, however, the market reached a tipping point, and by the fourth quarter the amount involved in transactions dropped sharply. A total of EUR 16.4 billion was invested in 2022, a decrease of 5% compared to 2021, marking a decline for the third year in a row.

Despite the observed decrease, valuations of office real estate benefited from the post-Covid economic recovery and low unemployment rates until the first half of 2022. By the third quarter, however, substantially increased interest rates caused office investors to become more cautious and to reduce investments. Office real estate valuations consequently decreased sharply in the fourth quarter of 2022. In addition, corporates continued to struggle to attract employees to the workplace, with low occupancy rates forcing them to reconsider their office space decisions.

As well as higher interest rates, new regulations were introduced in the residential real estate market during the year. The aim of these regulations, and the new taxation rules, is to keep rental housing affordable for low- and middle-income households. Investing in this asset category will consequently be less attractive for investors as the new rules and regulations will reduce potential rental income flows. These supply side challenges led to a decline in residential real estate valuations in 2022.

The industrial and logistics retail market also benefited from the strong economy until the second half of 2022, when interest rates started rising sharply. As real estate prices had risen steadily over the years, a correction was needed to bring prices back to 'reasonable' levels again. Retail real estate had barely recovered from the Covid-related problems when a reduction in consumer spending after the summer reduced demand again. Despite the recent fall in retail real estate prices, increased interest rates and reduced consumer spending have for the time being brought the recovery in this real estate category to an end.

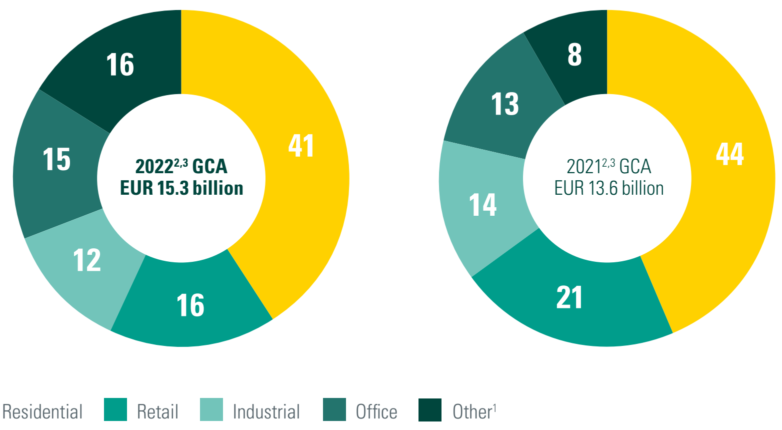
CRE portfolio

The exposure reported in the CRE portfolio relates to loans aimed at acquiring CRE property or secured by CRE property, whereby CRE means any income-producing real estate, either existing or under development or renovation. It excludes social housing, property owned by end-users, buy-to-let housing below a market value of EUR 2 million and unsecured general purpose lending. The credit exposure covered by the above definition is monitored on a quarterly basis and subject to an EAD and RWA limit.

Compared to 2021, the gross carrying amount increased markedly by 11.9% in 2022 to EUR 15.3 billion (31 December 2021: EUR 13.6 billion), primarily as a result of new client lending. The CRE loan portfolio is largely collateralised by Dutch properties and consists primarily of investment loans that are well diversified across different asset types. The distribution changed slightly compared to 2021, especially for 'Retail' and 'Office', and markedly for 'Other', primarily due to international Wealth Management clients being included in 'Other'.

Breakdown of CRE portfolio by asset type

(in %)



[1] Excluding Collateral not defined as commercial real estate collateral, such as currency and deposits, financial guarantees and life insurance policies pledged.
[2] Other asset types includes mixed objects, hotels & horeca facilities and parking real estate.
[3] Excluding PBI.

CRE energy labels

As part of its climate strategy, ABN AMRO has set targets to reduce the carbon footprint of its CRE portfolio. ABN AMRO continues to work towards this goal by seeking to increase the A and higher-than-A labels in the CRE portfolio and lowering the exposure to E-G energy labels. In line with this strategy, the distribution of energy labels marginally improved compared to 2021, with an increase in higher-than-A labels and 66% of the CRE portfolio now having an energy label of D or higher (31 December 2021: 64%).

Moreover, as of 1 January 2023 offices in the Netherlands with a lettable floor area (LFA) of at least 90% are obliged to have an energy label C or better. We are in contact with clients who do not yet comply, to urge them to formally register a label if the property has an energy label C or better or to share a sustainability plan with ABN AMRO that would lead to energy label C or better within a reasonable time-frame.

On 31 December 2022 more than 93% of assets in the CRE portfolio had an energy label (31 December 2021: 90%). Assets that are out of scope (such as land and parking spaces) are assigned to 'No label'. Most labels reported are supplied by the Rijksdienst voor Ondernemend Nederland (RVO) via EP-Online and are the labels officially registered for the properties. Some of the labels are estimated labels, and approximately 7% is unknown owing to the property being under development or not yet registered.

	31 December 2022				31 December 2021	
(in millions)	Gross carrying amount	- of which EPC label[4]	- of which estimated label	Percentage of total	Gross carrying amount	Percentage of total
Higher than A	886	885	1	6%	641	5%
A	4,901	3,662	1,240	32%	4,110	32%
B	1,124	883	240	7%	962	7%
C	2,028	1,410	618	13%	1,658	13%
D	1,139	858	281	7%	910	7%
E	899	574	324	6%	720	6%
F	646	299	347	4%	493	4%
G	2,001	423	1,578	13%	1,973	15%
No label[1]	590			4%	201	2%
Unknown label[2,3]	1,044			7%	1,257	10%
Total[3]	**15,258**	**8,994**	**4,629**	**100%**	**12,924**	**100%**

[1] No label relates to Parking and Land for which no energy labels are applicable.
[2] Unknown label relates to asset types which are expected to have an energy label.
[3] Including Wealth Management international clients for 31 December 2022 and excluding Wealth Management international clients for 31 December 2021.
[4] Including both energy labels based on the applicable regulation before and after 1 January 2021.

Market risk in the trading book

This section provides information on the market risk in traded assets and covers the following topics:

- Total market risk exposure
- Market risk management for the trading book
- Market risk measurement for the trading book
- Valuation adjustments
- CER materiality assessment
- Review of 2022 results

Total market risk exposure

Market risk exposure traded and non-traded risk

ABN AMRO is exposed to market risk in its trading book and banking book. The following table presents the market risk factors to which the assets and liabilities in the balance sheet are sensitive.

	31 December 2022			31 December 2021		
	Carrying amount	Market risk measure		Carrying amount	Market risk measure	
(in millions)		Traded risk	Non-traded risk		Traded risk	Non-traded risk
Assets subject to market risk						
Cash and balances at central banks	60,865		60,865	66,865		66,865
Financial assets held for trading	907	907		1,155	1,155	
Derivatives	5,212	4,831	381	3,785	2,975	810
Financial investments	39,034		39,034	43,165		43,165
Securities financing	20,032		20,032	16,138		16,138
Loans and advances banks	2,982		2,982	2,801		2,801
Loans and advances customers	243,927		243,927	258,251		258,251
Other assets	6,622		6,622	6,955		6,955
Total assets	**379,581**	**5,739**	**373,843**	**399,113**	**4,130**	**394,983**
Liabilities subject to market risk						
Financial liabilities held for trading	641	641		687	687	
Derivatives	4,148	3,671	477	4,344	3,545	799
Securities financing	9,652		9,652	9,494		9,494
Due to banks	17,509		17,509	38,076		38,076
Due to customers	255,015		255,015	251,218		251,218
Issued debt	56,259		56,259	59,688		59,688
Subordinated liabilities	7,290		7,290	7,549		7,549
Other liabilities	6,253		6,253	6,059		6,059
Total liabilities	**356,767**	**4,312**	**352,455**	**377,114**	**4,231**	**372,882**
Equity	22,814		22,814	21,999		21,999
Total liabilities and equity	**379,581**	**4,312**	**375,269**	**399,113**	**4,231**	**394,882**

Market risk management for the trading book Audited

Positions held with trading intent and hedges for positions held with trading intent must be included in the bank's trading book. The Central Trading Risk policy describes the positions included in the trading book and the criteria for transferring risk and positions between the trading and banking books. As part of its business strategy, ABN AMRO facilitates client orders, acts as a market maker in key markets and provides liquidity to clients, including institutional investors and private clients. Market risk in the trading book is the risk of losses in market value due to adverse market movements. The following market risks are inherent in the trading book:

- Interest rate risk, arising from adverse changes in interest rate risk curves and/or interest rate volatilities;
- Credit spread risk, arising from adverse changes in the term structure of credit spreads and/or from changes in the credit quality of debt securities or CDS reference entities, with an impact on default probabilities;
- Foreign exchange risk, arising from adverse changes in FX spot and forward rates and/or FX volatility.

ABN AMRO has in place a detailed risk management framework to identify, measure and control market risk in the trading book. This risk management framework is in line with the 3LoD model and provides assurance that the bank's trading activities are consistent with its client-focused business strategy and moderate risk profile. In accordance with the strategy, the Business Risk Committee Trading annually approves trading mandates and limits, which define the nature and number of the permitted transactions and risks, as well as the associated constraints. The limit utilisation is monitored and discussed by the first and second LoD on a daily basis. The Business Risk Committee Trading is a subsidiary committee of the Group Risk Committee.

Market risk measurement for the trading book Audited

ABN AMRO measures and manages market risk in the trading book on a daily basis. The key metrics used are economic capital, regulatory capital, Value-at-Risk (VaR), Stressed VaR (SVaR) and Incremental Risk Charge (IRC), together with a wide array of stress and scenario tests, sensitivity measures, concentration limits and notional limits. These metrics are measured and monitored on a daily basis. Appropriate limits are set at bank level in the Risk Appetite Statement and at bank and business-line levels in the limit framework, in line with the general risk principles of the Central Trading Risk policy.

Metrics and models are managed, reviewed, assessed and, if required, adjusted in a similar way as in the banking book. Other important tools to ensure the adequacy of the models, alongside the formal validation and review of models, are the daily explanation of risk reporting figures, periodic portfolio reviews and regular back-testing.

Validation procedure

For all models, including market risk models, we have a model risk policy in place. This policy requires that model assumptions and limitations are documented and independently validated by Model Validation. For material changes, the regulator performs an onsite investigation before such a model change is applied in production.

Economic capital

The calculation of economic capital for market risk in the trading book is based on the daily Value-at-Risk (VaR), Stressed VaR (SVaR) and Incremental Risk Charge (IRC) at a 99.95% confidence level. In comparison with previous years, Stressed VaR (SVaR) and Incremental Risk Charge (IRC) were added to the calculation of EC to align with the calculation of the regulatory capital.

Stress testing and scenario analysis

Stress testing and scenario analysis are designed to focus specifically on the impact of tail events occurring outside the VaR confidence interval. We perform daily stress tests for large movements in risk factors. Scenario analyses are also conducted frequently to evaluate the impacts of extreme market events that cover multiple risk factors, and the results of these tests are monitored. These scenarios can be based on historical or hypothetical events, or on a combination of the two.

For each risk type, sensitivities are monitored against limits. This includes all risk types mentioned above and the basic risks in the trading portfolio. In addition, the holding period is monitored as a measure of the liquidity of the positions.

Valuation adjustments

For the trading book, we take into account adjustments for counterparty credit risk on our clients (Credit Valuation Adjustment), ABN AMRO funding costs (Funding Valuation Adjustment) and ABN AMRO credit risk (Debt Valuation Adjustment).

Trading book positions are subject to prudent valuation standards in accordance with regulatory requirements. The prudent value is derived from IFRS fair value accounting and includes additional value adjustments.

CER materiality assessment

In 2022, we assessed the materiality of climate-related and environmental risk in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for market risk in the trading book are summarized below.

	Climate Risk		Environmental Risk	
	Physical risk	Transition Risk	Physical risk	Transition risk
Market risk in the trading book	✖	✖	✖	✖

Climate and environment risks can impact the trading books via the revaluation of fair valued positions which are held with a trading intent. In order to assess the impact, stress scenarios have been applied by shocking the market risk factors (e.g. credit spreads). The impact was found to be immaterial for market risk in the trading book.

Review of 2022 results

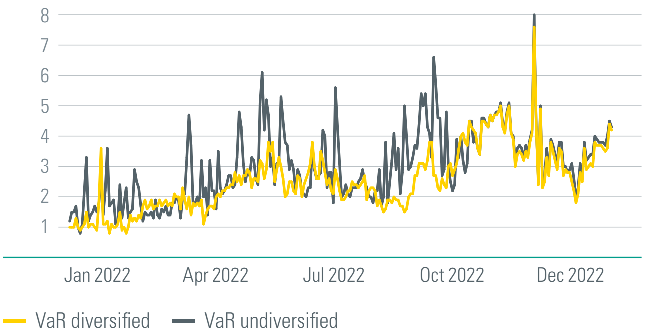
Internal aggregated diversified and undiversified VaR for all trading positions Audited

(in millions)	Commodities[1]	Equity[2]	Foreign exchange	Interest rate	Total undiversified VaR	Diversified VaR
						31 December 2022
VaR at last trading day of the period			0.2	4.1	4.3	4.2
Highest VaR			0.7	7.7	8.0	7.6
Lowest VaR				7.5	0.8	0.8
Average VaR			0.1	2.9	3.0	2.6
						31 December 2021
VaR at last trading day of the period			0.1	1.0	1.1	0.9
Highest VaR	0.3	0.4	0.8	4.9	5.3	4.3
Lowest VaR			0.1	0.7	0.9	0.7
Average VaR	0.1		0.1	2.0	2.3	1.8

1 Commodity trading was discontinued in 2022. Positions throughout the year were very small. The last transaction ended on 31 December 2022. As a result commodity trading will no longer be reported in future annual and interim financial statements.
2 Equity trading was discontinued in February 2021 and will no longer be reported in future annual and interim financial statements.

ABN AMRO applies a diversified portfolio VaR approach that takes into account the fact that returns across risk factors may offset one another to a certain extent and consequently reduce risk. As long as these returns are not perfectly correlated to one another, VaR figures based on a diversified portfolio approach will be lower than if the figures are calculated using undiversified VaR. Undiversified VaR means that the VaR figures computed for the different risk factors are aggregated without taking into account any offset across risk factors, negating the potential for risk reduction. The following graph shows the total one-day VaR at a 99% confidence level ('VaR diversified') and aggregation of the stand-alone risk factors ('VaR undiversified').

VaR diversified and undiversified
(in millions)



The average 1-day VaR at a 99% confidence level moved from EUR 1.8 million to EUR 2.6 million, comparing 2021 to 2022. In the same period, the average 1-day undiversified VaR at a 99% confidence level moved from EUR 2.3 million to EUR 3.0 million. Both increases were mainly due to increased market volatility in 2022. In 2022 and 2021, interest rates were the largest VaR component. Managing the hedging derivative position as a consequence of the changed TLTRO conditions, led to a one-day spike in the VaR on the day of unwinding the position. The interest rate component includes both specific risk (i.e. credit spread risk) and generic risk.

Regulatory capital

Market risk regulatory capital increased to EUR 160 million (31 December 2021: EUR 133 million) as risk-weighted assets increased to EUR 2.0 billion (31 December 2021: EUR 1.7 billion). The increase was mostly due to an increase in the VaR with a minor impact from IRC, partly offset by a slight decrease in the SVaR. The 1-day VaR increased in 2022, which resulted in an increase in the VaR RWA from EUR 0.2 billion to EUR 0.5 billion.

IBOR reform

In 2014, at the request of the G20, the Financial Stability Board issued a report on 'Reforming Major Interest Rate Benchmarks'. This report set out several recommendations for strengthening existing benchmarks for key interbank offered rates (IBORs) in unsecured lending markets and for promoting the development and adoption of alternative nearly risk-free reference rates, where appropriate. These recommendations led to a fundamental review of the key interest rate benchmarks used in global financial markets.

In order to ensure a smooth transition, ABN AMRO introduced a bank-wide project, to prepare the bank for the forthcoming changes in IBORs. Whereas the switch in the discounting regime for centrally cleared swaps was already completed in 2020, work on the change in the discounting regime for bilateral counterparties continued. Centrally cleared swaps denominated in CHF, JPY and GBP were migrated in December 2021. In 2022, repapering of USD LIBOR-related contracts started. From 2022, new USD contracts reference the risk-free rate instead of LIBOR. In the case of other benchmark interest rates that have been reformed, such as EURIBOR, and can therefore continue, financial instruments referencing those rates will not need to transition.

Market risk in the banking book

This section provides information on:
- Market risk management
- Interest rate risk
- Credit spread risk
- Funding spread risk
- Foreign exchange risk
- CER materiality assessment
- Market risk banking book metrics

Market risk in the banking book is the risk that the economic value of equity or the income of the bank declines because of unfavourable market movements. Market risk in the banking book consists predominantly of interest rate risk and credit spread risk in the liquidity portfolio. Funding spread risk and foreign exchange risk are also recognised as market risks in the banking book. However, these are relatively immaterial.

Market risk management for the banking book Audited

ABN AMRO has a detailed risk management framework in place to identify, measure and control market risk in the banking book. This framework provides assurance that the banking book activities remain consistent with the bank's strategy to pursue a moderate risk profile. The day-to-day management is delegated from the Asset & Liability Committee (ALCO) to the Asset and Liability Management and Treasury department (ALM/Treasury). Their activities include the execution of hedge transactions. ALM/Treasury forms the first line of defence. Market & ALM/T Risk Management acts as the second line of defence.

The risk appetite is articulated in terms of net interest income, the economic value of equity and the economic capital for market risk in the banking book, and expresses the maximum loss the bank is willing to accept. The risk appetite is cascaded into a limit framework.

Interest rate risk in the banking book

Interest rate risk is the risk of losses in the economic value of equity or the bank's net interest income (NII) due to yield curve developments. In order to measure interest rate risk, models are used and assumptions on client behaviour are made, most importantly with respect to the maturity of savings and the prepayment of mortgages. These assumptions influence the anticipated interest cash flow pattern. Interest rate risk is continuously managed in line with the risk appetite, as the profile of assets and liabilities on the balance sheet can change if client behaviour changes.

The main sources of interest rate risk are:
- The maturity mismatch between assets and liabilities. ABN AMRO provides mortgages and commercial loans with fixed interest terms. These assets are funded by non-maturing deposits and wholesale funding with a shorter average interest maturity than the assets;
- Client behaviour, which determines the maturity profile of some of our products. As we use models to predict this behaviour, we are exposed to model risk.

ABN AMRO uses a combination of portfolio (macro) hedges and specific asset or liability (micro) hedges to manage the interest rate sensitivity in the banking book and keep it in line with the bank's strategy and risk appetite. Micro hedges are used to swap fixed funding transactions and fixed investments in the liquidity buffer for floating interest rate positions. In addition, macro hedging is applied in order to align with the bank's strategy to contribute to a stable NII while protecting the economic value of equity.

Key assumptions for modelling client behaviour

From an interest rate risk perspective, the following aspects of client behaviour are the most important:
- Client behaviour with respect to early redemption of residential mortgages. This has a significant impact on the average interest maturity of the mortgage portfolio. Clients have the option to fully or partially prepay mortgages before maturity. Prepayments may be triggered by, for example, relocation, redemption or curtailment. An important driver of prepayments is the interest rate incentive, i.e. the difference between a client's current mortgage rate and prevailing mortgage rates. Future mortgage rates are simulated using a Monte Carlo approach. In addition to the interest rate incentive, other drivers such as loan age, seasonality and house price developments are also taken into account;
- Client acceptance of the residential mortgage volume offered and the deviation between the offered rate and the actual coupon;
- Client behaviour with respect to non-maturing deposits that are callable on demand. Future client rates for savings and current accounts are modelled using a replicating portfolio model. Modelled client rates depend on current or lagged yield curves and funding costs. A maximum maturity of 10 years is assumed. The resulting duration depends on product type and client behaviour.

The metrics used for market risk in the banking book are dependent upon the assumptions made in the behavioural models. Models must therefore be based on extensive research, including historical data regarding observed client behaviour, and must be independently validated and approved by the mandated risk committees. Models are periodically assessed to determine whether they behave appropriately and are statistically sound; if required, they are adjusted.

Risk measurement for interest rate risk

Interest rate risk is measured by NII at risk, the present value of one basis point (PV01), and the economic value of equity (EVE) at risk. To ensure a comprehensive approach to risk management and identify potential weaknesses, the metrics are complemented by stress testing and scenario analysis. Stress testing and scenario analyses go beyond determining the impact of alternative developments of interest rates and include testing assumptions with respect to modelling and client behaviour. A combination of market and product floors is applied. These floors are reviewed periodically.

For management purposes, the interest rate risk position is monitored by the Asset & Liability Committee (ALCO) on a monthly basis. The above metrics are also regularly reported to the Executive Board.

Credit spread risk in the banking book

Credit spread risk is the risk of losses due to adverse movements in the credit spread of assets. The main source is from bonds held for liquidity purposes. It is measured as the impact on economic value of a 1bp change in spreads to a swap rate. The sensitivity is measured for individual term points, as well as for a parallel shift of the curve.

Funding spread risk

Funding spread risk is the risk of losses due to adverse movements in the term structure of rates at which ABN AMRO can fund itself – expressed as a spread to a benchmark such as EURIBOR. Funding spread movements can arise due to changes in, for example, the perceived credit quality of ABN AMRO, changes in the competitive environment or changes in liquidity premiums. They may be entity-specific or systemic by nature. If funding spreads widen, it costs more to fund assets on the balance sheet. Unless this increased spread is passed on to clients by increasing client rates, the projected net interest income will decrease. The funding spread risk is measured using an NII-at-risk approach whereby the funding spread increases.

Foreign exchange risk Audited

Foreign exchange (FX) risk is the risk arising from adverse movements in FX spot and forward rates and/or FX volatility. It is managed within the bank by ALM and Treasury. As a general rule, foreign exchange risk is hedged by using cross-currency swaps to swap the exposure in foreign currency to EUR. If, for operational reasons, it is inefficient to hedge exposures in foreign currencies, an open currency position (OCP) remains. This is measured by the aggregated net position per currency, except for EUR.

Economic capital

Economic capital for market risk in the banking book is calculated using a parametric Monte Carlo simulation model that determines the economic capital needed to absorb losses resulting from adverse movements in interest rates, client behaviour for mortgages and non-maturing deposits, volatility, credit spreads and foreign exchange rates.

CER materiality assessment

In 2022, we assessed the materiality of climate-related and environmental risk in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for market risk in the banking book are summarized below.

	Climate Risk		Environmental Risk	
	Physical risk	Transition Risk	Physical risk	Transition risk
Market risk in the banking book	✖	✖	✖	✖

Climate and environmental risk events can materialise in market risks within the banking book. More specifically CER events can have a (potential) negative effect on the net interest income (NII) of the bank through changing client behaviour and/or changes in regulation which have an effect on the Bank's interest rate risk position, changing interest rate curves and increase in funding spreads. Based on scenario analyses. the effect of a single physical or environmental event on the NII of ABN AMRO is currently assessed to be immaterial. This is due to the relatively low interest rate sensitivity of portfolios with a higher sensitivities to physical or transition risks.

Market risk in the banking book metrics

Interest rate risk

(in millions)	31 December 2022	31 December 2021
NII impact from an instantaneous increase in interest rates of 100bps	280	98
NII impact from an instantaneous decrease in interest rates of 100bps	-302	-218
NII impact from a gradual increase in interest rates of 200bps	544	268
NII impact from a gradual decrease in interest rates of 200bps	-474	-251
PV01	-4.7	-5.9

NII-at-Risk is the difference in NII between a base scenario and an alternative scenario observed over a 1-year horizon. In addition to the regulatory prescribed scenarios, the internal metric is defined as the worst outcome of the following scenarios: a gradual increase or decrease in interest rates by 200bps, measured over a 1-year period, and an instantaneous increase or decrease of 100bps. NII-at-Risk includes all expected cash flows, including commercial margins and other spread components, from all interest rate-sensitive assets, liabilities and off-balance sheet items in the banking book. The NII-at-Risk calculation contains assumptions about the future balance sheet, including the reinvestment of maturing positions.

On 31 December 2022, the NII-at-Risk was EUR 474 million in absolute terms (31 December 2021: EUR 251 million), reflecting a reduction of NII in the scenario of a gradual decrease of 200bps in interest rates. The most positive NII occurs in the scenario where interest rates rise gradually by 200bps, in which case the NII would be EUR 544 million higher than the base scenario. The increase in NII-at-Risk is mainly attributable to increases in the market rates. Due to interest rate floors applied to certain market and product rates, the effect of a downward rate scenario was previously dampened. With rising rates, the distance towards these floors has increased, resulting in a larger effective shock.

The PV01 measures the value change resulting from a 1bp parallel shift in the yield curve. The PV01 exposure in absolute terms decreased by EUR 1.1 million to EUR 4.7 million in 2022. This decrease was the aggregate result of various developments in markets and the balance sheet. These include an increase in interest rates, lower predicted mortgage prepayments and associated hedging transactions.

Open currency position

The OCP is monitored regularly, and limits apply at a local and aggregate level. USD is the largest non-EUR exposure for assets as well as liabilities. The total OCP decreased in 2022 due to FX hedging activity.

	31 December 2022	31 December 2021
Total OCP (long, in EUR million)	94	428
OCP as % total capital	0.3%	1.6%
Sensitivity to 100 bps increase in largest non-EUR exposure (USD, in EUR million)	0.6	3.2

Operational (non-financial) risk

This section provides information on:
- Operational (non-financial) risk management
- Specific operational (non-financial) risk areas
- Operational (non-financial) risk measurement
- CER materiality assessment
- Review of 2022 results

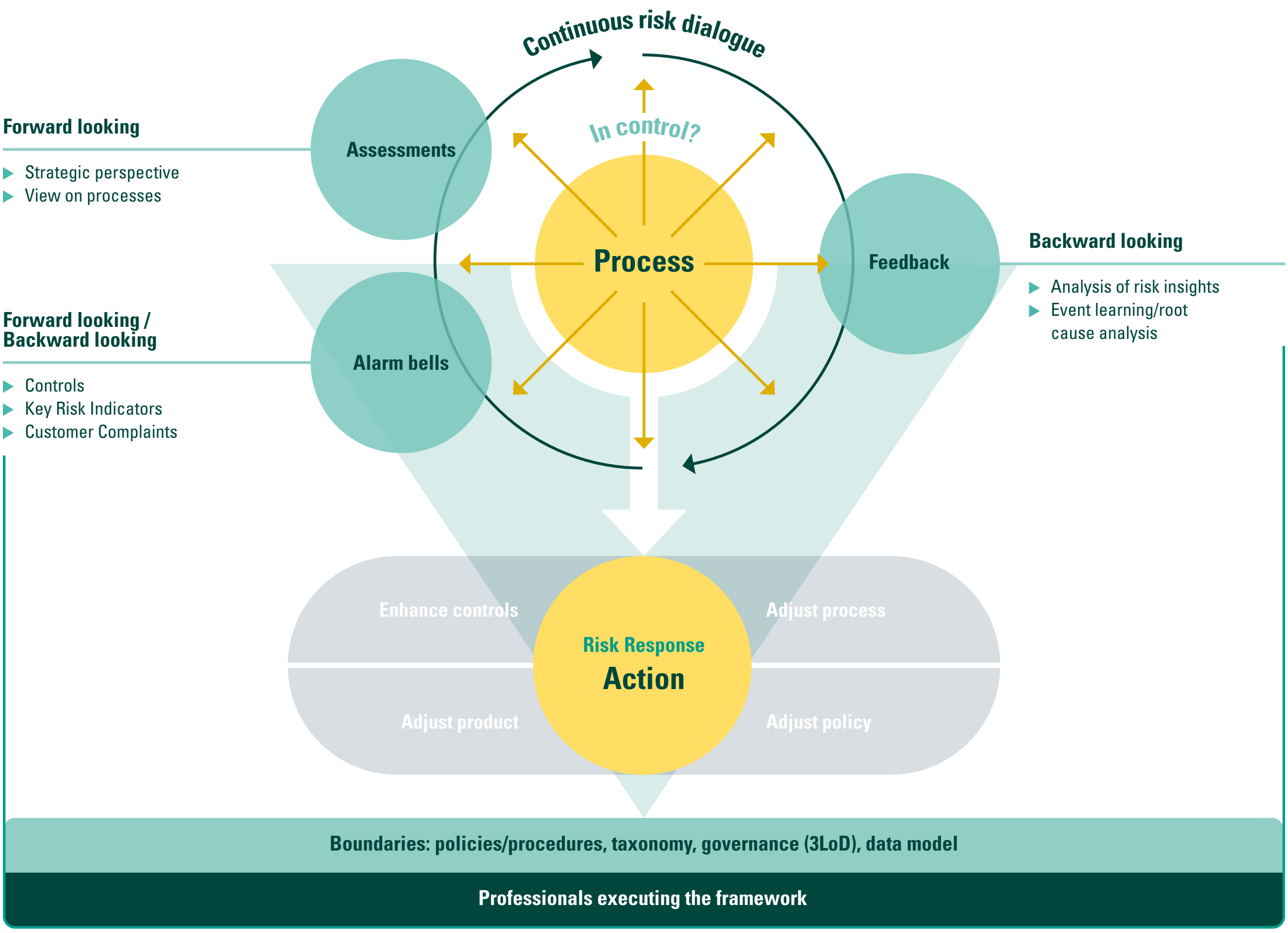
Operational (non-financial) risk management

Non-financial risks (NFR) refer to the category of risks that could result in loss due to inadequate or failed internal processes, people and systems or due to external events. This definition is in line with the definition applied by the Basel Committee on Banking Supervision (BCBS).

ABN AMRO has a holistic approach to managing non-financial risks (NFRs), providing the business with a clear and fair view on these risks, their relevance to the bank and how they should be managed. For this purpose, ABN AMRO has in place a framework that enables non-financial risks to be managed within its moderate risk profile. The Information and Operational Risk Management (I&ORM) department with ABN AMRO sets this framework for the bank in line with applicable rules and regulations. The main components of the framework are shown in the following diagram.

Framework for operational (non-financial) risk

Continuous risk dialogue



Operational (non-financial) risk types				
Compliance Risk	Data & Processing Risk	Information Risk	Change Risk	Fraud Risk
Legal Risk	HR Risk	Tax Risk	Model Risk	Behavioural Risk

Framework for operational (non-financial) risk management

We deploy our NFR Framework to make sure that we stay in control of all the bank's NFRs and adhere to existing laws and regulations relevant to NFRs. ABN AMRO's NFR Framework may be partly described as a toolkit of assessments, alarm bells and feedback. The bank itself may also be understood as a collection of processes. For that reason processes are at the heart of the NFR framework, but processes and tools are not enough. We rely on professionals to execute the NFR framework, especially in a continuous dialogue about risks. The activities performed in executing the NFR Framework are contextualised by boundaries established through a range of NFR policies and procedures, a taxonomy of material risks, roles and responsibilities for professionals working according to 3LoD model practices and behaviours as well as data management systems.

Assessments are conducted to identify non-financial risks and assess risk exposures. They are performed either periodically or can be initiated when concerns arise, for example as a result of changes in internal processes or developments in the outside environment that pose risks to strategic priorities. We also rely on alarm bells from both internal and external sources such as the effectiveness of the internal control environment, the status of key risk indicators (KRIs) relative to established risk thresholds and complaints from our clients to understand what actions are necessary to further mature the efficacy of the NFR Framework. Despite preventive measures being in place, incidents and operational losses are inherent to our business. ABN AMRO systematically tracks and analyses these events as part of feedback mechanisms that enable us to learn from operational failures and use them as early warnings. We also scan external developments and identify emerging risks for further assessment.

During our continuous risk dialogues, risk professionals from the first (1LoD) and second (2LoD) Lines of Defence evaluate the level of threat from NFRs and determine appropriate responses to keep control. Our risk professionals combine relevant internal data (e.g. scale of changes to processes), external data (e.g. climate science) and professional judgement to come to a holistic risk view. Once NFR exposures are agreed upon by 1LoD and 2LoD, and evaluated against risk thresholds, an appropriate risk response can be implemented. Common risk responses include enhancing controls by expanding coverage to capture new and evolving areas of risks as well as adjusting processes to reduce opportunities for errors.

The results of the executed risk dialogues as per the NFR framework are provided in risk reports at various levels within the bank, up to the Executive Board and Supervisory Board. This enables senior management to steer the bank's overall profile of NFRs.

Specific operational (non-financial) risk areas

ABN AMRO defines ten (10) non-financial sub-risk types (see below) as well as an overall NFR generic category, which provides a holistic profile of non-financial risks. The bank has in place dedicated functional areas with specific knowledge and expertise to deal with each material type of NFR. The NFR risk category and individual non-financial risk types are governed by the broader Enterprise Risk Management approach to ensure that structured, coherent, systematic and consistent risk management processes are applied throughout the 3LoD of the bank.

Compliance Risk

Compliance risk is defined as the risk of failure to comply with laws and regulations, self-regulatory organisational standards, company values and business principles, codes of conduct or generally accepted market standards applicable to ABN AMRO's services and activities. Non-compliance can result in legal or regulatory sanctions, material financial loss and/or harm to ABN AMRO's reputation.

ABN AMRO must continuously live up to regulatory expectations and obligations. The bank is expected to act as a gatekeeper in detecting financial and economic crime, to fulfil its obligations arising from its duty of care towards clients, and to address and incorporate key topics such as privacy and sustainability in the bank's strategy and compliance programmes.

An effective Compliance Function, culture and compliance programme are essential for ABN AMRO's license to operate and for protecting the banks' integrity and reputation.

In 2022, ABN AMRO focused on further enhancing the role of the Compliance Function as a servant leader with countervailing power and embedding future-fit management of compliance risks to contribute to building a personal bank in a digital age.

Data & Processing Risk

In 2022, ABN AMRO continued to focus on improving the quality and availability of data. This included making investments to upgrade data management capabilities that support its ambition to become a data-driven bank and achieve its overall strategy. In the current age, data not only provides commercial competitiveness but is of growing importance from risk management and regulatory compliance perspectives. In particular, structured and systematic data risk oversight contributes to effective risk management for the bank by enabling faster and more informed decision-making at every level within the organisation. Enhancement of our data risk management function to support and mature the overall in-control objective for data risks will continue to be of high priority to ABN AMRO going forward.

Business continuity management

Business continuity management (BCM) ensures organisational resilience at all levels within ABN AMRO. It focuses on setting up and maintaining ABN AMRO's crisis management capability (i.e. framework, process, tooling, people) to enable the organisation to remain well-prepared and sufficiently responsive in the face of severe threats. Our business continuity management capabilities proved effective in 2022, when we were faced with the Russian-Ukrainian war and the Covid-19 pandemic.

Our key tasks in continuity management include the following:

- Scanning the operating environment for threats that could trigger a calamity and/or crisis;
- Analysing threats and the business impact of a (potential) calamity and/or crisis;
- Determining the strategies and solutions to be applied in the event of a calamity and/or crisis – such as emergency management, business recovery, crisis management and IT disaster recovery planning – to ensure the safety of our employees, clients and visitors, and to enable continuity of business operations;
- Documenting, periodically assessing and testing these strategies and solutions.

Mitigations are in place to prepare for and deal with incidents and crises threatening the continuity of critical business processes. These mitigations include business continuity plans, crisis management, business relocation plans and IT disaster recovery plans. We also perform evaluations and root cause analyses on incidents and implement lessons learned. Equally importantly, we carry out forward-looking analyses to prepare for evolving threats such as those related to climate change where data and methodologies from climate science are increasingly incorporated into our risk assessments on critical infrastructure, such as our data centers.

Physical security is an important pillar of continuity management. ABN AMRO's Physical Security Policy (PSP) enables a fit-for-purpose framework that safeguards people, information, buildings and company assets against damages and disruptions. We operate a multidisciplinary approach by combining insights from key areas such as Business Continuity Management, Security & Integrity Management, HR/Workplace Management, Corporate Information Security and client units.

The PSP includes governance procedures that distribute roles and responsibilities across various internal departments, branches, (critical) corporate buildings and foreign offices with the aim of coordinating (complex) physical security issues such as events associated with chronic or acute climate change. Evaluations such as physical security risk assessments are regularly executed on data centers, (critical) corporate buildings and sites in the Netherlands and abroad. ABN AMRO did not experience any material financial loss due to extreme weather linked to climate change in 2022.

Information Security

Information is one of the bank's most valuable assets. Given that our clients rely increasingly on digitalisation and online banking, proper functioning of the bank's IT systems is crucial. These systems run in complex information infrastructures, connecting the bank's networks to public networks. Banking processes and their supporting information systems are therefore inherently vulnerable to threats to the security of client data and services. Examples of such threats include social engineering and phishing, computer-assisted fraud, unauthorised disclosure of confidential information, virus infections and ransomware, and distributed denial of service attacks (DDoS).

In recognition of the vital importance of protecting its information, systems and infrastructure at all times, ABN AMRO has established a structured IT risk management approach to ensure the confidentiality, integrity and availability of information. This approach defines the organisational framework, management and staff responsibilities, and the information security directives that apply to ABN AMRO, its vendors and third parties with whom the bank exchanges information.

In line with the bank's strategy, the IT transformation continued in 2022 through the adoption of cloud services and DevOps ways of working. These were accompanied by improvements to safeguard ABN AMRO's overall security position and to foster security by design. We also increased our efforts to keep pace with evolving cyber threats such as phishing and ransomware, while ensuring regulatory compliance. Our improved defences against Distributed Denial of Service (DDoS) proved to be effective throughout 2022, thus helping to mitigate attacks and limit disruption for our clients. We will continue to make investments geared toward ensuring overall stability of our digital payment services and strengthening the effectiveness of our risk and control framework.

Change Risk

Change is fundamental to ABN AMRO's strategy and a key factor in its desire to succeed as a personal bank in a digital age. It is crucial to be agile and adaptable to achieve our client-centric approach. Responding to change is what makes us commercial, progressive and entrepreneurial. During 2022 we continued to implement a wide range of change programmes as part of our strategy execution. Many of these change programmes are instrumental to resolving weaknesses (e.g., data management) identified within the bank. Still, our relatively large change portfolio plus their interdependencies tend to result in inherent (change) risks such as errors arising from failing to properly adjust corresponding controls when products, processes or internal structures are adjusted. We continue to further mature our change management framework by working towards reducing complexity in our change portfolio and emphasising stronger prioritisation and execution.

Fraud Risk

Fraud is a complex phenomenon with increasing impact on society, ABN AMRO and its clients. It can arise from internal or external events and result in financial loss, reputational damage and/or regulatory fines. ABN AMRO has classified fraud risk as a formal risk type within its risk taxonomy. In collaboration with the business and other relevant stakeholders, the dedicated risk type owner implements the fraud risk framework to enable the bank to manage fraud risks. In 2022, the focus of the fraud risk framework was on defining the fraud risk appetite statement, formalising roles and responsibilities within the risk governance, further developing the existing control framework, improving fraud management information and integrating fraud risk reporting within bank-level risk reporting. These efforts will continue in 2023.

It is important to note that ABN AMRO has a zero-tolerance policy for fraud. However, this is an ongoing challenge partly due to the increased sophistication of fraudsters coupled with digitalization of our banking services. In 2022, the number of victims of fraud increased. The most frequent modus operandi observed by ABN AMRO for external fraud were impersonation-, debit- and credit card- and invoice-fraud. In some instances, ABN AMRO itself was the victim of credit fraud where fraudulent documents were used for the purpose of credit applications. With regards to internal fraud the bank continuously monitors and assesses fraud risks related to employee fraud and bribery and corruption risk. In 2022, given the developments in the Ukraine-Russia conflict insider threat has increased. In response to insider threat the bank started developing an insider threat framework that will also continue in 2023.

ABN AMRO continues its efforts in 2023 to strengthen the fraud resilience of its clients and its employees to manage financial, emotional and reputational impact. Key actions included the following:

- **Developing and executing the fraud risk management framework:** The implementation of the fraud risk framework aims to put in place fraud risk management processes and controls wherein (emerging) fraud risks are continuously identified, assessed, measured, responded to, monitored and reported. Examples of the bank's fraud response measures taken in 2022 included the option that enables clients to (temporarily) lock savings accounts (to prevent fraudsters direct access to these accounts) and the introduction of in-app banners to warn customers for potential fraudulent situations.
- **Awareness:** To increase fraud awareness and employee resilience, ABN AMRO has in place a continuous integrity and compliance programme, as well as a bank-wide Code of Conduct. To encourage employees to report such things as corruption and suspicious or fraudulent behaviour, the bank maintains its Speak-Up programme, of which the whistle-blowing procedure is a part.
- **Expertise:** In order to monitor and assess fraud and emerging fraud risks ABN AMRO employs dedicated resources for investigations, fraud risk analyses, mitigation, reporting and prevention.
- **Public private partnerships:** ABN AMRO is cooperating with public and private institutions and authorities in order to counter online frauds and scams. Existing initiatives, such as the Electronic Crimes Taskforce (ECTF) and the Landelijk Meldpunt Internet Oplichting (LMIO), have proven their value in this respect.

ABN AMRO is also taking part in an initiative led by the Ministry of Justice and Security to implement a governance framework that focuses on mobilising all public and private partners to take joint responsibility for countering fraud. This is called the integrated approach and its priorities are data-sharing, designing and executing interventions, victim support and prevention.

Legal Risk

ABN AMRO considers legal risk to be any risk of financial loss or reputational effects that is the result of:
- uncertainty in the applicability, enforceability and interpretation of contracts, laws and regulations,
- the failure (or assumed failure) by the bank and/or any third party to comply with statutory, contractual or regulatory obligations or "best practices", or
- uncertainty about the outcome of legal actions against or initiated by the bank (including judicial proceedings/ litigation).

The following considerations could be taken into account:
- ABN AMRO acknowledges the fact that especially in a globalised business environment, there may not always be a clear set of legal rules and that ABN AMRO may be confronted with an abundance of legal requirements as well as a lack of legal clarity. Legal obligations may be unclear, opaque, conflicting, and can arise retroactively.
- Furthermore, rules and regulations may be interpreted and applied outside the original intention of the legislator by regulators or under case law.
- Rules and regulations which are not directly binding upon parties involved or third parties, such as resolutions, recommendations, best practice documents etc., issued by authorities and other governmental or non-governmental bodies emerge and may have a de facto force which may go beyond formal laws and regulations.
- Finally, extraterritorial reach of certain national laws increases the complexity of complying with all these many layers, types and forms of rules and regulations.

HR Risk

Human Resource (HR) risk is the risk that ABN AMRO is unable to develop, retain and attract the required critical skills/talents and diverse workforce to realise its strategic targets. Internally, we distinguish HR risks related to discrimination, employee relations, personal health & safety, remuneration and suitability. Adverse developments in these areas can potentially compromise the bank's viability. For this reason, management of HR risk is fundamental for the bank to achieve its strategic, business, operational, compliance and reputational objectives.

Tax Risk

Tax risk is the risk of unexpected tax charges, including interest and penalties. It also is the risk of being engaged in tax-related events resulting in, for example, a damaged reputation with the tax authorities, investors, employees and the general public. This can occur both in relation to the bank's own behaviour, products or solutions as well as with regard to the tax integrity of our clients. See section on Responsible Tax in the Integrated Annual Report for more details on how ABN AMRO deals with this risk.

Model Risk

Models are developed and applied to quantify the risk for most of the risk types listed in ABN AMRO's risk taxonomy. We define model risk as the potential for adverse consequences from decisions based substantially or partly on incorrect output of models, and due to errors in the development, implementation or use of such models. This definition is in line with the EU Capital Requirements Directive (CRD). To monitor and mitigate risks arising from the use of these models, the model risk management (MRM) department acts as the second line of defence. As an independent department, MRM sets the framework for the bank in line with regulatory requirements for model risk and independently validates models before they can be used. For this purpose, ABN AMRO has in place independent model validation standards and procedures as part of its model risk management framework. MRM also reports to Senior Management on the status of model risks in ABN AMRO and facilitates finding solutions to critical deficiencies.

Behavioural Risk

ABN AMRO designated behavioural risk as a material risk type in 2021. Behavioural risk management aims to safeguard an enabling and supportive work environment. It does not hinder but rather empowers employees to execute our strategy, take sound risks and act in line with our purpose, core values and Code of Conduct.

Behavioural risk is considered an internal causal factor of other ABN AMRO risk types. It is defined as the risk that actions, decisions and behaviours by ABN AMRO

CER materiality assessment

In 2022, we assessed the materiality of climate-related and environmental risk in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for operational (non-financial) risk are summarized below.

	Climate Risk		Environmental Risk	
	Physical risk	Transition Risk	Physical risk	Transition risk
Operational (non-financial) risk	✔	✔	✔	✔

(collectively), or by employees (as a group or individually) lead to detrimental or poor outcomes for clients, employees, society and/or ABN AMRO, and/or; ABN AMRO fails to maintain high standards of market behaviour and integrity, and/or; ABN AMRO fails to maintain the high expectations of clients, society and other stakeholders with regard to the integrity of our business.

In 2022, behavioural risk was implemented and embedded in ABN AMRO's enterprise risk management cycles. Tools and processes to identify, measure, report and monitor the level of behavioural risk were designed in the organisation. We mitigated identified risks by conducting analysis of (organisational) root causes for undesired behaviours and non-compliance and delivering effective interventions to behavioural change.

Operational (non-financial) risk measurement

In line with the Advanced Measurement Approach (AMA), the bank has in place an internally developed model to define the own funds required in relation to non-financial risks (i.e. operational risk capital). The AMA model estimates potential losses for non-financial risks (annually aggregated) by combining forward-looking and backward-looking views on risk events.

Specifically, risk assessments and scenario analyses provide a forward-looking view. Experts use these tools to build scenarios to evaluate future risks and estimate the severity of potential losses that could occur. The resulting estimates are used as data input for the model. In these scenarios, experts take into consideration the quality of the bank's control environment, its processes, systems and people, as well as external circumstances and changes that may have an influence. The ongoing relevance of the estimations (and hence of the capital) is safeguarded by reviewing the scenarios at regular intervals as well as when major changes occur in the bank's risk profile.

Alongside these expert-based estimations, the model also uses historical loss data of ABN AMRO and the banking industry. Historical loss data are included as these are assumed to provide some level of predictive information about future losses.

Reputational and liability effects arising from developments in climate and environmental risks were qualitatively assessed and found to be material. For example, industry-wide concerns relating to the speed of executing climate strategies, compliance with specifics regulations, duty of care to clients impacted by transition risks and/or green washing in product propositions are material drivers of potential reputational and liability effects for ABN AMRO. Data and insights are therefore continuously being developed, with the aim of improving quantification in 2023.

For the impact of climate physical risk on business continuity management a further quantitative analysis was performed.

Climate physical risk

We investigated how climate-related hazards together with ABN AMRO's exposures and vulnerabilities interact to manifest in physical risks to our critical infrastructure. The focus of the analysis was to establish financial impacts and enhance internal knowledge of the transmission mechanisms and potential effects of climate risks in the Non-Financial Risk (NFR) domains.

As the assessment showed, ABN AMRO's critical physical infrastructure (e.g. data centers) face threats from natural hazards (e.g. floods) that could potentially impact bank-wide business continuity. This was unsurprising, given that water-related threats are characteristic of the Netherlands. However, the inherent flood-risk profiles of ABN AMRO's critical infrastructure varied because of differences in location, elevation, construction and internal layout. Based on available flooding estimates for the Netherlands for 2050, the assessment estimated that a flood of 50 cm or higher could be impactful to one critical physical infrastructure (i.e. a data center). Although the expected financial costs would be less than 1% of profits, this was significant in a context of historically negligible losses from CER-related events.

Risk mitigations are planned, including a repeat of the extended analysis designed to overcome data integrity issues linked outdated data on flooding scenarios for the Netherlands. In the interim, ABN AMRO has upgraded the requirements to lengthen the time horizon of its business continuity risk assessments (BRCA) to climate-sensitive periods (e.g. looking ahead 30 years). In addition, the bank will investigate possibilities to reconfigure the internal layout for the most at-risk infrastructure.

Review of 2022 results

ABN AMRO uses a holistic approach to managing operational (non-financial) risks, considering capital, losses and the effectiveness of the control environment.

Capital for operational (non-financial) risk

The level of capital under the Advanced Measurement Approach (AMA) is derived from the results of the model calculations. For non-financial risks, ABN AMRO applies a 99.95% confidence level to the annually aggregated losses when calculating economic capital (EC), whereas a 99.9% confidence level is applied to calculate regulatory capital (RC/RWA). The adequacy of the capital levels is monitored on a quarterly basis; if issues occur – for example, regarding the reliability of data – add-ons can be applied.

Risk Weighted Assets (RWA) for operational (non-financial) risk based on AMA calculations remained relatively stable at EUR 16 billion for 2022. ABN AMRO's current operational risk capital level (measured against the bank's gross income) also remained in line with that of peer banks with a moderate risk profile (based on ORX benchmark data).

Losses related to operational (non-financial) risks

Operational losses related to non-financial risks include direct losses, as well as provisions for legal claims. Operational losses are reported according to event categories such as External Fraud; Internal Fraud; Clients, Products & Business Practices; Execution, Delivery & Process Management; Employee Practices & Workplace Safety; Disaster & Public Safety, and Technology & Infrastructure Failures.

A net operational loss of EUR 162 million was recorded in 2022. This was mainly attributable to the event category of Clients, Products & Business Practices, and predominantly (almost 90%) to provisions formed for a compensation scheme for clients who previously paid too much interest on revolving consumer credits. The categories of Execution, Delivery & Process Management (e.g. processing errors) and External Fraud were the other notable contributors to overall losses.

Effectiveness of the control environment

A robust risk control framework is a fundamental element of ABN AMRO's risk management system. This requires the bank to continuously adapt its risk control framework to changes in both the internal and external environment to ensure it has well-designed and operationally effective controls. Throughout 2022, ABN AMRO focused intensely on improving the control environment across the bank through initiatives such as the Risk Control Framework (RCF) improvement programme and Risk Fit professional training. It particularly targeted efforts to improve the control environment in high-priority processes in credit, compliance and information security. Although improvements were recorded, challenges remain in these high-priority areas. Nevertheless, the overall bank-level control effectiveness improved in 2022 relative to 2021, with most controls proving effective.

Funding & liquidity

This section provides information on:
- Liquidity risk management
- Funding strategy
- Risk management approach
- Going-concern management
- Contingency risk management
- CER materiality assessment

Liquidity risk is the risk that actual and potential payments or collateral posting obligations cannot be met on a timely basis, or only at excessive costs. There are two types of liquidity risk:
- Funding liquidity risk is the risk of not being able to accommodate both expected and unexpected current and future cash outflows and collateral needs because insufficient cash is available. Eventually, this can affect the bank's daily operations or its financial condition;
- Market liquidity risk is the risk that the bank cannot sell an asset in a timely manner at a reasonable market price due to insufficient market depth (insufficient supply and demand) or market disruption. Market liquidity risk includes the sensitivity in liquidity value of a portfolio due to changes in the applicable haircuts and market value. It also concerns uncertainty about the time that would be needed to liquidate assets in periods of stress.

Framework

Liquidity risk management

We have in place a liquidity risk management framework that helps us maintain a moderate risk profile and safeguards the bank's reputation from a liquidity perspective. This framework enables us to meet regulatory requirements and payment obligations at a reasonable cost, even under severely adverse conditions. A set of liquidity risk metrics and limits help manage the liquidity position. By maintaining a smooth long-term maturity profile, managing dependence on wholesale funding and holding a solid liquidity buffer in our main currencies, we maintain a prudent liquidity profile. The liquidity position is monitored on a daily basis.

Funding strategy

Our main source of funding is our strong client deposit base. The remainder of our funding is raised largely through various types of long-term and short-term wholesale funding instruments. Our wholesale funding strategy targets a moderate risk profile with a stable and diversified funding mix that reflects the composition of our loan book. This strategy aims to optimise the bank's funding sources in order to maintain market access and the targeted funding position with a diverse, stable and cost-efficient funding base. The maturity profile of wholesale funding is optimised to avoid a concentration of outflows and to control repricing risks. The funding strategy takes into account the following guidelines:
- Maintain market access by diversifying funding sources in different funding markets (Europe, the US and the Asia-Pacific region);
- Continually monitor attractive funding opportunities and maintain strong relationships with the investor base through active marketing;
- Optimise the balance between public benchmark deals and private placements;
- Optimise funding costs within the targets set for volumes and maturities and manage credit curves in different instruments and currencies;
- Optimise the planning and execution of funding in different market windows and currencies.

Risk management approach Audited

The natural maturity mismatch between our loan book and funding portfolio requires liquidity risk management. We consider maturity transformation to be an integral part of the business model, which is why we closely monitor our liquidity position and the resulting risks. We hold a portfolio of highly liquid assets that can be converted into cash in the event of unforeseen market disruptions, allowing us to meet payment and collateral obligations at all times. Funding and liquidity risk are managed centrally. We incorporate liquidity costs into the pricing of our day-to-day business activities. In managing these risks, a clear distinction is made between going-concern and contingency risk management.

Going-concern management

The most important metrics for going-concern risk management and the management of the day-to-day liquidity position within specified limits are:
- **Stress testing:** in monthly and ad hoc stress tests we evaluate the impact of cash inflows and outflows under plausible stress scenarios. Market-wide as well as bank-specific stress scenarios are defined and analysed. The goal of stress testing is twofold. Firstly, it helps us to review our risk framework, i.e. the liquidity buffer size, risk appetite and risk limits. Secondly, it allows us to identify ways to reduce outflows in times of crisis;
- **Liquidity Coverage Ratio (LCR):** The objective of the LCR is to assess the short-term resilience of the liquidity position by ensuring sufficient high-quality liquid assets to survive a significant stress scenario lasting 30 calendar days;

- **Survival period:** this is the period the liquidity position is expected to remain positive in an internal stress scenario in which wholesale funding markets deteriorate and clients withdraw a material proportion of their deposits;
- **Net Stable Funding Ratio (NSFR):** The objective of this ratio is to assess resilience over a longer time horizon. The NSFR requires banks to hold sufficient stable funding to cover the duration of their long-term assets on an ongoing basis;
- **Loan-to-Deposit ratio (LtD):** The LtD ratio measures the relationship between the loan book (loans and advances customers) and deposits from clients (due to customers), and includes all client-related loans and deposits. The ratio gives an indication of our dependence on wholesale funding for financing client loans.

Contingency risk management

Contingency risk management aims to ensure that, in the event of either a bank-specific or general market stress event, the bank is able to generate sufficient liquidity to withstand a short or long-term liquidity crisis. Contingency risk management entails:

- **Contingency Funding Plan:** this plan sets out the guidelines and responsibilities for addressing possible liquidity shortfalls in emergency situations. This only comes into effect if the liquidity position is threatened or if there are strong indications that liquidity stress is imminent. The Contingency Funding Plan is aligned with the Recovery Plan, as required by the regulators. It enables us to manage our liquidity without unnecessarily jeopardising commercial activities, while limiting excessive funding costs in severe market circumstances;
- **Collateral posting in the event of a rating downgrade:** if our credit rating is downgraded, collateral requirements may increase. We monitor these potential additional collateral postings in the liquidity risk management framework;
- **Liquidity buffer:** Group Treasury manages our liquidity buffer, of which the liquidity portfolio comprises a substantial part. At all times, this portfolio should be highly liquid to accommodate liquidity outflows during stress. The buffer consists of unencumbered, high-quality liquid assets, including government bonds, retained securities (RMBS and covered bonds) and cash.

CER materiality assessment

In 2022, we assessed the materiality of climate-related and environmental risk (CER) in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for liquidity risk are summarized below.

	Climate Risk		Environmental Risk	
Liquidity risk	Physical risk	Transition Risk	Physical risk	Transition risk
	✖	✖	✖	✖

We assessed whether material CER could cause net cash outflows or depletion of liquidity buffers and, if so, incorporate these factors into their liquidity risk management and liquidity buffer calibration. As liquidity risk consists of funding liquidity risk and market liquidity risk, the impact of CER transition risk and physical risk is assessed in both these sub risk categories:

Climate physical risk

- Physical risk on funding liquidity risk: asset value change driven by physical events may affect the bank's funding capacity, such as issuing secured funding. Physical events may lead to potential liquidity outflows, such as increased drawdown of credit lines or accelerated deposit withdrawals, as clients need additional money to finance damage repairs in times of CER events;
- Physical risk on market liquidity risk: as physical risk events are embedded in the country risk ratings we use in our liquidity risk framework, the impact of physical risk on the liquidity buffer is materially limited.

Climate transition risk

- Transition risk on funding liquidity risk: refinancing risk occurs if transition risk affects the bank's access to funding sources. Repricing risk occurs if transition risk negatively impacts the funding costs of non-green issuances in comparison with green issuances;
- Transition risk on market liquidity risk: the overall liquidity value of the liquidity buffer may be affected by transition risk following from differences in the liquidity of green and non-green investments.

Methodology

To assess if the CER risk could have material impact on the liquidity outflow and consequently on the liquidity buffer, the internal liquidity stress test methodology was used to quantify the materiality. Separate CER liquidity stress scenarios and parameters were defined in order to monitor potential liquidity outflows. The stress test covers the entire balance sheet of ABN AMRO, including off-balance sheet positions. To calculate the impact of the CER stress events on the liquidity buffer a number of parameters are required. The following categories were defined:

- Run-off parameters for client deposits;
- Haircuts on the liquidity buffer;
- Additional drawings on credit lines;
- Wholesale funding access;
- Extraordinary cash flows.

The effect of a CER event on each category is assessed, which results in parameters. The final result shows that the outflows based on the CER liquidity scenario parameters are considered minimal compared with the outflows of the regular internal stress test. Therefore, the overall CER impact on liquidity is considered to be immaterial.

Liquidity risk

The objective of our liquidity management is to manage the bank's liquidity position and to comply at all times with internal, regulatory and other relevant liquidity requirements. Various indicators are used to measure the liquidity objectives.

Liquidity risk management

Liquidity risk indicators

	31 December 2022	31 December 2021
Available liquidity buffer (in billions)[1]	103.6	101.5
Survival period (moderate stress)	> 12 months	> 12 months
LCR[2]	143%	168%
NSFR[3]	133%	138%
Loan-to-Deposit ratio	96%	103%

[1] The mandatory cash reserve with the central bank has been deducted from the cash and central bank deposits in the liquidity buffer.
[2] Consolidated LCR based on a 12-month rolling average.
[3] The NSFR is based on the CRR2 regulation since June 2021 and reflects a fixed point in time.

The survival period reflects the period that the liquidity position is expected to remain positive in an internally developed (moderate) stress scenario. This scenario assumes wholesale funding markets deteriorate and clients withdraw part of their deposits. The survival period was consistently above 12 months in 2022. The liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) both remained above 100% throughout 2022.

Loan-to-Deposit ratio Audited

Loans and advances customers decreased to EUR 243.9 billion at 31 December 2022 (31 December 2021: EUR 258.3 billion). Underlying, the loan book increased in most segments. However, this was more than offset by a decrease in other clients loans within Clearing and fair value adjustments related to hedge accounting. Due to customers increased to EUR 255.0 billion at 31 December 2022 (31 December 2021: EUR 251.2 billion). The Loan-to-Deposit (LtD) ratio decreased to 96% at 31 December 2022 (31 December 2021: 103%) reflecting the continued increased trend in client savings over the years, outpacing the growth in the client loan book.

Liquidity buffer composition Audited

(in billions)	31 December 2022 Liquidity buffer	LCR eligible Level 1	LCR eligible Level 2	31 December 2021 Liquidity buffer	LCR eligible Level 1	LCR eligible Level 2
Cash & central bank deposits[1]	58.6	58.6		64.3	64.3	
Government bonds	27.3	25.1	2.4	27.5	31.9	1.1
- of which ESG bonds	*0.8*	*0.8*		*1.0*	*1.0*	
Supra national & Agency bonds	9.1	9.5		6.8	7.4	
- of which ESG bonds	*2.3*	*2.4*		*1.3*	*1.3*	
Covered bonds	2.9	2.5	0.2	2.8	2.6	
- of which ESG bonds	*0.2*	*0.1*		*0.2*	*0.1*	
Retained RMBS and Covered bonds	5.5					
Other	0.1		0.1	0.1		0.1
Total liquidity buffer	**103.6**	**95.7**	**2.7**	**101.5**	**106.3**	**1.2**
- of which in EUR	*89.5%*			*89.6%*		
- of which in other currencies	*10.5%*			*10.4%*		

[1] The mandatory cash reserve with the central bank has been deducted from the cash and central bank deposits in the liquidity buffer.

The liquidity buffer consists largely of cash and deposits at central banks, government bonds and securities. Most of the securities in the liquidity buffer, with the exception of retained covered bonds, qualify for the LCR.
The liquidity buffer faces haircuts based on the market value. These haircuts are used to determine the liquidity value. Haircuts may vary between the liquidity buffer and the LCR eligible buffer as the internal assessment of the liquidity buffer may deviate from the LCR definition.

ABN AMRO wants to increase the green, social and sustainable investments in its liquidity portfolio up to EUR 3.5 billion by the end of 2023. This represents an update to the previous statement made in 2020, in which we focused on green bonds only. Targeted investments are bonds whose proceeds are invested in a sustainability instrument in line with the Green Bond Principles, the Social Bond Principles or a combination of the two. Inclusion of such bonds in the liquidity portfolio is subject to availability of ESG Reporting, a thorough project selection process and sound management of proceeds. To preserve the portfolios high quality and liquidity, these bonds must also meet the high quality liquid assets (HQLA) criteria of the European Banking Authority (EBA). By actively investing in the euro-denominated ESG bond market, ABN AMRO aims to support the growth of this market. The amounts of ESG bonds held in the liquidity portfolio are reported semi-annually. ABN AMRO's current ESG bond holdings amount to EUR 3.2 billion.

Liquidity buffer currency diversification Audited

(in billions, liquidity value)	31 December 2022	31 December 2021
EUR	92.7	91.0
USD	8.2	8.5
JPY	2.5	1.0
GBP	0.2	0.3
Other		0.8
Total	**103.6**	**101.5**

The table above shows the breakdown per currency in the liquidity buffer. The currency composition reflects the composition of the balance sheet, which mainly consists of EUR and USD exposures. The monthly averages of the liquidity buffer are shown in the following table.

Liquidity buffer composition - monthly average Audited

(in billions, liquidity value)	2022	2021
Cash & central bank deposits[1]	67.6	64.6
Government bonds	20.2	29.1
Supra national & Agency bonds	6.5	6.7
Covered bonds	2.5	3.0
Retained RMBS and Covered bonds	0.5	0.7
Other	0.3	0.4
Total	**97.5**	**104.5**

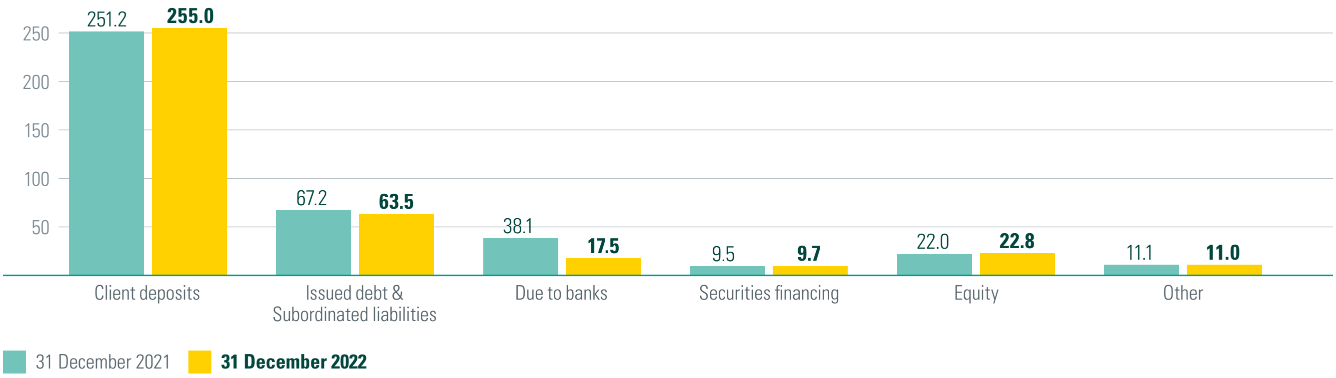
[1] The mandatory cash reserve with the central bank has been deducted from the cash and central bank deposits in the liquidity buffer.

Funding

Liability and equity breakdown Audited

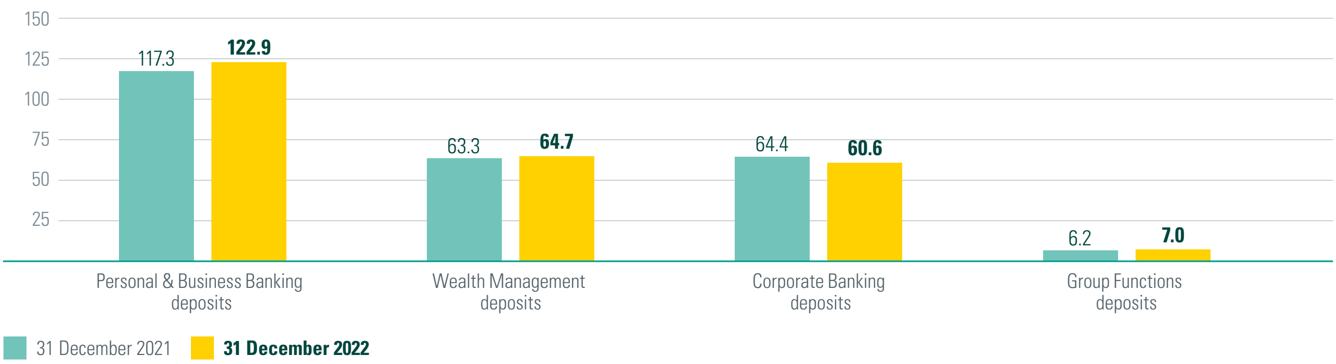
Client deposits are our main source of funding, complemented by a well-diversified book of wholesale funding. The graph below shows the liability and equity breakdown for the full balance sheet. The increase in client deposits reflects a continued increased trend in client savings.

Liability and equity breakdown Audited
(in billions)



The graph below shows the breakdown of client deposits by segment.

Breakdown of client deposits Audited
(in billions)



Available funding instruments Audited

A key goal of the funding strategy is to diversify funding sources. Our funding programmes allow us to issue various instruments in different currencies and markets, enabling us to diversify our investor base. The following table shows a breakdown of total funding instruments.

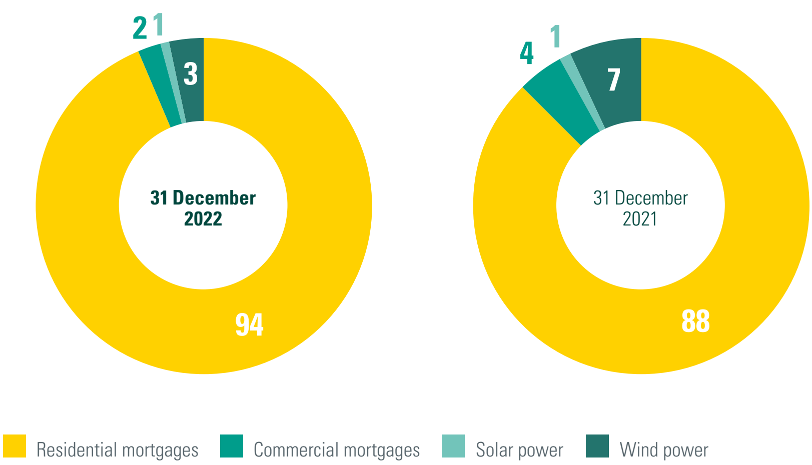
Overview of funding types Audited

(in millions)		31 December 2022		31 December 2021
Commercial Paper/Certificates of Deposit		**14,723**		**9,177**
Covered bonds	23,781		31,338	
Secured funding (long-term)		**23,781**		**31,338**
Senior preferred (medium-term notes)[1]	8,219		13,209	
- of which ESG bonds	*1,385*		*1,995*	
Senior non-preferred	9,536		5,964	
- of which ESG bonds	*4,181*		*1,853*	
Unsecured funding (long-term)		**17,755**		**19,172**
Total issued debt		**56,259**		**59,688**
Subordinated liabilities		7,290		7,549
Wholesale funding		**63,550**		**67,236**
Other long-term funding[2]		14,274		35,221
Total funding instruments[3]		**77,823**		**102,457**
- of which matures within one year		*32,420*		*18,419*

[1] Includes Senior preferred instruments only.
[2] Includes TLTRO funding (recorded in due to banks) and funding with the Dutch State as counterparty (recorded in due to customers).
[3] Includes FX effects, fair value adjustments and interest movements.

Total funding instruments decreased to EUR 77.8 billion at 31 December 2022 (31 December 2021: EUR 102.5 billion), mainly driven by the partial repayment of TLTRO III. Total issued debt decreased to EUR 56.3 billion at 31 December 2022 (31 December 2021: EUR 59.7 billion). The decrease reflects a decline in covered bonds. This was driven by a decline in market value and senior preferred funding, driven primarily by redemptions. This was partly offset by an increase in senior non-preferred funding. Subordinated liabilities decreased to EUR 7.3 billion at 31 December 2022 due to fair value adjustments (31 December 2021: EUR 7.5 billion). Senior non-preferred funding was issued in order to meet increasing MREL requirements from RWA increases. Other long-term funding decreased to EUR 14.3 billion at 31 December 2022 due to a repayment of EUR 21.0 billion of TLTRO III (31 December 2021: EUR 35.2 billion). Total green bonds outstanding increased to EUR 5.6 billion at 31 December 2022, which is 10% of total issued debt (31 December 2021: EUR 3.8 billion). In order to keep investors updated, our Green Bonds Framework determines a set of criteria applicable to issues of green bonds, including how we allocate the issue proceeds from green bonds to eligible assets, the evaluation and selection of eligible assets, independent assurance on the allocation of proceeds to eligible green assets, and the external reporting requirements. Green bonds have been issued since 2015, with a focus on sustainable real estate and renewable energy. These bonds enable investors to invest in, for example, energy efficiency through residential mortgages, loans for solar panels on existing homes, sustainable commercial real estate and wind energy. The allocation of green proceeds at 31 December 2022 is published on the ABN AMRO website.

ESG bonds, allocation of use of proceeds (year-end 2022)
(in %)

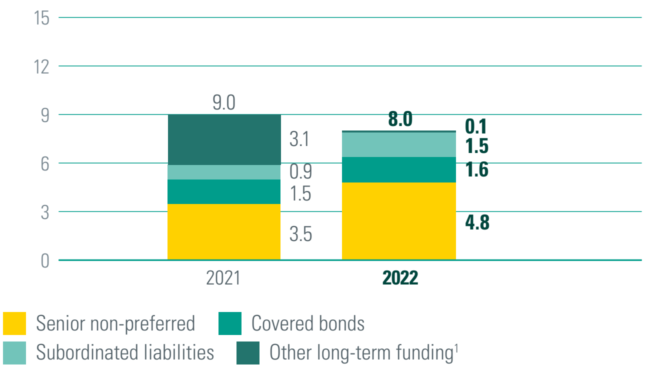


Funding issuance in 2022 Audited

Total long-term funding raised in 2022 amounted to EUR 8.0 billion. This included EUR 1.6 billion of covered bonds, EUR 1.5 billion of subordinated liabilities and EUR 4.8 billion of senior non-preferred funding. The total TLTRO III participation at 31 December 2022 was EUR 14.0 billion. Capital instruments are excluded in the long-term funding overview and included in the capital section, which provides a complete overview of all outstanding capital instruments.

Long-term funding raised in 2022 and 2021 Audited

(notional amounts at issuance, in billions)

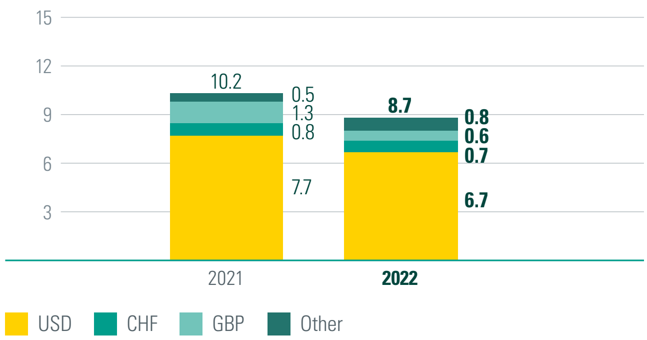


[1] The issuance of the EUR 1.0 billion of additional Tier 1 capital instrument is excluded from the graph above. An overview of the Capital instruments is provided in the Capital section.

Long-term wholesale funding in non-euro currencies declined to 15.7% of total outstanding long-term wholesale funding, compared with 18.3% at 31 December 2021. In 2022, the bank raised its long-term wholesale funding in euros and dollars. The diversification of the outstanding long-term funding in non-euro currencies is shown in the following graph.

Non-euro currency diversification of total outstanding long-term funding Audited

(in billions)



Maturity calendar Audited

We target a maturity profile where redemptions of funding instruments are well spread over time. The average remaining maturity of newly issued wholesale funding decreased to 9.4 years at year-end 2022 (11.2 years at year-end 2021), not taking into account other long-term funding. The average remaining maturity of outstanding long-term funding increased to 5.7 years at year-end 2022 (up from 4.2 years at year-end 2021). The maturity calendar assumes redemption on the earliest possible call date or the legal maturity date, which does not mean that the instruments will be called at the earliest possible call date. Early redemption of subordinated instruments is subject to approval by the regulator.

Maturity calendar Audited

												31 December 2022
(notional amounts, in billions)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	≥ 2033	Total
Covered bonds	2.0	1.8	0.5	1.6	0.6	0.7	0.4	1.9	3.1	2.2	13.4	28.2
Senior preferred	2.4	1.8	3.0	0.8	0.2	0.1		0.1	0.2		0.1	8.6
Senior non-preferred			1.3	0.7	2.0	0.9	1.0	1.3		0.8	3.1	10.9
Subordinated liabilities	2.5		1.4	0.9	1.5				1.2			7.6
Other long-term funding[1]	11.0	3.0		0.3	0.2							14.5
Total long-term funding	**17.9**	**6.6**	**6.1**	**4.4**	**4.5**	**1.6**	**1.4**	**3.2**	**4.5**	**3.0**	**16.6**	**69.8**

												31 December 2021
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	≥ 2032	Total
Total long-term funding	8.9	38.8	6.6	6.1	4.3	2.2	1.6	1.4	2.0	4.4	15.1	91.4

[1] Other long-term funding includes Targeted Longer-Term Refinancing Operations (TLTRO) III and funding with the Dutch State as counterparty.

Capital

Capital management strategy

The primary objective of the bank's capital management strategy is to ensure that capital adequacy requirements are met at all times and that sufficient capital is available to support the bank's strategy. Capital is a necessary resource for doing business and defines the bank's commercial possibilities. The balance between available and required capital is managed centrally to optimise the use of available capital. The basis of the capital management strategy is the bank's risk appetite and its business plans. Other important factors of managing the capital position are expectations and requirements of external stakeholders (such as regulators, investors, shareholders, equity analysts, rating agencies and clients), the bank's position in the market, market developments, contingent capital needs and the feasibility of capital management actions. Although ABN AMRO manages its capital centrally, the group companies are sufficiently capitalised to comply with all local regulatory solvency requirements and to meet any local business needs. ABN AMRO's banking activities are carried out by legal entities that are part of the bank's fiscal unity. Apart from prevailing statutory and regulatory legislation, there are no specific material impediments for prompt transfer of the bank's regulatory capital.

Dividend policy and Capital Framework

The bank's dividend policy takes into account matters including current and pending regulatory capital requirements, our risk profile, growth in commercial activities and market factors. The dividend payout is determined in light of the bank's moderate risk profile and regulatory changes and to ensure that dividend payments can be maintained in the future.

From 2021 onwards, the dividend payout has been set at 50% of reported net profit, after deduction of AT1 coupon payments and minority interests. Interim dividends will be considered at 40% of the reported H1 net profit, provided profit is expected to be sustainable throughout the year, at the discretion of the Board.

Our CET1 capital target ratio is 13% under Basel IV. When our Basel IV CET1 ratio is above the threshold of 15%, we will consider share buybacks, subject to conditions and regulatory approval. Our threshold of 15% reflects current uncertainties, as well as a buffer for potential M&A.

Any distribution of dividend remains discretionary, and ABN AMRO may propose deviations from the above policy.

Capital measurement and allocation

Capital adequacy is measured and monitored on an ongoing basis against target capital ratios, which are derived from the bank's overall risk appetite and strategy. Capital projections and stress test scenarios, both market-wide and bank-specific, are used to ensure that actual and future capital levels remain above the targets. Capital is allocated to businesses in a way that optimises the long-term value of the bank while serving the bank's strategic objectives. In the capital allocation process, both risk-based and non-risk-based return parameters are considered, taking into account economic and regulatory capital requirements. This process ensures that the bank meets its return targets while maintaining a moderate risk profile in line with its risk appetite.

Contingency capital management

Contingency plans are in place to address any capital issues arising. The Contingency Capital Plan provides a framework for detecting capital adequacy stress by setting out various early warning indicators. The plan also sets out a range of actions that can be undertaken, based on the level of severity and urgency of the issues.

Recovery and resolution planning

The Bank Recovery and Resolution Directive (BRRD) requires a recovery plan and a resolution plan to be in place. ABN AMRO submitted a reviewed and updated version of its bank recovery plan to the ECB in December 2022. The Single Resolution Board (SRB) has prepared a resolution plan, in which it concluded a Single-Point-of-Entry as the preferred resolution strategy, with ABN AMRO Bank N.V. as the resolution entity and bail-in is the preferred resolution tool.

Capital structure

Regulatory capital structure Audited

(in millions)		31 December 2022		31 December 2021
Total equity (EU IFRS)		**22,814**		**21,999**
Cash flow hedge reserve		946		1,540
Dividend reserve		-601		-573
AT1 capital securities (EU IFRS)		-1,985		-1,987
Share buyback reserve		-500		-500
Regulatory and other adjustments		-1,167		-1,273
Common Equity Tier 1		**19,507**		**19,206**
AT1 capital securities (EU IFRS)		1,985		1,987
Regulatory and other adjustments		-3		-5
Tier 1 capital		**21,489**		**21,188**
Subordinated liabilities (EU IFRS)	7,290		7,549	
Regulatory and other adjustments	-1,842		-2,413	
Tier 2 capital		**5,449**		**5,136**
Total regulatory capital		**26,938**		**26,324**

Regulatory capital flow statement Audited

(in millions)	2022	2021
Common Equity Tier 1 capital		
Balance at 1 January	**19,206**	**19,548**
Addition of net profit attributable to owners of the parent company	1,868	1,231
Reserved dividend	-601	-573
Interim dividend paid	-287	
Other, including regulatory adjustments	-678	-999
Balance at 31 December	**19,507**	**19,206**
Additional Tier 1 capital		
Balance at 1 January	**1,982**	**1,982**
Newly issued Tier 1 eligible capital instruments		
Redeemed Tier 1 eligible capital instruments		
Balance at 31 December	**1,982**	**1,982**
Tier 1 capital	**21,489**	**21,188**
Tier 2 capital		
Balance at 1 January	**5,136**	**4,664**
New issued Tier 2 eligible capital instruments	1,524	879
Redeemed Tier 2 ineligible capital instruments	-996	-278
Other, including regulatory adjustments	-216	-129
Balance at 31 December	**5,449**	**5,136**
Total regulatory capital	**26,938**	**26,324**

MREL

(in millions)	31 December 2022	31 December 2021
Regulatory capital	26,938	26,324
Other MREL eligible liabilities[1]	11,827	6,568
Total MREL eligible liabilities	**38,765**	**32,893**
Total risk-weighted assets	128,593	117,693
MREL	30.1%	27.9%

[1] Other MREL eligible liabilities consists of subordinated liabilities that are not included in regulatory capital.

RWA Audited

(in millions)	31 December 2022	31 December 2021
Credit risk	**110,621**	99,976
- of which standardised	*10,203*	*9,946*
- of which advanced	*100,418*	*90,030*
Operational risk	**15,967**	16,049
- of which standardised	*533*	*604*
- of which advanced	*15,434*	*15,444*
Market risk	**2,005**	1,668
- of which standardised	*2*	*6*
- of which advanced	*2,003*	*1,662*
Total RWA	**128,593**	**117,693**

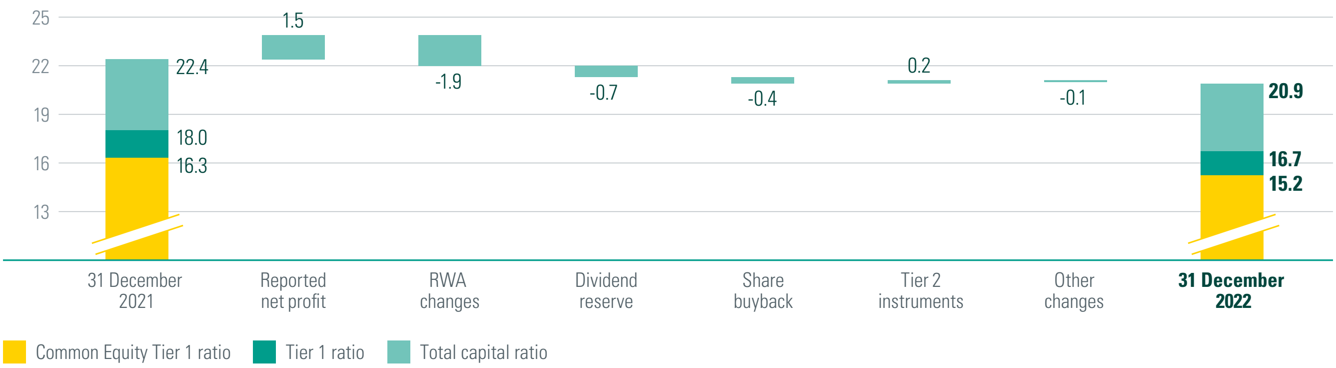
Main developments in capital position

At 31 December 2022, the Basel III Common Equity Tier 1 (CET1), Tier 1 and total capital ratios were 15.2%, 16.7% and 20.9% respectively (31 December 2021: 16.3%, 18.0% and 22.4% respectively). The CET1 capital ratio decreased compared to 31 December 2021 due to an increase in RWA, partly offset by an increase in CET1 capital. The EUR 10.9 billion increase in RWA mainly reflects an increase in credit risk RWA. Credit risk RWA was up as a result of a new model risk add-on and migration of specific portfolios from Advanced IRB model to Foundation IRB and Standardised Approach, partly offset by model updates and changes in asset quality. The CET1 capital position increased mainly due to the net profit for 2022 (after dividend and AT1 coupon payments), partly offset by the permission granted by the ECB to repurchase shares totalling EUR 500 million. All capital ratios were in line with the bank's risk appetite and were comfortably above regulatory requirements.

The following chart shows the primary drivers of the Basel III capital ratios in 2022.

Developments impacting capital ratios in 2022

(in %)



The maximum distributable amount (MDA) trigger level increased slightly to 9.7% (excluding the AT1 shortfall), including a slightly increased Countercyclical Capital Buffer (CCyB) and the reconfirmed Pillar 2 requirement as part of the SREP requirements for 2023. The AT1 shortfall was 0.3% on 31 December 2022. The Dutch central bank (DNB) will increase the CCyB for Dutch exposures to 1% by 25 May 2023. Full implementation of the 2% CCyB rate is expected by Q2 2024, which will cause the MDA trigger level to increase by around 1.5%. This is already reflected in our 13% CET1 target under Basel IV. The bank remains committed to maintaining a prudent buffer in excess of its regulatory requirements at all times.

Despite Basel III being the applicable regulatory framework, our primary metric for capital management purposes is a Basel IV CET1 target of 13%. This includes a management buffer on top of the capital requirements for SREP and Pillar 2 guidance. The European Commission's draft Basel IV proposal published in October 2021 expects Basel IV implementation in the EU by January 2025, with temporary measures mainly aimed at gradually phasing in the impact of the output floor. Reflecting our latest views on this proposal, the fully-loaded Basel IV CET1 ratio was estimated at around 16% on 31 December 2022. This was comfortably above the 13% target and the 15% threshold for considering share buybacks (subject to conditions and regulatory approval). The Basel IV CET1 ratio at implementation is still subject to some remaining uncertainties, including data limitations, finalisation of the Basel IV regulations, management actions and other portfolio developments.

MREL

Since 1 January 2022, our intermediate MREL target has been set at 27.1% of Basel III RWA, of which 26.6% must be met by own funds, subordinated instruments and senior non-preferred (SNP) notes. Subject to further SRB guidance, the MREL target for 1 January 2024 is set at 27.4%, of which 27.0% must be met by own funds, subordinated instruments and SNP notes. This includes the combined buffer requirement (CBR) of 4.0%. ABN AMRO aims to continue operating with a prudent buffer above the fully-loaded MREL requirements.

If ABN AMRO fails to meet CBR as part of its MREL requirement, the Single Resolution Board (SRB) has the power to prohibit or limit distributions of more than the Maximum Distributable Amount related to the minimum requirement for own funds and eligible liabilities (M-MDA). Based on own funds, subordinated instruments and SNP notes, MREL was 30.1% at 31 December 2022 (31 December 2021: 27.9%). In comparison with 31 December 2021, MREL increased mainly due to issuances of senior non-preferred instruments and the increase in CET1 capital, partly offset by RWA increases.

The reported MREL ratio excludes EUR 5.4 billion of grandfathered senior preferred liabilities currently eligible for MREL.

Developments impacting capital ratios in 2022

Common Equity Tier 1 capital

CET1 capital increased in 2022, mainly reflecting the net profit for 2022 (after dividend and AT1 coupon payments), partly offset by the permission granted by the ECB to repurchase shares totalling EUR 500 million. The reported CET1 ratio of 15.2% under Basel III is considerably above the MDA trigger level of 9.7%.

Additional Tier 1

A total of EUR 2.0 billion of AT1 instruments is currently outstanding. The AT1 instruments have triggers at the bank consolidated level (7.0% CET1) and solo level (5.125% CET1). If the CET1 ratio breaks through the trigger level, the AT1 is temporarily written down. ABN AMRO is comfortably above the trigger levels, with the bank consolidated CET1 ratio at 15.2% and the bank solo CET1 ratio at 14.8%. Available distributable items at 31 December 2022 amounted to EUR 19.8 billion (December 2021: EUR 18.8 billion).

Tier 2 capital

The fully-loaded total capital ratio of 20.9% decreased by 1.5 percentage points compared to 31 December 2021 (22.4%). This was mainly due to the RWA increases, partly offset by the increases in CET1 capital and Tier 2 capital. A SGD 0.75 billion T2 instrument was issued in July 2022 and a EUR 1 billion T2 instrument in November 2022. Per disclosure date of the Annual Report one of the Tier 2 capital instruments outstanding at 31 December 2022 was called for early redemption (XS1346254573 which was already deducted from Tier 2 capital per YE22) and one was announced to be called for early redemption (XS1586330604).

Senior non-preferred instruments

A total of EUR 10.9 billion of senior non-preferred instruments is currently outstanding. The bank issued a total of EUR 4.75 billion of senior non-preferred notes during the year under review, including EUR 1 billion in January 2022, EUR 1.5 billion in June 2022 and EUR 2.25 billion in November 2022.

Risk-weighted assets

Total RWA rose to EUR 128.6 billion (31 December 2021: EUR 117.7 billion), predominantly driven by credit risk RWA. Credit risk RWA was up as a result of a new model risk add-on and migration of specific portfolios from Advanced IRB model to Foundation IRB and Standardised Approach, partly offset by model updates and changes in asset quality. Market risk RWA also increased over the year as a whole, but decreased in the second half of the year. CVA risk RWA (counterparty credit risk) rose slightly over the year, while operational risk RWA remained relatively stable.

Further information on share capital, dividend and capital instruments

Share capital

At 31 December 2022, the authorised share capital amounted to EUR 2,400 million, distributed as 2,200 million class A ordinary shares and 200 million class B ordinary shares. Class A and B ordinary shares have a nominal value of EUR 1.00 each.

At 31 December 2022, issued and paid-up capital amounted to EUR 897,521,916 (31 December 2021: 940,000,001) and consisted entirely of class A ordinary shares. Further information is provided in Note 33 Equity attributable to owners of the parent company in the Consolidated Annual Financial Statements.

Dividend and share buybacks

From 2021 onwards, the dividend payout has been set at 50% of reported net profit, after deduction of AT1 coupon payments and minority interests. Interim dividends will be considered at 40% of the reported H1 net profit, provided profit is expected to be sustainable throughout the year, at the discretion of the Board.

Based on this dividend policy, a net profit for 2022 of EUR 1,777 million (after AT1 and minority interests) and after the interim dividend of EUR 0.32 per share in 2022 (2021: no interim dividend), ABN AMRO proposes a final cash dividend for 2022 of EUR 0.67 per share (2021: EUR 0.61). This is equivalent to EUR 601 million (2021: EUR 570 million), based on the number of outstanding shares at year-end 2022. This will bring the total dividend for 2022 to EUR 0.99 per share (2021: EUR 0.61). The ex-dividend date will be 21 April 2023, while the record date will be 24 April 2023 and the dividend will be paid on 17 May 2023.

On 9 February 2022, in line with our capital framework, we announced our inaugural share buyback programme of EUR 500 million. The programme commenced on 10 February and was completed on 11 May. Under the programme, 42,478,085 depositary receipts and ordinary shares of ABN AMRO Bank N.V. were repurchased. Upon completion of the share buyback programme, outstanding number of depositary receipts and ordinary shares of ABN AMRO Bank N.V. is 897,521,916. The NLFI, being a majority shareholder, participated in the share buyback programme pro-rata to its holding of 56.3% of shares and depository receipts via off-market transactions, thereby maintaining its relative stake in the company.

Our capital position remained strong, with a fully loaded Basel III CET1 ratio of 15.2% and a Basel IV CET1 ratio of around 16%. In line with our capital framework we have announced a share buyback programme of EUR 500 million to further optimise our capital position. This programme has commenced on 9 February and is expected to end no later than June 2023.

Capital instruments Audited

				31 December 2022		31 December 2021	
(in millions)	ISIN/CUSIP	Maturity date	First possible call date	Nominal amount	Carrying amount	Nominal amount	Carrying amount
Tier 1[1]							
EUR 1,000 million 4.375% per annum	XS2131567138	Perpetual	September 2025	1,000	991	1,000	993
EUR 1,000 million 4.75% per annum	XS1693822634	Perpetual	September 2027	1,000	994	1,000	994
Total Tier 1 capital instruments				**2,000**	**1,985**	**2,000**	**1,987**
Tier 2							
USD 113 million 7.75% per annum	US00080QAD79 / USN0028HAP03	May 2023		106	103	100	101
USD 1,500 million 4.75% per annum	US00080QAF28 / XS1264600310	July 2025		1,405	1,360	1,324	1,402
USD 1,000 million 4.8% per annum	US0008DAL47 / XS1392917784	April 2026		937	868	883	901
EUR 1,000 million 2.875% per annum	XS1346254573	January 2028	January 2023	1,000	1,027	1,000	1,035
USD 1,500 million 4.4% per annum	XS1586330604	March 2028	March 2023	1,405	1,392	1,324	1,358
USD 300 million 5.6% per annum	XS1385037558	April 2031		281	249	265	279
SGD 750 million 5.5% per annum	XS2498035455	October 2032	July 2027	524	520		
EUR 1,000 million 5.125% per annum	XS2558022591	February 2033	November 2027	1,000	979		
USD 1,000 million 3.324% per annum	XS2415308761 / US00084DAV29	March 2037	December 2031	937	778	883	876
EUR various smaller instruments		2023 -2025		14	14	14	15
USD 595 million 6.250% per annum	XS0619547838	April 2022				525	537
EUR 1,000 million 7.125% per annum	XS0802995166	July 2022				1,000	1,045
Total Tier 2 capital instruments				**7,609**	**7,290**	**7,317**	**7,549**
- of which eligible for regulatory capital:							
Basel III, Tier 1 (fully-loaded)				2,000		2,000	
Basel III, Tier 2 (fully-loaded)				5,449		5,136	

[1] AT1 capital securities. For both AT1 instruments, the CET1 Trigger levels are 7.0% for ABN AMRO Bank level, and 5.125% for ABN AMRO Bank solo level. The amount of available distributable items for ABN AMRO Bank N.V. per 31 December 2022 totals EUR 19.8 billion (31 December 2021: EUR 18.7 billion).

Movements in subordinated liabilities Audited

(in millions)	2022 Carrying amount	2021 Carrying amount
Balance as at 1 January	**7,549**	**8,069**
Cash flows		
Issuance	1,540	910
Redemption	-1,602	-1,514
Non-cash changes		
Foreign exchange differences	360	367
Other	-556	-283
Balance as at 31 December	**7,290**	**7,549**

Minimum capital requirements

The Pillar 1 capital requirement is the absolute minimum amount of capital required to cover the three major types of risk a bank faces: credit risk, operational risk and market risk, as determined in the Capital Requirements Directive (CRD) IV Pillar 1 framework. The following table provides an overview of RWA and minimum capital requirements per risk type, category of exposure and regulatory approach.

Minimum capital requirements

	31 December 2022		31 December 2021	
(in millions)	Capital requirement	RWA	Capital requirement	RWA
Credit risk IRB				
Central governments and central banks			67	840
Institutions[1]	148	1,847	127	1,589
Corporates	4,280	53,501	4,177	52,211
Retail	1,351	16,891	1,326	16,574
- of which secured by immovable property	*1,235*	*15,431*	*1,188*	*14,847*
- of which qualifying revolving exposures	*11*	*136*	*11*	*140*
- of which other retail	*106*	*1,323*	*127*	*1,588*
Equities not held for trading	247	3,091	269	3,364
Securitisation positions	20	253	9	116
Credit valuation adjustment				
Other[2]	1,987	24,835	1,227	15,336
Total credit risk IRB	**8,033**	**100,418**	**7,202**	**90,030**
Credit risk SA				
Central governments and central banks	41	515		2
Institutions[1]	75	939	100	1,248
Corporates	468	5,854	451	5,636
Retail	182	2,272	200	2,495
Secured by mortgages on immovable property	12	152	12	145
Exposures in default	13	158	14	173
Credit valuation adjustment	22	274	16	202
Other[2]	3	39	4	46
Total credit risk SA	**816**	**10,203**	**796**	**9,946**
Other risks				
Market risk	160	2,005	133	1,668
- of which Standardised Approach		*2*	*1*	*6*
- of which Internal Model Approach	*160*	*2,003*	*133*	*1,662*
Operational risk	1,277	15,967	1,284	16,049
- of which Standardised Approach[3]	*43*	*533*	*48*	*604*
- of which Advanced Measurement Approach	*1,235*	*15,434*	*1,236*	*15,444*
Total other risks	**1,438**	**17,973**	**1,417**	**17,717**
Total	**10,287**	**128,593**	**9,415**	**117,693**

1 Institutions include exposures to banks and investment companies, regional and local governments and pension funds.
2 Other includes non-credit obligations.
3 Including Basic Indicator Approach.

Main regulatory developments

The European Commission's draft Basel IV proposal published in October 2021 expects Basel IV implementation in the EU by January 2025, with temporary measures mainly aimed at gradually phasing in the impact of the output floor.

The CRR fully-loaded and CRR phase-in capital ratios converged in 2022 because the transition period expired on 1 January 2022.

Impact of CRD V/CRR2 fully-loaded rules on capital ratios

(in millions)	31 December 2022	31 December 2021
Common Equity Tier 1 capital	19,507	19,206
Common Equity Tier 1 ratio	15.2%	16.3%
Common Equity Tier 1 ratio (Basel IV)[1]	16%	16%
Tier 1 capital	21,489	21,188
Tier 1 ratio	16.7%	18.0%
Total regulatory capital	26,938	26,324
Total capital ratio	20.9%	22.4%
RWA	128,593	117,693
Leverage ratio (SA-CRR)	5.2%	5.9%

[1] Basel IV results are based on fully-loaded figures, rounded to the nearest whole percent and subject to the implementation of Basel IV standards into EU legislation.

Leverage ratio

(in millions)	31 December 2022	31 December 2021
Tier 1 capital	**21,489**	**21,188**
Exposure measure (CRR2)		
On-balance sheet exposures	379,581	399,113
Off-balance sheet exposures	30,452	30,637
On-balance sheet netting[1]	5,014	8,186
Derivative exposures[1]	3,677	3,582
Securities financing exposures	2,248	2,502
Other regulatory measures	-7,448	-83,240
Exposure measure	**413,525**	**360,779**
Central bank exposure[1]		66,922
Exposure measure (incl. central bank exposure)	**413,525**	**427,702**
Leverage ratio	5.2%	5.9%
Leverage ratio (incl. central bank exposure)	5.2%	5.0%

[1] The temporary relief measure that exempted central bank reserves from the exposure measure applied until 31 March 2022.

The Capital Requirements Regulation (CRR) includes a non-risk-based leverage ratio. The leverage ratio requirements were amended by CRR2, which introduced a binding leverage ratio requirement of at least 3% and amended the requirements for calculating the exposure measure. The amendment includes the application of SA-CCR to clearing guarantees on derivative exposures. The leverage ratio increased to 5.2% as at 31 December 2022 (31 December 2021: 5.0%), mainly due to a decrease in on-balance sheet exposures, including those due to TLTRO repayments, and an increase in CET1 capital. The temporary capital relief measure that exempts central bank reserves from the exposure measure was terminated on 31 March 2022. The exposure measure is reported to the Asset and Liability Committee (ALCO) at the business line level and monitored closely in order to ensure the leverage ratio remains within the bank's risk appetite. The leverage ratio outlook takes account of business-specific plans, as well as macroeconomic conditions, regulatory developments and capital-related uncertainties. In the event of risk appetite breaches for the leverage ratio, the bank-wide escalation paths for capital and funding are followed.

Business risk

Volatility of earnings

Business risk is the risk that business earnings and franchise value declines and/or deviates from expectations because of uncertainty in business income or in expenses incurred to generate business income. ABN AMRO strives to preserve its business earnings, independently of (internal or external) developments. Business risk therefore needs to be managed in order to limit actual and forecasted volatility in business earnings.

ABN AMRO manages business risk by seeking to minimise the effect of unexpected internal and/or external developments. The key criteria for classifying a risk as a business risk are:

- An unexpected event that leads to uncertainty in present or future business earnings and/or franchise value;
- Changes in the drivers of future business earnings such as uncertainty in volumes, margins, fee and commission rates and/or business expenses.

Drivers of earnings volatility

Earnings are affected by various internal and external factors, such as changes in client preferences, competition and regulation. In addition, earnings are affected by technical, societal, geopolitical and economic developments, such as the Covid-19 pandemic and the war in Ukraine. Our risk assessments are based on the long-term uncertainty in expected business earnings and take into account internal and external developments, scenarios and market movements. When assessing the pressure from external factors contributing to an increase or decrease in the business risk, at least the following elements are considered:

- The key macroeconomic variables within which the bank operates or will operate based on its main geographies. Examples of key variables include gross domestic product (GDP), unemployment rates, interest rates, inflation rates and house price indices;
- The competitive landscape and how it is likely to evolve, considering the activities of the bank's peers;
- Expected growth in target markets, and the activities and plans of key competitors and new players (FinTech) in these target markets;
- Overall trends in the market that may have an impact on performance and profitability. This should include, as a minimum, regulatory trends, technological trends and societal/demographic trends;
- The contamination effects that risks may have on other risk types, and risks downstream or upstream in client supply chains that may have knock-on effects (this includes the impact of Covid-19, the war in Ukraine and Climate Change).

We currently consider the following developments to be the primary risks for future earnings: changing relation with client due to service/operating model, high investments in digital & data infrastructure, disintermediation in banking sector, increased regulatory and gatekeeper cost, competition of big tech, etc.

Business risk appetite

The thresholds are set at the expected one-year profit horizon and form the basis for a quantitative Red, Amber or Green (RAG) status. The qualitative RAG status is based on expert judgements, taking into account elements such as pressure from external factors and strategic objectives.

Monitoring of earnings drivers

ABN AMRO continually monitors and responds to the key external and internal factors and elements within these factors. The disclosure and monitoring of the business risk drivers is based, among other things, on the ERM report. ABN AMRO's business risk management framework is supported by the 3LoD model. The bank mitigates sensitivity to business risk drivers through discussions at senior management and board level that address developments in these drivers in an effective and timely manner. Business risk is also included in the capital buffer that is meant to safeguard our position in the case of extreme events.

Strategic risk

We consider strategic risk to be a part of business risk. It concerns the risk of internal and external events that may have an effect on ABN AMRO achieving its objectives and strategic goals. The bank's strategy and business risk are related. The strategy incorporates mitigation of unexpected events and changes in business risk drivers. Regular review of the strategy ensures alignment with developments in business risk. To ensure that the bank's strategy is pursued and the long-term strategic goals (financial and non-financial) are met, our business plans and budgets take these strategic goals into account.

Strategic equity investment risk

As part of business risk, strategic equity investment risk is the risk of deviation in the value of strategic equity investments. These investments are not fully consolidated in the bank's financial accounts, but are represented as an equity investment on the balance sheet. Investments related to clients and involving unlisted private equity or held for trading purposes are not considered to be strategic equity investments.

Economic capital as a buffer for business risk

Economic capital is used to mitigate the negative effects of unexpected business risk events. The economic capital for business risk reflects the maximum downward deviation of actual versus expected net operating profit in one year, excluding any impact already covered by other risk types (e.g. impairments for credit risk).

The economic capital (EC) for business risk combines an EC based on forward looking scenarios with an EC based on historical revenue data. EC for both approaches is calculated and the maximum of the two is used. These scenarios determine the sensitivity of the client units' income to macroeconomic variables or industry performance indicators. This sensitivity is used to determine the volatility of income for each client unit, as well as any correlation between client units. Based on the individual volatilities, we use simulation to calculate bank-wide volatility. The model offers a methodology through which our model inputs and assumptions can be updated and tested efficiently on an annual basis. The model is sensitive to the projections for the negative and adverse scenarios and their probabilities.

Furthermore, economic capital is also considered a buffer for strategic equity investment risk. This is the maximum downward deviation of a strategic equity investment's economic value from the current book value.

CER materiality risk assessment

In 2022, we assessed the materiality of climate-related and environmental risk in relation to traditional risk types. The initial assessment was qualitative. For some risk types this was further substantiated quantitatively whereby a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 year) horizon was made, where possible. To ensure consistency across risk types, we looked at a set of pre-defined CER events, including climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). The results for business risk are summarized below.

	Climate Risk		Environmental Risk	
	Physical risk	Transition Risk	Physical risk	Transition risk
Business risk	✖	✔	✔	✔

Business risk of climate and environmental risk (CER) events concerns the effect or potential effect of events on the operating result of the bank. The impact of climate transition risk on business risk has been assessed via the impact of CO_2 reduction targets on lending volumes and revenues in the medium term and with a likelihood of once in 1-10 years in the Mortgages, CRE, Shipping and Oil & Gas portfolios. Based on the calculated revenues at risk, the impact is considered material in the medium term.

Client portfolios with higher sensitivities to physical or transition risks (e.g. oil & gas) have relatively low loan volumes in the bank's book and therefore do not entail material business risks.

Climate physical risk

With regard to physical climate risk, individual CER events have historically not materially increased operating expenses, and are also not expected to do so in the future. The effect of a single physical or environmental event on the bank's operating income is currently assumed to be marginal.

Climate transition risk

In the medium to long term, material business risks could result from adjustments made to ABN AMRO's commercial or risk policies in order to reduce other CER-related risks and/or to decrease emissions within client portfolios in accordance with climate-related regulations.

Environmental risk

Environmental risk events with a high probability and a material impact relate to transition risk factors such as regulations or technology and to environmental physical risk factors such as water stress, resource scarcity or pollution.

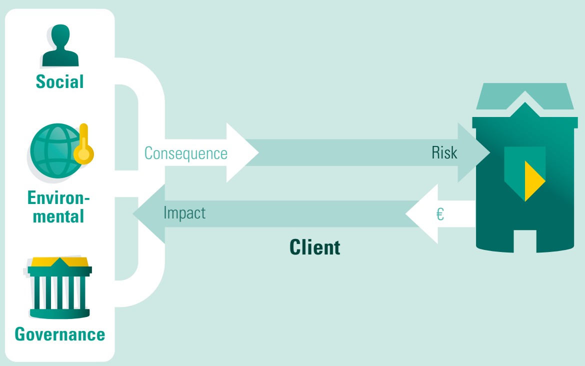
We manage material CER in business risk through the medium or longer-term portfolio choices we make regarding company strategy. Our assessments in the areas of long-term value creation and impact thinking help to reinforce these decisions.

Sustainability risk

This section contains information on:
- Sustainability risk policy framework
- Sustainability risk governance
- Sustainability risk management framework
- CER materiality assessment
- Greenhouse gas emissions
- Scenario analysis - real estate

Sustainability risk is defined in the risk taxonomy as the risk that Environmental, Social or Governance-related (ESG) factors will have a financial or reputational impact on ABN AMRO, either directly or via other risk types. Sustainability risk management is a fundamental part of safeguarding a moderate risk profile and supporting ABN AMRO's strategic objectives. ESG factors relate to, but are not limited to the following:
- **Environmental:** climate change, biodiversity loss, natural resources depletion and pollution. Climate-related and environmental risks (CER) can refer to both transition and physical risk and to so-called inside-out risks or outside-in risks (see box).
- **Social:** substandard working conditions, forced labor and child labour, human trafficking, indigenous peoples' rights, privacy, animal welfare and public health.
- **Governance:** corporate governance (e.g. remuneration, diversity and balancing the interests of stakeholders), corporate behaviour (e.g. corruption and bribery) and ethical business conduct.

Inside-out



Outside-in

Inside-out risks refer to the financial and non-financial risks that may occur when clients of the bank have an impact on people or the planet. This can be a direct impact, for example if a client causes and has to clean up water pollution, limiting the client's ability to live up to its contractual obligations with the bank.

Outside-in risks refer to the financial and non-financial risks that may occur when climate-related or environmental factors have an impact on the bank's clients or portfolios. Outside-in risks are divided into transition and physical risks.

→ Transition risks are the financial and non-financial risks that result, directly or indirectly, from the process of adjusting to a lower-carbon and more environmentally sustainable economy (e.g. changes in regulations, consumer preferences and technology).

→ Physical risk refers to the financial and non-financial risk of a changing climate or environmental degradation. Physical risk can be acute, for example when it relates to extreme weather events, or chronic, relating to progressive shifts such as rising temperatures and biodiversity loss.

Sustainability risk policy framework

ABN AMRO has in place a sustainability risk policy framework, which is an integral part of the bank's risk management framework. It ensures that sustainability risk is properly identified, measured, managed, mitigated, monitored and reported on in line with the bank's risk appetite and in support of the bank's strategic objectives. These processes are supported by exclusions, statements and standards that underpin the way the bank executes its sustainability risk management. The sustainability risk policy framework is subject to an annual review to incorporate new insights, practices, internal and external developments, and views of stakeholders, and to align with the latest regulatory guidance, such as ECB and EBA requirements and definitions. Various parts of the framework will be updated to align with the strategic ambitions of the bank's climate strategy.

Sustainability risk policy framework

Sustainability Risk Policy

Exclusions
- Exclusion list
- Controversial weapons list

Statements
- Human rights
- Climate change
- Animal welfare

Standards
- Sustainability Risk Standard for Finance
- Sustainability Risk Standard for Engagement
- Sustainability Risk Standard for Defence
- Sustainability Acceleration Standard

Sustainability risk standard with sector requirements
- Agri-commodities
- Animal protein
- Energy
- Metals & minerals
- Manufacturing
- Chemicals & pharma
- Real estate
- Transportation
- Financial institutions

Our Exclusion List specifies the activities we exclude from our financial services because of their adverse ESG impact. Our Controversial Weapons List (CWL), in turn, specifies the companies that we exclude because of their involvement in controversial weapons. The CWL is in line with the ban on investments in cluster munition, as specified in the Dutch Financial Supervision Act, supplemented by the exclusion of companies involved in other controversial weapons, including white phosphorus. By regularly reviewing and updating the Exclusion List and the CWL, ABN AMRO ensures that it operates in line with its purpose, values and risk appetite. New developments and scientific insights within and outside the bank are taken into consideration.

Our statements set out ABN AMRO's commitment, responsibilities and expectations for ourselves and for our business associates, including our clients, investee companies and suppliers, on three important themes: climate, human rights and animal welfare. The statements also describe the key activities we undertake to meet our responsibilities. Parts of the climate change statement have been replaced by the bank's climate strategy. In 2023 the statement will be updated to reflect this.

Our standards include requirements for managing sustainability risk in different processes (including engagement and classifying sustainability acceleration finance). We also have standards specifying the minimum ESG requirements for our corporate lending clients.
In 2022, we further specified the general principles on which this Sustainability Risk Standard (including sector requirements) and our client due diligence is built. We also strengthened this standard, especially with regard to climate and environment-related risks, transition and physical risks, and human rights risks. In addition, we have a standard applying specifically to corporate clients with links to defence activities.

Generic Principles

- Clients comply with applicable laws and regulations and are able to demonstrate transparency regarding their responsible business conduct.
- Clients know the salient human rights risks of their own activities and business relationships and take measures to address these risks.
- Clients have a satisfactory ESG track record.
- Clients have identified potentially affected groups and other relevant stakeholders and engage with them constructively and openly in assessing and mitigating human rights risks and addressing any grievances.
- Clients take measures to promote circularity and reduce the use of virgin material and waste (e.g. through design, recycling, life time extension), if applicable.
- Clients monitor their GHG emissions and take measures to reduce them in line with the Paris climate goals.
- Clients are aware of how their business model depends on ecosystem services (i.e. resources, pollination) and take measures to preserve these services.
- Clients are aware what the transition to a Net Zero economy means for their business model and take appropriate measures to prepare for the transition.
- Clients are aware what their impact is on biodiversity, water, air and soil and take appropriate measures to prevent biodiversity loss and pollution.
- Clients are aware of the physical risks of a changing climate for their business model and take appropriate measures to mitigate these risks.

Sustainability risk governance

The Executive Board is accountable for establishing an effective sustainability risk management framework in the bank and for setting, approving and overseeing the bank's strategy, including the sustainability pillar. See also the section on Sustainability Governance in the Leadership & governance chapter.

The Executive Board has delegated management of sustainability risk, including CER, to the Group Risk Committee. This means that the committee maintains oversight on sustainability risk through the enterprise risk management report (containing the status of adherence to the bank's Risk Appetite Statement) and is responsible for approval of sustainability risk issues. In 2022, the GRC discussed and approved the development of the climate plan, which was published in December 2022, in response to the increasing climate transition risk and in line with the sustainability pillar in the bank's strategy.

A dedicated Sustainability Risk team within the Central Risk Management department is responsible for the sustainability risk management framework and acts as the second line of defence. Central Risk Management also monitors the implementation of the sustainable finance regulations throughout the bank. Besides the Executive Board and the Group Risk Committee, various other committees are increasingly involved in the management of sustainability risk:

- Business Risk Committees (BRC) for oversight on sustainability risk within the specific business lines and approval of business line-specific sustainability risk issues (e.g. scenario analysis);
- Engagement Advisory Committee (EAC) for oversight on client engagement;
- Group Sustainability Committee (GSC) for internal advice on sustainability matters affecting the bank and the business environment;
- Scenario Analysis and Stress-test Committee (SSC) for oversight on climate-related and environmental risks scenario analyses and stress testing;
- Central Credit Committee (CCC) for oversight on the application of the sustainability risk policy framework in credit decisions.

Sustainability risk management framework

Sustainability risk, including climate-related and environmental risk, is managed in line with the bank's enterprise risk management cycle. Sustainability risks identified in our business environment are measured to inform risk management and strategic decision-making. Based on insights gained, we develop appropriate risk response measures, including limits and checkpoints in the risk appetite, for material risks. Sustainability risk is also included in risk monitoring and reporting tools such as the enterprise risk management (ERM) report.

Sustainability risk & business strategy

Sustainability risk management and the bank's strategy, in particular the sustainability pillar, go hand in hand. On the one hand, insights into sustainability risks inform strategic decision-making. For example, the bank's carbon reduction targets, which are at the core of our sustainability strategy, also mitigate the reputational risk and focus in the first wave on portfolios that were identified as having the highest level of transition risk. Similarly, decisions to engage with one or more clients to accelerate the sustainability shift are informed by client-level risk identification and measurement that is part of client acceptance and credit provisioning processes. Decisions to reduce, maintain or grow in certain portfolios are also informed by insights into sustainability risks.

The sustainability risk policy framework is updated regularly, for example to ensure that we do not onboard any clients that would prevent us from achieving our strategic commitments or that conflict with our commitment to standards such as the UN Guiding Principles for Business and Human Rights or OECD Guidelines for Multinational Enterprises. Below is an overview of key elements and the latest developments in each step of the enterprise risk management cycle. For the sustainability pillar in the bank's strategy, please refer to the Sustainability section in the Strategy, Value Creation and Performance chapter.

Sustainability risk identification

The risk identification process for sustainability risk takes place at multiple levels. The process includes but is not limited to sector and country sustainability risk classifications and sustainability risk heatmapping. These tools also feed into bank-wide risk identification processes such as the risk event register (see below), into which sustainability risk is integrated.

Sector and country classification

The sector and country risk classification categorises sectors and countries into low, medium or high risk from a sustainability perspective and includes climate-related, environmental (ecosystem dependencies), social and governance-related aspects. 'High risk' from a sustainability perspective means there is an inherent sustainability risk associated with the client's sector or country of operation. For example, social risks are considered higher in sectors such as mining and leisure. Similarly, governance risks are considered higher in countries with limited rule of law. While this implies that we need more robust due diligence procedures for that particular client, it does not mean that ABN AMRO wants to refrain from doing business with these clients. On the contrary, we use this as an opportunity to engage with a client in the transition towards sustainability.

The sector classification takes into account the results of the bank's climate risk heatmap and the environmental risk heatmap (see below), as well as expert opinion on human rights risks for sectors. The country ratings are based on data provided by Sustainalytics. Both ratings are updated periodically to reflect international and sector developments. After approval by the Group Risk Committee, the rating is incorporated into our Client Assessment on Sustainability tool (CASY NextGen, see Credit Risk section) and published in our Sustainability Risk Policy Framework.

Climate and environmental risk heatmaps

Heatmaps are used to scan ABN AMRO's lending portfolio on sector sensitivity and vulnerability to climate and environmental risk. This results in tools that identify climate and environmental risk hotspots in our corporate lending portfolio. These tools are used to determine priority sectors for performing portfolio scenario analyses so as to assess the magnitude of the impact on selected risk types and to select portfolios for the first wave of sectors that we cover with our Climate Strategy (see the Strategy, Value Creation and Performance chapter). The heatmap methodology developed in 2021 was used, with adjustments, for the 2022 climate risk and environmental risk heatmaps.

As formal risk identification tools, the heatmaps also contribute to the risk identification process, such as the Risk Event Register (RER), which includes events such as the introduction of strict environmental or climate regulations, real estate value corrections due to physical climate risk and environmental degradation (e.g. biodiversity loss). The events in the RER were subsequently included in the scenarios for expected credit loss calculations, for example in the negative planning scenario, which included assumptions on a disruptive transition that would impact the entire economy, and both the baseline and the negative scenario included assumptions on the impact nitrogen regulations in the Netherlands would have on GDP.

CER materiality assessment

Within our risk taxonomy, sustainability risk is both a stand-alone risk type and a driver of other risk types. In 2022, we assessed the materiality of climate-related and environmental risk in relation to the following traditional risk types: credit risk, market risk, operational (non-financial) risk (including reputational, legal and compliance risk), liquidity risk and business risk. The initial assessment was qualitative and was then further substantiated quantitatively, where possible.

The bank's risk materiality framework used in the annual update of the risk taxonomy has been adjusted to make it more suitable for performing this assessment. The adjustments related primarily to the indicators and thresholds for the materiality of non-financial impact, aligning the framework more directly with the bank's strategy of 'Banking for better, for generations to come' and with the corresponding key performance indicators. The concept of double materiality has also been incorporated to signal that both a negative and a positive impact on society and the environment can be material. Where possible, a distinction between materiality in the short term (within 1 year), medium term (within 5 years) and long term (within 30 years) has also been included.

To ensure consistency across risk types, each risk type owner looked at a set of pre-defined CER events, based on the events suggested in the ECB Guide on CER, and assessed the impact of one or more of the most relevant events for their risk type. These included climate-related risk events such as floods and drought (physical risk) and policy and technology development (transition risk), as well as environmental risk events such as water stress and biodiversity loss (physical risk) and policy and technology development (transition risk). For each risk type, a tailor-made methodology was used to substantiate how and within what timeframe these events drive or have a material impact on their risk type. See the table below for the initial conclusions. More information on the methodologies is provided in the respective risk type sections. In 2023, the assessments will be updated and improved to make them more robust and comprehensive, and allow the bank to take risk mitigation action based on the outcomes.

Materiality Assessment Table

	Climate Risk		Environmental Risk	
Risk Type	Physical risk	Transition Risk	Physical risk	Transition risk
Credit Risk	✔	✔	✔	✔
Market risk in the trading book	✖	✖	✖	✖
Market risk in the banking book	✖	✖	✖	✖
Operational (Non-financial) risk	✔	✔	✔	✔
Liquidity risk	✖	✖	✖	✖
Business risk	✖	✔	✔	✔

Check indicates that risk is material. Where there is no check, the risk is assessed as not material.

Sustainability risk measurement

Various tools are used to measure sustainability risk at different levels:

- **At bank level:** Sustainability risk elements are included in the internal stress testing scenarios and in the 2022 EBA Climate Stress Test, as mentioned in the Risk framework section. In addition, the bank-wide impact of climate-related and environmental risk on traditional risk types was measured in 2022 using a qualitative and quantitative CER materiality assessment, as explained below and in the risk type sections.
- **At portfolio level:** CER scenario analysis is used to measure the impact of sustainability risk in specific portfolios. In this chapter, you can read more on the portfolio level analysis.
- **At client level:** Sustainability risk is measured using the Client Assessment on Sustainability tool (CASY NextGen) as part of the credit decisioning process. Please refer to the Credit risk management section for more information on this process.

Portfolio scenario analysis

ABN AMRO uses portfolio scenario analysis as one of the tools for understanding the impact of sustainability risk, particularly climate-related and environmental risk, on traditional risk types (e.g. credit risk and business risk) in specific sectors, using various climate scenarios. In 2021 this was done in four priority portfolios, which were selected based on the 2020 climate risk heatmap: energy, shipping, commercial real estate and residential real estate. In 2022 the commercial and residential real estate scenario analyses were updated and extended to include the risk events heat stress and wildfires, in addition to flooding and drought. In line with the ECB's expectations regarding the management of CER, and based on the lessons learned in 2021, the process of CER scenario analysis was further improved and formalised in the bank's Sustainability risk policy framework and enterprise risk management framework in 2022. Following this improved process, we selected four additional portfolios to start the CER scenario analysis: arable farming, livestock farming, manufacturing and freight transport by road. The selection of these sectors was based on considerations related to:

- sensitivity of the portfolios to CER according to the 2021 climate risk heatmap, the insights of the 2022 environmental risk heatmap and/or the climate stress tests;
- strategic importance of the portfolio demonstrated by the size of the exposure, declared strategic focus and/or development in the dynamic balance sheet that was used in the Climate Stress Test;
- viability of an analysis in the portfolio, based on portfolio characteristics, data availability and alignment with other business-as-usual processes within the bank;
- stakeholder expectations and/or other developments in the business environment of the portfolio.

Analysis frameworks were developed for the additional portfolios in 2022. These frameworks define the exact scope of the analysis and the scenarios to be applied, as well as the potential transmission channels to investigate. The frameworks also define which strategy or risk management processes could potentially be informed by the outcomes of the analysis; in other words, they define the purpose of the analyses. The results of these scenario analyses are expected in 2023.

Sustainability risk response

To ensure that sustainability risk is managed in line with the bank's risk appetite and strategy, mitigating actions are defined at bank, portfolio and client levels for risks identified as material.

At bank level, mitigating actions are as follows:

- Exclusion of some specific sectors and subsectors from lending products, as stated in the bank's Exclusion List and Controversial Weapons List;
- Strict requirements for corporate lending under the sustainability risk standard with sector requirements;
- Sustainability risk considerations included in the bank's credit risk and business risk policies

At portfolio level, thematic engagement is used as a mitigating action for risks that affect entire portfolios or large numbers of clients within a portfolio in the same way. Overseen by the Engagement Advisory Committee, the first line develops and executes a thematic engagement plan with clear time-bound targets, supported and challenged by the second line where needed. In 2022, thematic engagement focused on improving energy efficiency of vessels in the shipping portfolio (as a follow up from the 2021 scenario analysis), on improving management practices of clients in various sectors to prevent exploitation of migrant workers, and on improving supply chain due diligence practices of clients with supply chains in the Xinjiang region in China.

Individual engagement is used as a mitigating action at client level. Individual engagement focuses primarily on remediation of breaches with the sustainability risk policy framework.

Sustainability risk appetite

Risk response may also involve the development, review and/or implementation of risk appetite limits and checkpoints at bank and client unit/functions levels. Our strategic risk appetite statement (SRAS) references the alignment of our portfolio with the Paris Climate Agreement. The sustainability risk appetite is set using indicators that address all ESG aspects of sustainability and both the inside-out and outside-in perspectives of sustainability risk at bank and client unit/functions levels. The risk indicators have both quantitative and qualitative elements. The latter reflects the fact that the data currently available in this relatively new risk category is still insufficient.

In some cases, new KRIs are included in the risk appetite for monitoring purposes only. Limits and checkpoints are planned to be included after a period of monitoring, when more data is available or when the impact can be assessed more accurately. Monitoring allows us to gather relevant data that can inform the process of setting checkpoints and limits, and also to increase transparency on risk developments over time. For example, the key risk indicator on the carbon footprint in our lending and investment portfolios was still only being monitored in 2022, but checkpoints and limits will be set for this indicator in 2023, based on data gathered and informed by the climate strategy presented in December 2022.

Some bank-wide KRIs are cascaded down to client unit/functions levels and some client units and functions have their own specific KRIs. These KRIs are increasingly informed by insights from sustainability risk identification and measurement efforts such as scenario analysis. For example, ABN AMRO Mortgages monitors assets with an increased physical risk and started monitoring the number of potentially vulnerable clients in high physical risk areas in January 2022. In time, limits and checkpoints will be developed for such KRIs as well.

Risk Appetite

	Indicator	Checkpoint/limits	Monitoring only
Sustainability risk	Percentage of clients requiring engagement on ESG	◆	
	Sustainable and Acceleration Standard volume change	◆	
Climate risk	Change in carbon footprint in lending and investment portfolio		◆
	Data quality of financed emissions		◆
Environmental risk	Relative exposure in sectors sensitive to physical environmental risks		◆
	Relative exposure in sectors sensitive to transition environmental risks		◆
Human rights risk	Strength of human rights risk management	◆	

Sustainability risk monitoring and reporting

To ensure that an identified sustainability risk remains within the approved risk appetite limits and checkpoints, we monitor sustainability risk, including environmental and climate-related risks, at a bank-wide and client unit/functions level. Sustainability risk at bank level is monitored and reported to the GRC and to the Executive Board in the enterprise risk management (ERM) report. At a client unit level, sustainability risk is monitored and reported through the business risk reports to the respective business risk committees.

A dedicated risk register has been developed for human rights risks. This includes all kinds of human rights risks we can be connected to, in any capacity, and helps us record and aggregate our observations on these risks over time. The risk register feeds into our enterprise risk management process and results in more robust governance and more involvement from senior management. Human rights risks are managed across a range of departments within the bank.

Environmental and climate risk heatmaps

Heatmaps are used to scan ABN AMRO's corporate lending portfolio on sector sensitivity and vulnerability to climate and environmental risk, with a further distinction between transition and physical risks.

The scope of both analyses is identical to the scope of the climate heatmap disclosed in 2021, i.e. carbon-intensive sectors (NACE A-H and L). Underlying sub-sectors are selected, based on significant exposure or relative high sensitivity, according to previous heatmaps. Given this condition of significant exposure, heatmaps are tailored to the ABN AMRO portfolio and assess some sectors in more detail than others. The figures below show the aggregated sensitivity score for each sector on NACE level 1. The next section shows the moderate to high sensitivity scores of the climate and environmental heatmaps on a more granular level.

High level environmental risk heatmap for corporate loans

(in millions)

	Sector	Aggregated sensitivity to transition risk	Aggregated sensitivity to physical risk	31 December 2022 Gross carrying amount[3,4] (in EUR million)	31 December 2021 Gross carrying amount[3,4] (in EUR million)
A	Agriculture, forestry and fishing	MH	MH	7,222	7,301
B	Mining and quarrying	L	ML	2,536	2,704
C	Manufacturing	M	M	7,667	7,609
D	Electricity, gas, steam and air conditioning supply	M	ML	1,585	2,203
E	Water supply; sewerage, waste management and remediation activities	M	L	649	631
F	Construction	ML	ML	4,078	4,413
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	ML	ML	9,151	9,185
H	Transport and storage	ML	M	9,491	9,798
L	Real estate activities	M	ML	12,755	11,384
	Other sectors[1]			31,596	31,231
	Corporate loans[2]			**86,731**	**86,458**

High sensitivity (H) · Moderately high (MH) · Moderate (M) · Moderately low (ML) · Low sensitivity (L) · Not specified

[1] Includes exposures to all other NACE sectors.
[2] Excluding loans at fair value through P&L.
[3] Gross carrying amount excludes fair value adjustments from hedge accounting.
[4] Compared to 2021, the presentation has changed. Corporate loans to other counterparties have been split per NACE sector and gross carrying amounts per sector have been updated accordingly.

High level climate risk heatmap for corporate loans

(in millions)

	Sector	Aggregated sensitivity to transition risk	Aggregated sensitivity to physical risk	31 December 2022 Gross carrying amount[3,4] (in EUR million)	31 December 2021 Gross carrying amount[3,4] (in EUR million)
A	Agriculture, forestry and fishing	MH	MH	7,222	7,301
B	Mining and quarrying	MH	ML	2,536	2,704
C	Manufacturing	ML	M	7,667	7,609
D	Electricity, gas, steam and air conditioning supply	L	ML	1,585	2,203
E	Water supply; sewerage, waste management and remediation activities	M	M	649	631
F	Construction	ML	ML	4,078	4,413
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	L	ML	9,151	9,185
H	Transport and storage	MH	ML	9,491	9,798
L	Real estate activities	L	ML	12,755	11,384
	Other sectors[1]			31,596	31,231
	Corporate loans[2]			**86,731**	**86,458**

High sensitivity (H) · Moderately high (MH) · Moderate (M) · Moderately low (ML) · Low sensitivity (L) · Not specified

[1] Includes exposures to all other NACE sectors.
[2] Excluding loans at fair value through P&L.
[3] Gross carrying amount excludes fair value adjustments from hedge accounting.
[4] Compared to 2021, the presentation has changed. Corporate loans to other counterparties have been split per NACE sector and gross carrying amounts per sector have been updated accordingly.

Both heatmaps are based on internal data obtained from questionnaires, complemented by external data. The climate heatmap uses data on scope 1, 2 and 3 greenhouse gas emission intensity as input for transition risk sensitivity. For the environmental heatmap, transition risk sensitivity is partly determined by data on biodiversity loss resulting from the impact of sub-sectors and their supply chains on land use, air pollution and water pollution. This dataset is also the basis of our Impact Report. For physical risk, both heatmaps use ENCORE's scientific materiality assessment of the ecosystem service dependency of sub-sectors, refined by our internal experts to account for our context as a bank based in Northwest Europe.

Environmental risk heatmap

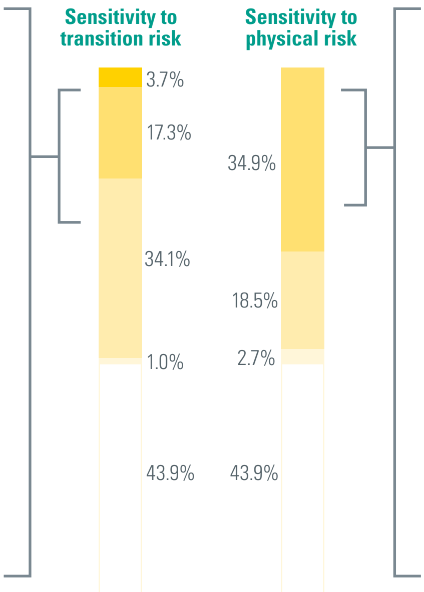
The environmental risk heatmap focusses on sector sensitivity and vulnerability to physical environmental risk (i.e. dependencies on nature, arising when natural systems are compromised due to the impact of climate events, geological events or changes in ecosystem equilibria) and transition environmental risks (i.e. resulting from misalignment with the transition towards maintaining, enhancing and restoring natural ecosystems).

In comparison with the climate risk heatmap (see below), a larger part of our portfolio is moderately sensitive to environmental risk and a smaller part is highly sensitive to risk. Environmental risks are less concentrated in particular sectors, but there are risk drivers that score highly across our portfolio.

For environmental transition risk, we explored whether sensitivities in terms of current policies and scandals, future prospects for reducing biodiversity impacts and market availability of alternative products were concentrated in particular drivers of biodiversity loss. Policies, controversies and management actions and technologies linked to air pollution (18-23%), land use (7-13%) and overextraction (4-6%) were the most common bank-wide drivers for transition risk. For physical risk, the ecosystem services water (32%; 55%) and flood protection (27; 51%) were found most relevant for, respectively, the own operation and supply chains of the analysed sub-sectors.

Environmental Risk Heatmap

Sub-sector (incl NACE sector letter)	EUR million
Moderately high sensitivity to environmental transition risk	
Raising of cattle (A)	3,203
	3,203
Moderate sensitivity to environmental transition risk	
Sea and coastal freight water transport (H)	5,854
Manufacture of food products and beverages (C)	2,142
Arable farming (A)	1,878
Indoor growing of crops (A)	1,183
Freight transport by road (H)	958
Manufacture of chemicals and chemical products (C)	928
Raising of poultry and swine/pigs (A)	772
Extraction of crude petroleum and natural gas (B)	567
Inland freight water transport (H)	466
Manufacture of basic metals (C)	240
Air transport (H)	45
	15,032



Sub-sector (incl. NACE sector letter)	EUR million
Moderate sensitivity to environmental physical risk	
Real estate activities (L)	12,755
Raising of cattle (A)	3,203
Manufacture of food products and beverages (C)	2,142
Arable farming (A)	1,878
Construction (F)	1,826
Freight transport by road (H)	958
Manufacture of chemicals and chemical products (C)	928
Non-fossil electricity production (D)	816
Manufacture of machinery and equipment (C)	795
Raising of poultry and swine/pigs (A)	772
Support activities for transportation (H)	763
Water supply; sewerage, waste management and remediation activities (E)	649
Wholesale of construction materials (G)	563
Wholesale of food, beverages and tobacco (G)	506
Inland freight water transport (H)	466
Manufacture of rubber and plastic products (C)	387
Manufacture of construction materials (C)	204
Wholesale of agricultural raw materials and live animals (G)	177
Fossil electricity production (D)	162
Air transport (H)	45
	29,995

High sensitivity (H) | Moderately high (MH) | Moderate (M) | Moderately low (ML) | Low sensitivity (L) | Not specified

[1] Some sub-sectors deviate from NACE. This is due to the fact that for some sub-sectors NACE classification was not useful for sector experts to provide relevant input about the sub-sector characteristics.

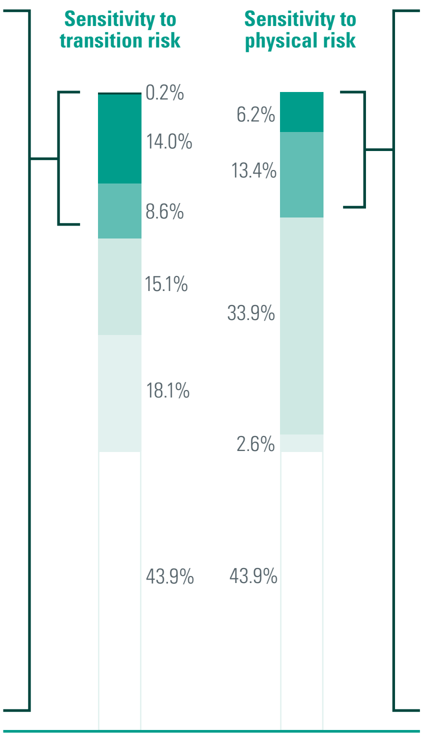
Climate risk heatmap

The climate risk heatmap focuses on sector sensitivity and vulnerability to physical climate risk (i.e. dependency on natural capital assets that may deteriorate as a result of climate hazards) and transition climate risk (i.e. resulting from impacts caused by misalignment with the transition to a net-zero economy).

The highest sectoral sensitivities to climate-related risk are in the Agriculture, Mining and Transportation sectors. Higher sensitivities are concentrated in the Raising of cattle and Sea coastal freight transport sub-sectors. Given that sensitivities are based on multiple indicators, sub-sectors can have similar risk labels, but for different reasons. Transition risk is determined by GHG emission intensity, the feasibility of decarbonisation pathways and market conditions. Characteristics relevant for physical risk include assets, energy use, labour productivity, ecosystem service dependency in own operations and the supply chain, transportation routes and climate-sensitivity of demand.

Climate Risk Heatmap

Sub-sector (incl NACE sector letter)	EUR million
High sensitivity to climate transition risk	
Fossil electricity production (D)	162
	162
Moderately high sensitivity to climate transition risk	
Sea and coastal freight water transport (H)	5,854
Raising of cattle (A)	3,203
Support activities for petroleum and natural gas extraction (B)	1,794
Extraction of crude petroleum and natural gas (B)	567
Inland freight water transport (H)	466
Manufacture of basic metals (C)	240
Air transport (H)	45
	12,168
Moderate sensitivity to climate transition risk	
Manufacture of food products and beverages (C)	2,142
Indoor growing of crops (A)	1,183
Freight transport by road (H)	958
Manufacture of chemicals and chemical products (C)	928
Raising of poultry and swine/pigs (A)	772
Water supply; sewerage, waste management and remediation activities (E)	649
Manufacture of fabricated metal products, except machinery and equipment (C)	629
Manufacture of construction materials (C)	204
	7,464



Sub-sector (incl. NACE sector letter)	EUR million
Moderately high sensitivity to climate physical risk	
Raising of cattle (A)[1]	3,203
Indoor growing of crops (A)[1]	1,183
Raising of poultry and swine/pigs (A)[1]	772
Manufacture of construction materials (C)[1]	204
Air transport (H)	45
	5,406
Moderate sensitivity to climate physical risk	
Manufacture of food products and beverages (C)	2,142
Arable farming (A)	1,878
Construction (F)	1,826
Manufacture of chemicals and chemical products (C)	928
Manufacture of machinery and equipment (C)	795
Support activities for transportation (H)	763
Water supply; sewerage, waste management and remediation activities (E)	649
Manufacture of fabricated metal products, except machinery and equipment (C)	629
Warehousing and storage (H)	587
Inland freight water transport (H)	466
Manufacture of rubber and plastic products (C)	387
Manufacture of basic metals (C)	240
Wholesale of agricultural raw materials and live animals (G)	177
Fossil electricity production (D)[1]	162
	11,629

High sensitivity (H) | Moderately high (MH) | Moderate (M) | Moderately low (ML) | Low sensitivity (L) | Not specified

[1] Some sub-sectors deviate from NACE. This is due to the fact that for some sub-sectors NACE classification was not useful for sector experts to provide relevant input about the sub-sector characteristics.

Corporate loans - sensitivity to physical risk

The heatmap shows sectors' sensitivity to climate risk drivers, expressed as a high, medium or low level of sensitivity. To complement our assessment of physical risk, the table below shows the sensitivity of exposures to climate risk events based on the client's location. The combination of the two produces a more integrated view on physical risk in our portfolio, based on both sector and geographical data. The two tools will be combined in 2023 to provide improved insight into the CER risks in our portfolio.

(in millions)	Sector sensitivity to physical risk	Exposure located in areas sensitive to impact from chronic climate change effects	Exposure located in areas sensitive to impact from acute climate change effects	Exposure located in areas sensitive to impact both from chronic and acute climate change effects	Exposure located in areas not sensitive to climate change events	31 December 2022 Total gross carrying amount[3]	31 December 2021 Total gross carrying amount[3]
Agriculture, forestry and fishing	MH	3,235	1,427	600	1,961	7,222	7,301
Mining and quarrying	ML	19	326	31	2,161	2,536	2,704
Manufacturing	M	930	1,340	131	5,266	7,667	7,609
Electricity, gas, steam and air conditioning supply	ML	413	330	28	815	1,585	2,203
Water supply; sewerage, waste management and remediation activities	ML	261	23	3	362	649	631
Construction	ML	458	684	69	2,867	4,078	4,413
Wholesale and retail trade; repair of motor vehicles and motorcycles	ML	1,525	1,496	196	5,935	9,151	9,185
Transport and storage	ML	486	1,160	332	7,513	9,491	9,798
Real estate activities	ML	1,377	2,593	277	8,508	12,755	11,384
Corporate loans in key sectors		**8,704**	**9,378**	**1,666**	**35,388**	**55,135**	**55,228**
Other sectors[1]		2,857	6,117	412	22,211	31,596	31,231
Corporate loans[2]		**11,560**	**15,494**	**2,078**	**57,598**	**86,731**	**86,458**

1 Includes exposures to all other NACE sectors.
2 Excluding loans at fair value through P&L.
3 Gross carrying amount excludes fair value adjustments from hedge accounting.

High sensitivity (H) | Moderately high (MH) | Moderate (M) | Moderately low (ML) | Low sensitivity (L) | Not specified

The table classifies our corporate loans portfolio by location and indicates sensitivity of the location to climate change events. These are categorized as "acute" if arising from extreme events, such as droughts, floods and storms, and "chronic" if they are related to progressive shifts, such as increasing temperatures and water stress. While impact from environmental degradation, such as air, water and land pollution, biodiversity loss and deforestation also qualifies as physical risk, it is not in scope of this table.

The assessment whether an exposure is sensitive to the impact of climate events is solely based on the location of the collateral or, if the loan is not collateralised by immovable property, of the location of the counterparty. For flooding risk in the Netherlands, data were obtained from the Climate Impact Atlas of Climate Adaptation Services (CAS). But the evaluation was done per sub-sovereign region (EU NUTS3 or similar). All counterparties in a region where more than 10% of the locations are exposed to a potential flood of more than half meter are marked as exposed to acute- physical climate risk. This provides a conservative estimate of the exposure sensitive to flooding risk, which we seek to improve in the future. For all other risk hazards and for regions outside the Netherlands, we used scores for individual hazards per sub-sovereign region, provided Moody's ESG Solutions. If any of the individual hazard scores is high or red flag, all exposures in that region are reported as sensitive to chronic (water stress and heat stress) or acute (floods, hurricanes & typhoons, wildfires, sea level rise) physical risk.

The agriculture sector has a medium high sensitivity to physical risk. Furthermore a relatively large share of our exposure to this sector is in the north and east of the country, regions sensitive to water stress, i.e. the balance between renewable water supply and total water withdrawals.

GHG monitoring

In line with the bank's climate objectives and strategic risk appetite on the alignment of our portfolio with the Paris Agreement and the Net Zero Banking Alliance, we measure the greenhouse gas (GHG) emissions of our activities. This includes the direct (scope 1 and 2 and partly scope 3) emissions of our own operations and the indirect emissions in our lending and client assets portfolios. In doing so, we focus on GHG/carbon-intensive sectors in particular, and assess the alignment of certain GHG-intensive portfolios with Paris and net zero emissions scenarios.

GHG emissions

GHG emissions (in ktons CO_2e)	2022	2021	Delta
Total scope 1[1]	3	3	-1
Total scope 2[2]	3	3	
Total scope 3 - own operations[3]	41	47	-6
Total scope 3 - emissions of the balance sheet[4, 5]	17,820	19,018	-1,198
Total scope 3 - emissions of client assets[6]	4,767	6,498	-1,731
Total GHG emission	**22,634**	**25,570**	**-2,936**

1 Natural gas/biogas, solar energy (the Netherlands and rest of world) and mobility lease cars (Netherlands).
2 Electricity (excluding solar energy) and heating & cooling, location based figures provided by energy suppliers (the Netherlands and rest of world).
3 Including GHG emissions for home workplace, air travel, international business rail travel, hotel visits, mobility, public transport and IT. Scoping is based on GHG Protocol.
4 Based on PCAF methodology, using total assets as the denominator and gross carrying amount as attribution metric.
5 ABN AMRO is continuously working on improving the methodology and data quality of the GHG emissions. The figures of 2021 have been updated correspondingly.
6 Calculation based on PCAF methodology listed companies, using Enterprise value including cash as the denominator. The scope of the calculation includes equities and corporate bonds, both direct and indirect in funds.

Our scope 3 emissions from own operations decreased due to lower emissions for IT (off-premises data centers and Software-as-a-Service). Financed emissions in our lending portfolio also decreased; further details are provided below.

Emissions for assets under management decreased in line with the total volume of managed assets. Emissions per EUR 1 million invested were approximately the same as at 31 December 2021.

GHG Financed Emissions

	31 December 2022					31 December 2021				
	Gross carrying amount[4]		GHG emissions (in ktons CO_2)	Carbon intensity (in tons CO_2/EUR millions)	PCAF average data quality score	Gross carrying amount[4]		GHG emissions (in ktons CO_2)	Carbon intensity (in tons CO_2/EUR millions)	PCAF average data quality score[5]
(in millions)	In scope for financed emissions	Out of scope for financed emissions				In scope for financed emissions	Out of scope for financed emissions			
Cash and balances at central banks		60,865					66,865			
Financial assets held for trading		907					1,155			
Derivatives		5,212					3,785			
Financial investments[1]	6,912	35,240	258	37	3.7	6,738	34,791	251	37	3.7
Securities financing		20,032					16,138			
Loans and advances banks		2,990					2,811			
Residential mortgages	150,762		1,517	10	3.6	146,351		1,686	12	3.6
Consumer loans[2]	234	9,998	49	208	4.0	220	10,575	49	224	4.0
Corporate loans at amortised cost	86,731		15,967	184	4.2	86,458		17,007	197	4.3
Corporate loans at fair value through P&L	66		14	219	5.0	99		2	16	5.0
Other loans and advances customers[3]		7,497					15,012			
Equity-accounted investments	474		14	30	5.0	564		24	43	5.0
Other assets		8,492					9,440			
Total assets	**245,180**	**151,234**	**17,820**	**73**	**3.8**	**240,429**	**160,572**	**19,018**	**79**	**3.8**

1 Corporate bonds and equity are in scope for financed emissions. Government bonds are currently out of scope for financed emissions. We are investigating inclusion of government bonds in future years.
2 Motor vehicle loans are in scope for financed emissions, while the other consumer loans are out of scope for financed emissions due to unavailability of a methodology.
3 Including loans and advances customers at fair value through P&L.
4 Excluding fair value adjustments from hedge accounting.
5 PCAF Average data quality score is calculated on the Gross carrying amount.

GHG PCAF data quality score

(in millions)	31 December 2022 Gross carrying amount[1]	GHG emissions (in ktons CO_2)	31 December 2021 Gross carrying amount[1]	GHG emissions (in ktons CO_2)
Data quality score 1 (highest)	10,260	1,371	7,470	622
Data quality score 2	4,091	1,841	6,843	2,792
Data quality score 3	84,818	974	76,133	979
Data quality score 4	69,919	994	76,156	1,208
Data quality score 5 (lowest)	76,092	12,640	73,827	13,417
Total in scope	**245,180**	**17,820**	**240,429**	**19,018**
Not in scope	151,234		160,572	
Total assets	**396,414**	**17,820**	**401,001**	**19,018**

1 Excluding fair value adjustments from hedge accounting.

The tables above provide an overview of the assets in scope of GHG emission reporting and the associated data quality score. The lending portfolio's emissions are calculated in accordance with the principles set by the Partnership Carbon Accounting Financials (PCAF). In line with the PCAF Financed Emissions Standard published in 2020, we extended our scope during the year by including corporate bonds, equity-accounted investments and motor vehicle loans. Based on the new version of the standard introduced in December 2022, which includes a method for government bonds, we will review and, if possible, extend the scope further.

We also improved the average data quality score, especially for residential mortgages and corporate loans . For corporate loans, we extended the use of company-level emissions data to our shipping and energy clients, thereby reducing the use of average carbon intensities per sector. For residential mortgages and commercial real estate, we used carbon intensities per square metre by energy label and type of object. To allow for comparison of figures with previous periods, the reported emissions at 31 December 2021 were updated and also reflect the current scope and data quality score.

The use of more granular data resulted in an upward revision of estimated emissions for residential mortgages. In comparison with 31 December 2021, emissions were lower, despite the growth of the loan book. This reflects the increased proportion of properties with energy label A or higher. More details on the financed emissions in our corporate loans portfolio are provided below.

Corporate loans in sectors contributing highly to climate change

(in millions)	31 December 2022 Gross carrying amount[3]	- of which carbon-related	GHG emissions (in ktons CO_2)	- of which carbon-related	31 December 2021 Gross carrying amount[3,4]	- of which carbon-related[4]	GHG emissions (in ktons CO_2)[4]	- of which carbon-related
Agriculture, forestry and fishing	7,222		5,665		7,301		5,823	
Mining and quarrying	2,536	2,361	2,076	2,027	2,704	2,446	2,627	2,367
Manufacturing	7,667	252	776	63	7,609	311	724	53
Electricity, gas, steam and air conditioning supply	1,585	262	851	490	2,203	138	1,193	449
Water supply; sewerage, waste management and remediation activities	649		354		631		334	
Construction	4,078		109		4,413		118	
Wholesale and retail trade; repair of motor vehicles and motorcycles	9,151		182		9,185		257	
Transport and storage	9,491		3,999		9,798		3,953	
Real estate activities	12,755		217		11,384		247	
Corporate loans in sectors highly contributing to climate change	**55,135**	**2,874**	**14,229**	**2,580**	**55,228**	**2,895**	**15,277**	**2,869**
Other sectors[1]	31,596		1,738		31,231		1,730	
Corporate loans[2]	**86,731**	**2,874**	**15,967**	**2,580**	**86,458**	**2,895**	**17,007**	**2,869**

1 Includes exposures to all other NACE sectors.
2 Excluding loans at fair value through P&L.
3 Excluding fair value adjustments from hedge accounting.
4 ABN AMRO is continuously working on improving the methodology and data quality of the GHG emissions. As a result, the corporate loans to other counterparties have been split per NACE sector this year and GHG emissions of 2021 have been updated correspondingly.

Compared to 31 December 2021, the bank's exposure to sectors contributing to climate change, including to carbon-related sectors, remained largely unchanged. The associated scope 3 emissions decreased because we reduced our exposure to carbon-intensive sectors such as electricity, gas, steam and air conditioning supply (NACE sector D) and mining and quarrying (NACE sector B).

Sectors highly contributing to climate change - client assets

	31 December 2022		31 December 2021	
(in millions)	Amount	Percentage of total	Amount	Percentage of total
Client assets in sectors highly contributing to climate change[1]	43,579	61%	54,571	60%
Client assets in other sectors	27,132	38%	35,865	39%
Subtotal	**70,710**	**100%**	**90,436**	**100%**
No data available	336	0%	392	0%
Total	**71,047**	**100%**	**90,828**	**100%**

[1] Please refer to the definitions on page 343 for the definition of carbon-intensive assets.

Carbon-related client assets

	31 December 2022		31 December 2021	
(in millions)	Amount	Percentage of total	Amount	Percentage of total
Carbon-related client assets[1]	6,109	9%	6,396	7%
Non-carbon-related client assets	61,884	87%	79,752	88%
Subtotal	**67,993**	**96%**	**86,148**	**95%**
No data available	3,053	4%	4,680	5%
Total	**71,047**	**100%**	**90,828**	**100%**

[1] Please refer to the definitions on page 343 for the definition of carbon-intensive assets.

The climate analysis identifies a potential number of properties that, due to a combination of factors (for example modest maintenance, a poor energy label, a low market value and potentially high costs of damage) may decrease in value in the future, if climate risks strike. In the worst-case scenario, the collateral is not worth restoring. Another point of preliminary research is based on a group of potential clients who may not be (fully) able to cover the costs of climate-related risks if they occur.

Based on the climate risk analysis performed in 2022, ABN AMRO gained more awareness and an updated overview of our mortgage portfolio with respect to climate risks. The data quality is expected to improve continuously over the coming years. ABN AMRO is working together with other banks on a market standard approach for climate risk in real estate.

Scenario analysis - real estate

In 2022, the analysis of physical climate risk in real estate (both residential and commercial) was updated and improved. For example, the scope of the analysis was expanded so that, as well as flood and drought risk, it now also includes the risk of wildfires and heat stress. The scenario analysis methodology was also officially validated, thus allowing it to be used for portfolio credit analyses, stress testing and ICAAP purposes.

An additional study was also carried out, in collaboration with Group Economics, into the effects of flood risk and foundation risk on pricing in the residential real estate market. This study shows that these climate risks are generally not yet reflected in the market price. The results of this study are used in the scenario analyses, with a distinction being made between the direct effect (i.e. cost of damage) and the indirect effect (i.e. perception effect) of physical risks.

Scenario choice and data

Foundation risk is an important driver of physical climate risk in the Dutch residential real estate market. Property-specific data on foundation risk is available from Kennis Centrum Aanpak Funderingsproblematiek (KCAF), a leading party in the Netherlands that generates granular data on this risk. This data is also included in property valuation reports.

Data on the other drivers of physical climate risk assessed (flooding, wildfires and heat stress) are obtained from Climate Adaptation Services (CAS), which provides data at a highly granular level for all of the Netherlands. The CAS data is partly based on the WH scenario until 2050 from the Royal Netherlands Meteorological Institute (KNMI). This scenario marks the worst-case outcome for climate change in the Netherlands and closely aligns with the NGFS current policies scenario.

Wildfires in the Netherlands are regularly caused by human actions. However, the number of wildfires is increasing due to drought associated with climate change. The damage can be enormous, as in the case of the fire in De Peel in 2020. The wildfire map has been developed by WENR and Deltares and takes account of various factors, including precipitation deficit, groundwater level, soil type and recreational pressure.

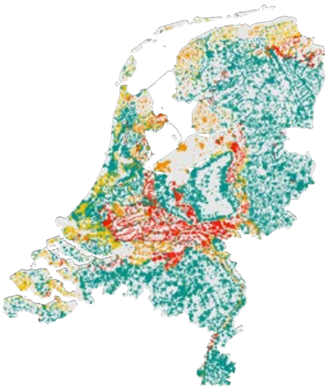
According to Witteveen+Bos, an increasing part of the Netherlands will face heat stress, i.e. a perceived temperature higher than 41 degrees Celsius, in the future. Heat stress does not directly cause physical damage to homes, but it does have an impact on human health and productivity and thus on GDP. As this could lead to client preferences for type of homes and location changing, ABN AMRO has mapped out this risk as well.

Results

Drought, subsidence and pole rot – RRE

The map on the left shows all the properties in our RRE portfolio in the Netherlands and the risk of pole rot and subsidence occurring in the next 28 years.

In the scenario analysis, the probabilities of foundation problems are grouped into 4 buckets: no risk, low risk, medium risk and high risk. Almost all properties with foundation problems are built on peat soil and were built before 1970. As foundation risk is a slowly progressing risk, the deterioration caused by foundation problems could translate into a future lower market value and will thus impact LGD and consequently RWA. The repair costs for an average house could be EUR 80,000 - EUR 100,000.



Flooding – RRE

The map on the left shows all the properties in our RRE portfolio in the Netherlands and their risk of flooding for the next 28 years.

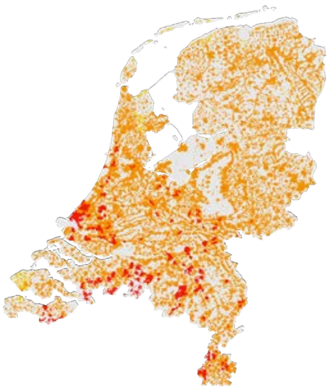
In the scenario analysis, the probabilities of flooding are grouped into 4 buckets: no risk, low risk, medium risk and high risk. Areas around rivers have the highest risk of flooding, with an estimated probability of 1/30 per year until 2050. The damage that can be caused by flood is estimated at EUR 1,250 per square meter in the scenario analysis. This amount depends on the height of the water.

Wildfires – RRE

The map on the left shows all the properties in our RRE portfolio in the Netherlands and the risk of wildfires in the next 28 years.

According to Statistics Netherlands (CBS), there were twice as many wildfires caused by drought in the Netherlands in 2018 compared to the years before. As experienced in Southern and Eastern Europe in 2021, there are more uncontrollable fires due to drier soil and rising temperatures.

In the scenario analysis, the probabilities of wildfires are grouped into 4 buckets: no risk, low risk, medium risk and high risk. The possible estimated damage caused by wildfire in the scenario analysis is equal to the rebuild value.



Heat stress – RRE

The map on the left shows all the properties in our RRE portfolio in the Netherlands and the expected heat stress in 2050.

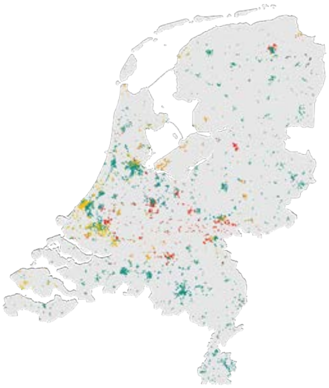
In the scenario analysis, the probabilities of heatstress are again grouped into 4 buckets: no risk, low risk, medium risk and high risk. High heat stress is experienced when the perceived temperature rises beyond 42°C. It is expected that especially the Southern part of the Netherlands will experience heat stress. Heat stress depends on the type of home and is reduced by preventing sunlight from shining directly into the home. Measures such as a sunblinds, shade provided by trees, floor cooling and water supplies mitigate this. For heat stress, no damage on the property is considered in the scenario analyses.

No risk Low Medium High

Drought, subsidence and pole rot – CRE

The map on the left shows all the properties in our CRE portfolio in the Netherlands and the risk of pole rot and subsidence occurring in the next 28 years.

In the scenario analysis, the probabilities of foundation problems are grouped into 4 buckets: no risk, low risk, medium risk and high risk. Almost all properties with foundation problems are built on peat soil and were built before 1970. As foundation risk is a slowly progressing risk, the deterioration caused by foundation problems could translate into a future lower market value and will thus impact LGD and consequently RWA. The repair costs for an average house could be EUR 80,000 - EUR 100,000.



Flooding – CRE

The map on the left shows all the properties in our CRE portfolio in the Netherlands and their risk of flooding for the next 28 years.

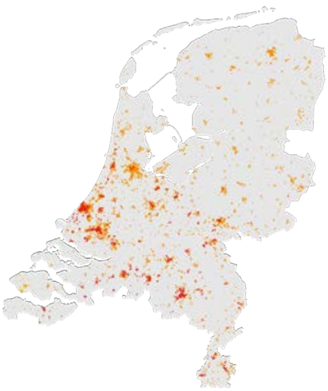
In the scenario analysis, the probabilities of flooding are grouped into 4 buckets: no risk, low risk, medium risk and high risk. Areas around rivers have the highest risk of flooding, with an estimated probability of 1/30 per year until 250. The damage that can be caused by flood is estimated at EUR 1,250 per square meter in the scenario analysis. This amount depends on the height of the water.

Wildfires – CRE

The map on the left shows all the properties in our CRE portfolio in the Netherlands and the risk of wildfires in the next 28 years.

According to Statistics Netherlands (CBS), there were twice as many wildfires caused by drought in the Netherlands in 2018 compared to the years before. As experienced in Southern and Eastern Europe in 2021, there are more uncontrollable fires due to drier soil and rising temperatures.

In the scenario analysis, the probabilities of wildfires are grouped into 4 buckets: no risk, low risk, medium risk and high risk.



Heat stress – CRE

The map on the left shows all the properties in our CRE portfolio in the Netherlands and the expected heat stress in 2050.

In the scenario analysis, the probabilities of heatstress are again grouped into 4 buckets: no risk, low risk, medium risk and high risk. High heat stress is experienced when the perceived temperature rises beyond 42°C. It is expected that especially the Southern part of the Netherlands will experience heat stress. Heat stress depends on the type of home and is reduced by preventing sunlight from shining directly into the home. Measures such as a sun-blinds, shade provided by trees, floor cooling and water supplies mitigate this. For heat stress, no damage on the property is considered in the scenario analyses.

No risk Low Medium High

Management Control Statement

ABN AMRO publishes this Management Control Statement to demonstrate its accountability for Risk Management and Culture, as stipulated in Principles 1.4 and 2.5 of the Dutch Corporate Governance Code.

- By virtue of Principle 1.4 (Risk management accountability) of the Dutch Corporate Governance Code, ABN AMRO's Executive Board is required to account for the effectiveness of the design and operation of the bank's internal risk management and control systems.
- By virtue of Principle 2.5 (Culture) of the Code, the Executive Board is responsible for promoting a culture aimed at creating long-term value for the company and its affiliated enterprises.
- By virtue of Principle 2.5.4 (Accountability regarding culture), the Executive Board is required to explain the bank's values and how these values are incorporated into the activities of the company and its affiliated enterprises, and to account for the effectiveness of and the bank's compliance with the Code of Conduct.

The Management Control Statement consists of four sections:

A. Insights into our Risk management governance processes and control systems for 2022.
B. Factors that potentially impact ABN AMRO's current business model.
C. Areas at risk of non-compliance with regulations and heightened regulatory scrutiny.
D. Areas of attention for ABN AMRO identified by senior management.

Section A: Risk Management Governance

ABN AMRO's internal risk management and control process is designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Strategic and business objectives
- Compliance with laws, regulations and internal policies
- Reliability of financial and non-financial information
- Effectiveness and efficiency of operations; and
- Safeguarding of assets, and identification and management of liabilities

ABN AMRO's first and second lines of defence perform a variety of tests and controls – risk assessments, stress tests, and evaluations on effectiveness of controls – on risk management and control systems. The results are reported in formal risk reports and discussed at senior management level.

ABN AMRO continuously upgrades the effectiveness of its risk control framework via the Risk Management Foundation Plan. More attention is also being paid to responding to the factors that affect the effectiveness of the risk control framework, such as clarity, achievability and engagement.

Group Audit, as the third line of defence, evaluates the design and effectiveness of ABN AMRO's governance, as well as its Risk Management and Control Systems. In 2022, the Audit reports were discussed with relevant Executive Committee members. Group Audit attended the Executive Board and/or Executive Committee meetings every quarter to discuss the Quarterly Audit Opinions.

Last year, the evaluation of the adequacy of ABN AMRO's internal risk management and control systems was regularly discussed with the Audit Committee, the Risk & Capital Committee and the full Supervisory Board.

On an annual basis the Executive Board makes the following Statements and provides clear substantiation regarding the internal risk management and control systems. This is always done in accordance with ABN AMRO's moderate risk profile (in compliance with best practice provision 1.4.3 of the Corporate Governance Code and based on ABN AMRO's risk management processes):

- An integral part of the Integrated Annual Report 2022 is the Executive Board's Report, which provides insight into any failings in the effectiveness of the Internal Risk Management and Control Systems (best practice 1.4.3.i);
- The internal risk management and control systems provide reasonable assurance that the financial reporting for 2022 does not contain any material inaccuracies (best practice 1.4.3.ii);
- Based on the current situation, preparation of the financial reporting for 2022 on a going-concern basis is justified (best practice 1.4.3.iii). For further information, please refer to Note 1 Accounting policies in the Consolidated Annual Financial Statements;
- The Executive Board's report states those material risks and uncertainties that may affect ABN AMRO's continuity for the 12-month period following the preparation of this report (best practice 1.4.3.iv);
- The Executive Board's report outlines the bank's values, and how they are incorporated into the activities of the bank and its affiliated enterprises. It discusses the bank's compliance with the Code of Conduct (best practice 2.5.4).

For more information, please refer to the Risk framework section.

Section B: Factors that potentially impact ABN AMRO's current business model

The Executive Board has identified the following factors with potential impact on ABN AMRO's business model:

- Ongoing Russian-Ukrainian war
- Pressure on business volumes, margins and costs
- General weaknesses in economies where we or our clients do business
- Ongoing challenges to comply with a fast-changing regulatory landscape
- Other significant corporate developments

Ongoing Russian-Ukrainian war

The global headline issue in 2022 was the Russian-Ukrainian war, which created challenges to ABN AMRO's business model and its clients. In particular, economic activity slowed in the Netherlands, as well as in countries where we and our clients do business. There is a risk of a future recession in these business-relevant economies such as those in Western countries, caused by high inflation linked to high energy prices. Separately, although ABN AMRO's business continuity measures proved effective in the face of the war, there is increased risk of cyber warfare, including the use of destructive malware. ABN AMRO, as all other banks, must also cope with the intensified sanctions regime as a result of the ongoing Russian-Ukrainian war.

Pressures on business volumes, margins and costs

Although fee income grew in line with strategic targets for 2022, business risks for fees and commissions remain relevant. Competition in key markets, for instance pressure on the bank's market share in mortgages, increase the risk of underachieving income targets. Meanwhile cost discipline remains paramount for ABN AMRO to meet its cost targets but this also constrains expenditure and investments necessary for growth.

ABN AMRO faces a challenging regulatory environment, characterised by the following:

- There is an ongoing strain to comply with the regulatory environment that is characterised by many new laws and regulations, especially in the area of sustainable financing, privacy and digital resilience as well as more detailed disclosure requirements for non-financial risks. The unintended effects of such a demanding environment are an accumulation of change and cost pressure on ABN AMRO.
- ABN AMRO has defined sustainability as one of its strategic pillars. This means developments in the area of sustainability are expected to provide both opportunities and challenges for the bank. For example, ABN AMRO expects to benefit from the transition to the carbon-neutral economy as it supports its clients with advice and financing solutions for the necessary investments.
- However, sustainability creates exposure to a wide range of reputational, legal and litigation risks. In addition to claims around greenwashing (i.e. false or misleading statements about the sustainability profile of products or services), there is a threat of legal action from environmental activists potentially dissatisfied with ABN AMRO's climate action plan. Future legal ramifications are also conceivable where clients underperform on sustainability criteria and the bank decides to terminate these relationships.
- Sustainable Finance Regulations and the bank's Climate Plan also create the need for new and detailed information on the bank's clients with respect to climate and environmental risks. ABN AMRO is therefore confronted with increasing data needs, manual and/or external data collection, and moving definitions of standards and metrics when meeting Climate and Environmental disclosures. At the same time, sustainability experts are in short supply.

For more information, please refer to the Sustainability risk section.

Other significant corporate developments

The Executive Board took further steps to shape a future-proof bank by successfully implementing the New Service Model, winding down non-core activities, closing branches in the Netherlands and transitioning to a simplified operating model.

Section C: Areas with a risk of non-compliance with regulations and heightened regulatory scrutiny

Ensuring demonstrable compliance requires robust risk governance, enhanced data management and a substantial share of the bank's resources. Despite efforts to be compliant with laws and regulations, ABN AMRO does not always live up to its own expectations as well as those set out by regulators, clients and society at large. Failing to meet these expectations may lead to reputational damage, fines, claims and changes in ABN AMRO's income, costs or capital basis, all of which could endanger its long-term goals. The main areas with a risk of non-compliance with regulations and heightened regulatory scrutiny are described below. Updates on the progress of remediation programmes are also provided.

- **Anti-Money Laundering (AML) and Counter-Terrorism Financing (CTF), including Customer Due Diligence/ Know Your Client.** ABN AMRO is executing remediation programmes in the areas in Personal & Business Banking, Commercial Banking and International Card Services (ICS). This is supported by a programme to improve the quality of client files. ABN AMRO also delivered on the major milestones for Personal & Business Banking and Commercial Banking at the end of 2022 and aims to complete its AML remediation programmes in 2023.

  For more information, please refer to the Performance section in the Strategy, value creation & performance chapter.

- **Duty of care towards the bank's clients.** The goals of ABN AMRO and the expectations of external stakeholders - including clients, politicians and media - continue to be high regarding the bank's duty of care. In 2022, ABN AMRO successfully finalised its bank-wide Duty of Care Programme and worked on embedding the same in regular governance and processes.

  ABN AMRO has also intensified efforts to adapt to the changing fraud landscape and protect its clients and itself against fraud. Key actions include continuously improving the internal fraud risk management framework with more vigorous controls. Furthermore, ABN AMRO continued its fraud awareness campaigns and collaborations with public and private partners. This should improve the digital resilience of our clients.

- **Variable interest rates.** ABN AMRO is seeing an increased risk of claims and liability regarding loan products with variable interest rates. This has resulted in client compensation arrangements, including interest-on-interest, for certain revolving consumer credits. Residual claim and liability risks remain, both in relation to revolving credits and other types of loan products with variable interest rates. The bank continues to monitor these risks and the use of variable interest rates going forward.

  For more information, please refer to Customer experience in the Strategy, value creation & performance chapter.

- **Credit Risk Management.** Regulatory attention remains high around credit risk management, which has been persistently challenging for ABN AMRO, particularly relating to credit risk monitoring, collateral management and credit (risk) modelling. To remediate these challenges, ABN AMRO has made investments in IT infrastructure, data management capabilities, resourcing and organisational redesign.

  Moreover, ABN AMRO is progressing on its Return to Compliance plan to bring all its credit risk models in line with regulations. Adequate add-ons have been taken to address shortcomings in the meantime.

  More information on this is provided in the Credit risk management section.

In the past, ABN AMRO's legal predecessor, Fortis Bank (Nederland) N.V., ABN AMRO and several (former) subsidiaries were directly or indirectly involved in transactions relating to equity trading extending over dividend record dates, including several forms of tainted dividend arbitrage, i.e. tainted dividend stripping, including cum/ex and cum/cum. It cannot be excluded that ABN AMRO or subsidiaries may face financial consequences as a result of their involvement in these transactions. This could include corporate administrative fines and other measures under both criminal and civil law claims. The bank has been implementing measures to prevent any future involvement in tainted dividend arbitrage.

Overall, these remediation programmes require a substantial, ongoing effort, especially the regulatory areas mentioned above. In addition to its remediation programmes, the bank continues to improve compliance in all operational processes.

Section D: Areas of attention identified by senior management

The Executive Board has identified and agreed on the following areas of improvement, which are being actively managed by senior management:

- **Increased cyber risks:** The availability, security and stability of core systems and data are important preconditions for ABN AMRO to fulfil its strategy to be 'a personal bank in the digital age'. These preconditions are at risk as criminals increasingly try to lock and/or destroy systems and data, mostly in attempt to get cash out by means of ransomware or extortion.

  To reduce this risk, ABN AMRO puts in place robust controls to protect its systems, continuously improves capabilities to detect and respond to an attack and strengthens its abilities to recover quickly in case an attack would happen. It is equally important to note that cyber security has a strong behavioural component, meaning employees and users need to be aware of the threats and risks. Awareness programs are therefore being executed to enable employees to recognise and act on cyber security threats.

  Achieving these ambitions will make our systems much more robust. However, substantial efforts are still required to improve the IT infrastructure, which is complex due to the existence of legacy systems and multiple third-party applications.

- **Data management:** Having fit-for-purpose data and data management processes are elementary to the bank's strategic ambitions. ABN AMRO recognises that failing to have these in place undermines sound risk taking, curtails client-driven innovation including further digitalisation, imposes higher costs through manual interventions and reduces competitiveness. Likewise, without proper data and related management frameworks ABN AMRO cannot fully meet regulatory requirements such as adhering to the Principles for Effective Risk Data Aggregation and Risk Reporting (PERDARR) and adequately execute tasks related to detecting financial crime. Proper data management also plays a vital role in safeguarding against privacy risks.

Throughout 2022, ABN AMRO further progressed in strengthening data management capabilities by upgrading controls, improving governance and closing data gaps. Still, the quality of (historical) data, data ownership, data knowledge and a complex IT infrastructure all need to be addressed.

- **Change accumulation:** The large-sized change portfolio, many mutual interdependencies, high dependency on data quality, skill shortage and immature change execution processes are leading to an accumulation of change, which creates negative effects in terms of failing to achieve the set goals in the areas of growth, digitalisation, cost containment and regulatory compliance. Consequently, the overall level of risks around change accumulation in ABN AMRO increased in 2022 although the bank was improving regarding managing regulatory-driven changes.

  During 2022, Senior Management strongly increased its involvement to remedy recurring issues in change execution. Structures to strengthen program governance, provide performance measurement and improve risk reporting were put into place. These developments bode well for the future but navigating the complexities of the change portfolio is expected to require significant, ongoing attention.

- **People and culture:** Difficulties persist in attracting, developing and retaining qualified and diverse staff due to the combined effects of general supply shortage and consequent high competition for specific talents, especially in areas of IT and data. Changing employee attitudes accelerated by Covid-19 pandemic (e.g. people demanding more flexible working arrangements) also impact both labour supply and conditions necessary to retain and attract staff.

  ABN AMRO's Employee Engagement Survey score decreased in 2022. When people feel less engaged this may lead to several risks: higher levels of turnover, higher costs for attracting new colleagues, loss of productivity and efficiency (execution power) and increased costs of retention.

  Efforts are being made to mitigate these risks through carefully managed HR programmes, which focus on strategic workforce management, reskilling and well-being. HR also works closely with the business lines to:
  - Enhance performance management practices;
  - Ensure strategy execution also focuses on leadership and supporting people during change;
  - Strengthen client-centric ways of working;
  - Embedding our values-led culture through the bank's Culture Change Plan
  - Improve hybrid ways of working.

In the meantime, measures have been taken to minimise and mitigate the risks regarding all areas of improvement. However, it should be noted that ABN AMRO's internal risk management and control systems do not provide complete assurance on the realisation of business objectives, nor do they always prevent or detect inaccuracies, fraud and non-compliance with rules and regulations.

Additional risk, funding & capital disclosures

The following section includes additional disclosures on risk, funding and capital. This mandatory information is provided in accordance with EU IFRS and EDTF. This section is supplemental to the core analysis provided in the Risk, funding & capital review section and provides additional or more detailed information.

Credit quality by exposure class under the Internal Ratings-Based (IRB) approach

The following tables provide an overview of the EAD, RWA and LGD buckets by exposure class and grade category.

IRB approach: credit quality by exposure class

							31 December 2022
		Total			LGD 0-20%	LGD 20-50%	LGD >50%
(in millions)		EAD	RWA	RWA/EAD	EAD (%)	EAD (%)	EAD (%)
Exposure class	**Grade category**						
Central governments and central banks	Investment grade						
	Sub-investment grade						
	Impaired						
	Total						
Institutions[1]	Investment grade	7,813	1,532	20%	43%	48%	9%
	Sub-investment grade	170	314	185%	8%	89%	3%
	Impaired						
	Total	**7,983**	**1,847**	**23%**	**42%**	**49%**	**9%**
Corporates	Investment grade	48,776	20,558	42%	22%	76%	2%
	Sub-investment grade	48,823	29,289	60%	18%	80%	1%
	Impaired	3,483	3,654	105%	38%	59%	3%
	Total	**101,083**	**53,501**	**53%**	**21%**	**77%**	**2%**
Retail	Investment grade	132,134	8,506	6%	98%	2%	0%
	Sub-investment grade	26,933	6,940	26%	91%	9%	1%
	Impaired	1,457	1,445	99%	5%	94%	1%
	Total	**160,525**	**16,891**	**11%**	**96%**	**4%**	**0%**
Securitisation positions	Investment grade	2,043	253	12%	100%		
	Sub-investment grade						
	Impaired						
	Total	**2,043**	**253**	**12%**	**100%**	**0%**	**0%**
Total	Investment grade	190,767	30,850	16%	76%	23%	1%
	Sub-investment grade	75,927	36,544	48%	44%	55%	1%
	Impaired	4,940	5,098	103%	28%	69%	3%
	Total[2]	**271,634**	**72,492**	**27%**	**66%**	**33%**	**1%**

1 Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
2 Exposure at Default does not include other non-credit obligations and equities not held for trading, because these items are not subject to credit risk grading.

IRB approach: credit quality by exposure class

(in millions)		Total EAD	RWA	RWA/EAD	LGD 0-20% EAD (%)	LGD 20-50% EAD (%)	LGD >50% EAD (%)
							31 December 2021
Exposure class	**Grade category**						
Central governments and central banks	Investment grade	103,059	663	1%	95%	4%	1%
	Sub-investment grade	88	124	141%	21%		79%
	Impaired	5	53	1003%			100%
	Total	**103,152**	**840**	**1%**	**94%**	**4%**	**1%**
Institutions[1]	Investment grade	6,697	1,078	16%	47%	53%	0%
	Sub-investment grade	328	501	153%	4%	93%	3%
	Impaired	9	10	110%	100%		
	Total	**7,034**	**1,589**	**23%**	**45%**	**55%**	**1%**
Corporates	Investment grade	49,127	18,024	37%	32%	63%	5%
	Sub-investment grade	49,309	29,385	60%	25%	73%	2%
	Impaired	4,818	4,802	100%	42%	43%	15%
	Total	**103,254**	**52,211**	**51%**	**29%**	**67%**	**4%**
Retail	Investment grade	138,073	7,802	6%	98%	2%	1%
	Sub-investment grade	29,772	7,197	24%	92%	6%	2%
	Impaired	1,699	1,575	93%	80%	18%	2%
	Total	**169,544**	**16,574**	**10%**	**97%**	**2%**	**1%**
Securitisation positions	Investment grade	1,016	116	11%	77%	21%	2%
	Sub-investment grade						
	Impaired						
	Total	**1,016**	**116**	**11%**	**77%**	**21%**	**2%**
Total	Investment grade	297,972	27,684	9%	85%	14%	1%
	Sub-investment grade	79,497	37,207	47%	50%	48%	2%
	Impaired	6,531	6,439	99%	52%	36%	12%
	Total[2]	**384,000**	**71,331**	**19%**	**77%**	**21%**	**2%**

[1] Institutions include exposures to banks and investment undertakings, regional governments and local authorities, and pension funds.
[2] Exposure at Default does not include other non-credit obligations and equities not held for trading, because these items are not subject to credit risk grading.

Additional information on exposure flows

Gross carrying amount of residential mortgages Audited

(in millions)	Stage 1	Stage 2	Stage 3[3]	Total	Stage 1	Stage 2	Stage 3[3]	Total
				2022				2021
Balance at 1 January	**137,063**	**8,025**	**1,264**	**146,351**	**135,407**	**9,141**	**1,124**	**145,672**
Transfer to stage 1	3,838	-3,823	-15		3,383	-3,362	-20	
Transfer to stage 2	-6,587	7,023	-436		-4,285	4,639	-355	
Transfer to stage 3	-257	-338	595		-293	-492	785	
Additional drawdowns and partial repayments	-14,064	-1,509	-232	-15,805	-6,011	1	1	-6,010
Originated or purchased	22,879			22,879	22,178			22,178
Matured or repaid	-2,421	-208	-31	-2,660	-13,317	-1,903	-265	-15,484
Write-offs			-3	-3			-6	-6
Foreign exchange	1			1				1
Balance at 31 December	**140,450**	**9,169**	**1,143**	**150,762**	**137,063**	**8,025**	**1,264**	**146,351**

[1] Excluding loans at fair value through P&L.
[2] Gross carrying amount excludes fair value adjustments from hedge accounting.
[3] Including POCI.

Gross carrying amount of consumer loans Audited

(in millions)	Stage 1	Stage 2	Stage 3[1]	2022 Total	Stage 1	Stage 2	Stage 3[1]	2021 Total
Balance at 1 January	**9,348**	**1,037**	**409**	**10,794**	**9,707**	**1,068**	**456**	**11,232**
Transfer to stage 1	443	-433	-11		219	-205	-15	
Transfer to stage 2	-343	360	-17		-455	458	-3	
Transfer to stage 3	-50	-58	108		-53	-28	80	
Additional drawdowns and partial repayments	-340	-24	-11	-375	-1,203	-16	19	-1,201
Originated or purchased	1,911			1,911	2,538			2,538
Matured or repaid	-1,852	-134	-51	-2,037	-1,403	-250	-57	-1,710
Write-offs			-65	-65			-69	-69
Foreign exchange	3			4	4	1		5
Other movements					-7	9	-2	
Balance at 31 December	**9,121**	**749**	**363**	**10,232**	**9,348**	**1,037**	**409**	**10,794**

[1] Including POCI.

Gross carrying amount of corporate loans Audited

(in millions)	Stage 1	Stage 2	Stage 3[3]	2022 Total	Stage 1	Stage 2	Stage 3[3]	2021 Total
Balance at 1 January[3]	**69,364**	**12,075**	**5,019**	**86,458**	**64,517**	**15,356**	**6,873**	**86,745**
Transfer to stage 1	3,472	-3,388	-84		2,002	-1,947	-55	
Transfer to stage 2	-7,040	7,631	-591		-3,102	3,293	-191	
Transfer to stage 3	-557	-536	1,093		-540	-909	1,449	
Additional drawdowns and partial repayments	-3,391	1,449	175	-1,767	-19,948	1,047	11	-18,889
Originated or purchased	23,683			23,683	46,463			46,463
Matured or repaid	-16,920	-3,381	-1,431	-21,732	-21,258	-4,992	-2,216	-28,466
Write-offs			-555	-556	-11	-19	-1,012	-1,042
Foreign exchange	577	43	37	657	1,357	280	159	1,795
Other movements	-84	71	1	-13	-116	-33	1	-149
Balance at 31 December	**69,103**	**13,963**	**3,666**	**86,731**	**69,364**	**12,075**	**5,019**	**86,458**

[1] Excluding loans at fair value through P&L.
[2] Gross carrying amount excludes fair value adjustments from hedge accounting.
[3] Including POCI.

Gross carrying amount of off-balance Audited

(in millions)	Stage 1	Stage 2	Stage 3[1]	2022 Total	Stage 1	Stage 2	Stage 3[1]	2021 Total
Balance at 1 January	**50,199**	**6,019**	**1,271**	**57,488**	**51,194**	**6,183**	**1,275**	**58,653**
Transfer to stage 1	1,960	-1,923	-37		995	-968	-27	
Transfer to stage 2	-2,801	2,958	-157		-1,352	1,430	-79	
Transfer to stage 3	-81	-82	164		-26	-261	287	
Additional drawdowns and partial repayments	-9,513	-668	-547	-10,728	-6,593	-248	-111	-6,952
Originated or purchased	10,701			10,701	8,251			8,251
Matured or repaid	-549	-138		-687	-3,122	-182	-99	-3,403
Write-offs								
Foreign exchange	271	42	7	320	854	65	23	942
Other movements					-3			-3
Balance at 31 December	**50,187**	**6,209**	**700**	**57,095**	**50,199**	**6,019**	**1,271**	**57,488**

[1] Including POCI.

Additional information on impairment charges

Loan impairment charges and allowances – residential mortgages Audited

				2022				2021
(in millions)	Stage 1	Stage 2	Stage 3[2]	Total	Stage 1	Stage 2	Stage 3[2]	Total
Balance at 1 January	**8**	**22**	**52**	**82**	**14**	**44**	**58**	**116**
Transfer to stage 1	6	-8	-1	-3	12	-15	-3	-6
Transfer to stage 2	-2	20	-14	4	-1	15	-14	
Transfer to stage 3	-1	-2	21	17	-1	-5	27	21
Remeasurements[1)]	-12	5	16	9	-10		15	5
Changes in models							-1	-1
Changes in risk parameters	17	28	12	57	-8	-11	-12	-31
Originated or purchased	7			7	4			4
Matured or repaid	-1	-7	-10	-18	-1	-6	-13	-19
Impairment charges (releases) on loans and advances	**13**	**35**	**25**	**73**	**-6**	**-21**	**-1**	**-28**
Write-offs			-3	-3			-6	-6
Unwind discount / unearned interest accrued			1	1			1	1
Foreign exchange and other movements								-1
Balance at 31 December	**21**	**57**	**75**	**153**	**8**	**22**	**52**	**82**
Impairment charges (releases) on loans and advances	13	35	25	73	-6	-21	-1	-28
Recoveries and other charges (releases)			-17	-17			-18	-18
Total impairment charges for the period	**13**	**35**	**8**	**56**	**-6**	**-21**	**-19**	**-46**

1 Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.
2 Including POCI.

Loan impairment charges and allowances – consumer loans Audited

				2022				2021
(in millions)	Stage 1	Stage 2	Stage 3[2]	Total	Stage 1	Stage 2	Stage 3[2]	Total
Balance at 1 January	**23**	**45**	**208**	**276**	**38**	**41**	**215**	**294**
Transfer to stage 1	13	-17	-5	-9	9	-12	-3	-7
Transfer to stage 2	-2	11	-9		-8	25	-19	-3
Transfer to stage 3		-5	42	37	-2	-8	61	51
Remeasurements[1]	-9	-1	37	27	-7	13	33	39
Changes in models						-4	5	1
Changes in risk parameters	3	3	6	12	-3	-2	-6	-12
Originated or purchased	4			4	5			5
Matured or repaid	-2	-1	-9	-12	-4	-2	-21	-27
Impairment charges (releases) on loans and advances	**7**	**-10**	**61**	**59**	**-11**	**8**	**50**	**47**
Write-offs			-65	-65			-69	-69
Unwind discount / unearned interest accrued			5	5			4	4
Foreign exchange and other movements			2	3	-4	-3	8	
Balance at 31 December	**30**	**36**	**211**	**277**	**23**	**45**	**208**	**276**
Impairment charges (releases) on loans and advances	7	-10	61	59	-11	8	50	47
Recoveries and other charges (releases)			-45	-45			-44	-44
Total impairment charges for the period	**7**	**-10**	**16**	**14**	**-11**	**8**	**6**	**3**

1 Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.
2 Including POCI.

Loan impairment charges and allowances – corporate loans Audited

(in millions)	2022 Stage 1	Stage 2	Stage 3[2]	Total	2021 Stage 1	Stage 2	Stage 3[2]	Total
Balance at 1 January	**130**	**291**	**1,632**	**2,053**	**243**	**316**	**2,494**	**3,053**
Transfer to stage 1	38	-49	-10	-21	19	-36	-5	-21
Transfer to stage 2	-27	123	-84	11	-26	73	-16	31
Transfer to stage 3	-15	-34	147	98	-9	-24	140	107
Remeasurements[1]	74	18	-156	-64	-101	27	500	425
Changes in models					-1	-6	-8	-15
Changes in risk parameters	24	25	12	61	-19	-22	-13	-54
Originated or purchased	44			44	46			46
Matured or repaid	-10	-18	-60	-88	-14	-10	-539	-563
Impairment charges (releases) on loans and advances	**127**	**65**	**-152**	**41**	**-104**	**2**	**59**	**-44**
Write-offs			-555	-556	-11	-19	-1,012	-1,042
Unwind discount / unearned interest accrued			25	25			16	16
Foreign exchange and other movements	-1	-55	82	27	2	-7	74	69
Balance at 31 December	**256**	**301**	**1,033**	**1,590**	**130**	**291**	**1,632**	**2,053**
Impairment charges (releases) on loans and advances	127	65	-152	41	-104	2	59	-44
Recoveries and other charges (releases)			-42	-42			-79	-79
Total impairment charges for the period	**127**	**65**	**-194**	**-1**	**-104**	**2**	**-21**	**-124**

1 Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.
2 Including POCI.

Loan impairment charges and allowances – off-balance Audited

(in millions)	2022 Stage 1	Stage 2	Stage 3[3]	Total	2021 Stage 1	Stage 2	Stage 3[3]	Total
Balance at 1 January	**17**	**20**	**116**	**153**	**16**	**10**	**21**	**48**
Transfer to stage 1	6	-8		-2	1	-3		-1
Transfer to stage 2	-2	5		4	-2	9		7
Transfer to stage 3	-1		1					
Remeasurements[1]	-4		-115	-120		7	94	101
Changes in risk parameters	1	1		2				
Originated or purchased	12			12	6			6
Matured or repaid	-4	-3		-7	-5	-3	-11	-18
Impairment charges (releases)	**9**	**-4**	**-114**	**-110**	**1**	**10**	**83**	**94**
Write-offs					-1		-2	-3
Foreign exchange and other movements			8	8			14	14
Balance at 31 December	**25**	**16**	**10**	**51**	**17**	**20**	**116**	**153**
Impairment charges (releases) on off-balance	9	-4	-114	-110	1	10	83	94
Other charges (releases)[2]			82	82			22	22
Total impairment charges for the period	**9**	**-4**	**-32**	**-28**	**1**	**10**	**105**	**116**

1 Remeasurements represents the current year change of expected credit loss allowances mainly attributable to changes in volumes such as partial repayments and changes in the credit quality of existing loans remaining in their stage.
2 These charges (releases) relate to the off-balance sheet items that do not fall within the scope of IFRS 9 and for which stage information is not applicable.
3 Including POCI.

Additional information on forborne, past due and impaired (stage 3) loans

Forbearance credit quality Audited

(in millions)	Total forborne assets	Forborne assets not past due and not stage 3 or POCI	Forborne assets past due, but not stage 3 or POCI	Impaired forborne assets	Specific allowance	Collective allowance	Total allowance
							31 December 2022
Loans and advances banks							
Residential mortgages	1,072	622	69	382		34	34
Consumer loans	181	87	5	88	4	54	58
Corporate loans[1]	5,655	3,129	88	2,439	515	154	669
Other loans and advances customers[1]							
Total loans and advances customers[1]	**6,909**	**3,838**	**162**	**2,909**	**519**	**242**	**760**
Total loans and advances[1]	**6,909**	**3,838**	**162**	**2,909**	**519**	**242**	**760**

[1] Excluding loans at fair value through P&L.

(in millions)	Total forborne assets	Forborne assets not past due and not stage 3 or POCI	Forborne assets past due, but not stage 3 or POCI	Impaired forborne assets	Specific allowance	Collective allowance	Total allowance
							31 December 2021
Loans and advances banks							
Residential mortgages	3,080	2,524	93	464		29	29
Consumer loans	235	109	8	118	4	80	85
Corporate loans[1]	7,870	4,582	13	3,276	724	186	910
Other loans and advances customers[1]							
Total loans and advances customers[1]	**11,186**	**7,215**	**114**	**3,857**	**729**	**295**	**1,024**
Total loans and advances[1]	**11,186**	**7,215**	**114**	**3,857**	**729**	**295**	**1,024**

[1] Excluding loans at fair value through P&L.

Forborne assets by geography Audited

(in millions)	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						31 December 2022
Loans and advances banks						
Residential mortgages	1,064	8				1,072
Consumer loans	147	34				181
Corporate loans[1]	4,513	930	78	2	132	5,655
Other loans and advances customers[1]						
Total loans and advances customers[1]	**5,725**	**972**	**78**	**3**	**132**	**6,909**
Total loans and advances[1]	**5,725**	**972**	**78**	**3**	**132**	**6,909**

[1] Excluding loans at fair value through P&L.

(in millions)	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						31 December 2021
Loans and advances banks						
Residential mortgages	3,073	7			1	3,080
Consumer loans	213	21		1		235
Corporate loans[1]	6,186	1,265	106	3	310	7,870
Other loans and advances customers[1]						
Total loans and advances customers[1]	**9,473**	**1,293**	**106**	**3**	**311**	**11,186**
Total loans and advances[1]	**9,473**	**1,293**	**106**	**3**	**311**	**11,186**

[1] Excluding loans at fair value through P&L.

Forborne assets by business segment Audited

(in millions)	31 December 2022	31 December 2021
Personal & Business Banking	2,358	8,672
Wealth Management	243	229
Corporate Banking	4,307	2,285
Total forborne assets	**6,909**	**11,186**

Maturity overview of assets and liabilities Audited

The following table shows financial assets and liabilities arranged by the earliest possible contractual maturity.

Contractual maturity of assets and liabilities Audited

	31 December 2022										
(in millions)	On demand	Trading derivatives	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets											
Cash and balances at central banks	60,865										60,865
Financial assets held for trading	28		32	90	49	64	56	251	337		907
Derivatives	1	4,831	6			36	14	32	292		5,212
Financial investments	594		1,204	1,232	3,024	3,903	5,367	12,437	10,647	626	39,034
Securities financing	548		15,293	3,146	1,045						20,032
Loans and advances banks	1,296		864				78	31	714		2,982
Loans and advances customers	17,949		7,258	5,659	3,694	8,851	14,580	32,588	153,348		243,927
Other assets	2,688		2,107	1,242	94	30		386	73		6,622
Total assets	**83,968**	**4,831**	**26,765**	**11,369**	**7,907**	**12,884**	**20,096**	**45,725**	**165,411**	**626**	**379,581**
Liabilities											
Financial liabilities held for trading	2		92	1	55	7	23	209	252		641
Derivatives	1	3,671	24	1	2	19	22	63	346		4,148
Securities financing	419		9,034	200							9,652
Due to banks	1,568		912	235	11,327	130	3,070	115	152		17,509
Due to customers	223,772		15,755	3,747	1,657	1,670	422	1,484	6,507		255,015
Issued debt			3,665	10,261	1,052	4,074	3,585	9,913	23,709		56,259
- of which senior secured				*20*	*154*	*1,779*	*1,816*	*2,618*	*17,393*		*23,781*
- of which senior unsecured			*26*	*81*		*2,270*	*1,768*	*7,295*	*6,315*		*17,755*
- of which other			*3,639*	*10,160*	*898*	*25*					*14,723*
Subordinated liabilities			1,027	1,401	103			3,731	1,028		7,290
Other liabilities	2,810		2,620	430	27	18	330	18			6,253
Total liabilities	**228,572**	**3,671**	**33,129**	**16,276**	**14,224**	**5,920**	**7,451**	**15,532**	**31,993**		**356,767**
Total equity										22,814	22,814
Total liabilities and equity	**228,572**	**3,671**	**33,129**	**16,276**	**14,224**	**5,920**	**7,451**	**15,532**	**31,993**	**22,814**	**379,581**
Off-balance sheet liabilities											
Committed credit facilities	53,873										53,873
Guarantees and other commitments	7,651										7,651
Total off-balance sheet liabilities	**61,524**										**61,524**

31 December 2021

(in millions)	On demand	Trading deriva-tives	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets											
Cash and balances at central banks	66,865										66,865
Financial assets held for trading	7		12	81	69	315	50	238	381		1,155
Derivatives		2,975			9	12	22	64	703		3,785
Financial investments	1,353		975	1,989	1,185	5,066	6,083	14,131	11,801	580	43,165
Securities financing	716		13,142	2,192	88						16,138
Loans and advances banks	912		334		375	258	124	72	726		2,801
Loans and advances customers	26,837		6,483	5,732	2,630	8,360	14,282	32,176	161,750		258,251
Other assets	4,772		1,699	353	113	16	1				6,955
Total assets	**101,462**	**2,975**	**22,647**	**10,348**	**4,471**	**14,028**	**20,561**	**46,681**	**175,362**	**580**	**399,113**
Liabilities											
Financial liabilities held for trading				24	1	13	61	178	409		687
Derivatives	6	3,545	9	36	8	29	73	168	470		4,344
Securities financing	498		8,394	603							9,494
Due to banks	1,049		1,403	107	312	14	31,889	2,910	392		38,076
Due to customers	232,973		8,594	1,562	503	253	311	1,300	5,723		251,218
Issued debt	51		6,081	5,410	2,187	2,550	4,420	11,684	27,306		59,688
- of which senior secured	*54*		*1,045*	*105*		*1,633*	*1,963*	*4,126*	*22,413*		*31,338*
- of which senior unsecured	*- 3*		*25*	*1,985*	*1,433*	*826*	*2,456*	*7,557*	*4,893*		*19,172*
- of which other			*5,011*	*3,320*	*753*	*92*					*9,177*
Subordinated liabilities					537	1,045	112	2,308	3,547		7,549
Other liabilities	2,730		2,462	386	92	20	334	21	14		6,059
Total liabilities	**237,306**	**3,545**	**26,943**	**8,128**	**3,638**	**3,925**	**37,199**	**18,568**	**37,862**		**377,114**
Total equity										21,999	21,999
Total liabilities and equity	**237,306**	**3,545**	**26,943**	**8,128**	**3,638**	**3,925**	**37,199**	**18,568**	**37,862**	**21,999**	**399,113**
Off-balance sheet liabilities											
Committed credit facilities	54,642										54,642
Guarantees and other commitments	7,598										7,598
Total off-balance sheet liabilities	**62,240**										**62,240**

Maturity based on contractual undiscounted cash flows Audited

The following tables show financial assets and liabilities arranged by the earliest possible contractual maturity.

31 December 2022											
(in millions)	On demand	Trading derivatives	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets:											
Cash and balances at central banks	60,865										60,865
Financial assets held for trading	28		32	91	51	68	64	262	347		944
Derivatives	1	4,831	28	84	210	404	670	1,434	1,663		9,325
Financial investments	594		1,224	1,309	3,203	4,197	5,812	13,001	11,127	626	41,092
Securities financing	548		15,305	3,155	1,049						20,056
Loans and advances banks	1,296		868	9	22	41	150	191	877		3,453
Loans and advances customers	17,949		7,492	6,558	5,879	12,829	21,534	46,385	166,989		285,614
Other assets	2,688		2,108	1,242	95	31	2	388	74		6,627
Total undiscounted assets	**83,968**	**4,831**	**27,057**	**12,448**	**10,508**	**17,571**	**28,231**	**61,660**	**181,077**	**626**	**427,978**
Of which:											
Gross settled derivatives not held for trading:											
Contractual amounts receivable			17	42	31	87	142	411	282		1,012
Contractual amounts payable			10	17	34	66	127	354	230		837
Total undiscounted gross settled derivatives not held for trading			**7**	**25**	**-3**	**21**	**15**	**57**	**52**		**175**
Net settled derivatives not held for trading			52	160	80	392	940	2,529	4,247		8,401
Liabilities:											
Financial liabilities held for trading	2		92	1	57	11	29	219	261		674
Derivatives	1	3,671	60	135	337	633	1,120	2,292	2,596		10,844
Securities financing	419		9,038	200							9,657
Due to banks	1,568		911	230	11,320	125	3,068	113	151		17,488
Due to customers	223,772		15,757	3,752	1,666	1,684	446	1,531	6,553		255,161
Issued debt			3,707	10,407	1,358	4,603	4,474	11,468	25,183		61,198
Subordinated liabilities			1,041	1,449	200	181	343	4,007	1,202		8,424
Other liabilities	2,810		2,616	427	23	11	329	17			6,234
Total liabilities	**228,572**	**3,671**	**33,223**	**16,602**	**14,961**	**7,249**	**9,809**	**19,647**	**35,946**		**369,681**
- of which:											
Gross settled derivatives not held for trading:											
Contractual amounts receivable			677	247	53	82	29	7			1,096
Contractual amounts payable			165	133	69	110	64	16			558
Total undiscounted gross settled derivatives not held for trading			**-512**	**-114**	**16**	**28**	**36**	**9**			**-537**
Net settled derivatives not held for trading			54	120	273	480	271	213	809		2,222
Net liquidity gap	**-144,604**	**1,161**	**-6,165**	**-4,154**	**-4,453**	**10,321**	**18,422**	**42,013**	**145,131**	**626**	**58,297**
Off-balance sheet liabilities											
Committed credit facilities	53,873										53,873
Guarantees and other commitments	7,651										7,651
Total off-balance sheet liabilities	**61,524**										**61,524**

31 December 2021

(in millions)	On demand	Trading deriva-tives	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets											
Cash and balances at central banks	66,865										66,865
Financial assets held for trading	7		13	83	72	320	57	249	391		1,191
Derivatives		2,975	64	258	649	1,207	2,221	4,825	5,376		17,575
Financial investments	1,353		995	2,066	1,367	5,370	6,540	14,706	12,288	580	45,266
Securities financing	716		13,145	2,193	88						16,142
Loans and advances banks	912		330	-13	347	220	63	-57	595		2,397
Loans and advances customers	26,837		6,726	6,670	4,915	12,542	21,631	46,892	176,333		302,544
Other assets	4,772		1,700	353	113	16	1				6,955
Total undiscounted assets	**101,462**	**2,975**	**22,972**	**11,610**	**7,552**	**19,675**	**30,513**	**66,614**	**194,984**	**580**	**458,936**
Of which:											
Gross settled derivatives not held for trading:											
Contractual amounts receivable			113	36	7	2	2	6	6		172
Contractual amounts payable			45	5	6	9	8	9	13		95
Total undiscounted gross settled derivatives not held for trading			**68**	**31**	**2**	**-8**	**-6**	**-3**	**-7**		**77**
Net settled derivatives not held for trading			201	4	53	69	202	384	1,088		2,002
Liabilities											
Financial liabilities held for trading			1	25	3	18	69	192	422		731
Derivatives	6	3,545	50	200	401	750	1,297	2,382	2,607		11,238
Securities financing	498		8,394	603							9,494
Due to banks	1,049		1,395	76	236	-130	31,850	2,894	385		37,754
Due to customers	232,973		8,595	1,563	506	260	322	1,323	5,746		251,288
Issued debt	51		6,116	5,535	2,469	3,051	5,267	13,157	28,704		64,350
Subordinated liabilities			16	64	692	1,295	561	3,011	4,188		9,827
Other liabilities	2,730		2,459	384	89	15	333	20	13		6,042
Total liabilities	**237,306**	**3,545**	**27,027**	**8,451**	**4,396**	**5,259**	**39,698**	**22,977**	**42,066**		**390,725**
- of which:											
Gross settled derivatives not held for trading:											
Contractual amounts receivable			45	13	10	20	37	96	116		339
Contractual amounts payable			14	5	18	39	35	42	50		203
Total undiscounted gross settled derivatives not held for trading			**-32**	**-8**	**8**	**19**	**-2**	**-54**	**-66**		**-135**
Net settled derivatives not held for trading			55	131	151	321	601	1,474	1,998		4,732
Net liquidity gap	**-135,844**	**-569**	**-4,055**	**3,159**	**3,156**	**14,416**	**-9,186**	**43,637**	**152,918**	**580**	**68,211**
Off-balance sheet liabilities											
Committed credit facilities	54,642										54,642
Guarantees and other commitments	7,598										7,598
Total off-balance sheet liabilities	**62,240**										**62,240**

Expected maturity based on behavioural models Audited

The following table provides an overview of the amounts expected to be settled within twelve months and after twelve months, based on the behavioural maturity profile.

(in millions)	31 December 2022 Up to one year	More than one year	Total	31 December 2021 Up to one year	More than one year	Total
Assets						
Cash and balances at central banks	60,865		60,865	66,865		66,865
Financial assets held for trading	907		907	1,155		1,155
Derivatives	4,831	381	5,212	2,975	810	3,785
Financial investments	9,848	29,186	39,034	10,596	32,568	43,165
Securities financing	19,117	916	20,032	15,827	311	16,138
Loans and advances banks	1,732	1,250	2,982	1,766	1,034	2,801
Residential mortgages	14,377	126,744	141,121	14,385	133,326	147,711
Consumer loans	2,305	7,650	9,955	3,279	7,240	10,518
Corporate loans at amortised cost	36,896	48,398	85,295	36,117	48,797	84,915
Corporate loans at fair value through P&L	28	37	66	42	57	99
Other loans and advances customers	6,789	703	7,491	13,331	1,677	15,008
Equity-accounted investments		474	474		564	564
Property and equipment	673	315	988	545	627	1,172
Goodwill and other intangible assets	108		108	25	102	127
Assets held for sale	13		13	89		89
Tax assets	565		565	739		739
Other assets	323	4,150	4,473	1,306	2,957	4,263
Total assets	**159,377**	**220,204**	**379,581**	**169,044**	**230,069**	**399,113**
Liabilities						
Financial liabilities held for trading	641		641	687		687
Derivatives	3,671	477	4,148	3,545	799	4,344
Securities financing	8,822	830	9,652	8,397	1,097	9,494
Due to banks	13,847	3,662	17,509	2,033	36,043	38,076
Current accounts	15,126	106,905	122,030	47,577	85,406	132,983
Demand deposits		100,397	100,397	18,208	80,582	98,790
Time deposits	21,611	8,485	30,096	11,174	7,606	18,780
Other due to customers	198	2,293	2,491	89	576	665
Issued debt	19,298	36,961	56,259	16,530	43,158	59,688
Subordinated liabilities	2,520	4,770	7,290	1,563	5,985	7,549
Provisions	1,030	13	1,044	1,201		1,201
Tax liabilities	22		22	101		101
Other liabilities		5,187	5,187	1,644	3,113	4,757
Total liabilities	**86,787**	**269,980**	**356,767**	**112,749**	**264,365**	**377,114**

The behavioural maturity profile is based on internally developed liquidity risk models. These models cover residential mortgages, consumer and corporate loans, non-maturing assets (mainly current accounts), credit cards, non-maturing liabilities (demand deposits and current accounts) and term deposits. The liquidity risk models predict the behavioural cash flows, which can differ from the contractual cash flows as a result of, for example, prepayments or because some products do not have a defined contractual maturity date. The models are based on historically observed client behaviour and use a combination of internal and external risk drivers. The models are used for monitoring the bank's liquidity mismatch position.

The liquidity risk models are included in the bank's model risk management framework. This means that the models have to follow a regular monitoring and validation schedule. Approval of the models is given by the Methodology Acceptance Group (MAG) ALM/T, based on independent advice from Model Validation.

Taxonomy of eligible and non-eligible assets

The objective of the EU taxonomy is to determine taxonomy-aligned activities. These are activities that are considered sustainable on the basis of a set of criteria. The first step in determining whether an activity can potentially be aligned with the taxonomy is to determine eligibility. Eligibility under the EU taxonomy indicates which activities are in scope of the taxonomy, but does not take account of the different technical criteria required to qualify as environmentally sustainable (i.e. 'taxonomy-aligned').

In the case of corporate clients, ABN AMRO is only allowed to use actual information that has been disclosed by clients reporting under the Non-Financial Reporting Directive (NFRD). Last year, such reported information was not yet available. However, NFRD companies have now published their eligibility percentages based on their revenues, capital expenditure and operational expenditure. As a financial institution, we are required to use our clients' actual eligibility information when disclosing our own eligibility ratio. The mandatory eligibility percentage in the table below includes the reported eligibility for exposures to NFRD companies based on their revenues, while the percentage based on their capital expenditure is included in a footnote.

In addition to a mandatory disclosure, ABN AMRO has opted to voluntarily disclose on the eligibility of its non-NFRD exposures. This percentage can be found under 'Voluntary eligibility disclosure' in the table. Because non-NFRD companies do not report on eligibility, the methodology for determining eligibility for non-NFRD companies uses the NACE code of the counterparty as a proxy for eligibility.

Looking ahead: Green Asset Ratio

In order to qualify as 'environmentally sustainable', and therefore to be included in the numerator of the Green Asset Ratio (GAR), economic activities must be aligned with the taxonomy criteria. This means that these activities significantly contribute to a taxonomy objective, meet the 'do no significant harm' (DNSH) criteria and meet the minimum safeguards criteria. When assessing whether activities that we finance are aligned, we are highly dependent on the information that our clients disclose in accordance with the NFRD and, in future, in accordance with the Corporate Sustainability Reporting Directive (CSRD) when it comes into force.

Based on the information that our clients disclose, and in line with current regulatory requirements, we need to disclose the GAR in our 2023 Annual Report. We are only allowed to include taxonomy-aligned exposures to NFRD corporates, certain household exposures and specific local government financing in the numerator. This means that a significant amount of our portfolio (such as lending to and ABN AMRO's investments in non-NFRD corporates and financial institutions, amounting to 29% of our total assets) cannot be considered for taxonomy alignment and will subsequently be excluded from the GAR numerator in the 2023 Annual Report. Non-NFRD corporates are not allowed to be included in the numerator until the 2024 Annual Report, subject to positive assessment of this by the European Commission.

The denominator of the GAR is based on the concept of covered assets, which comprises total on-balance sheet assets less exposures to central governments, central banks and supranational issuers and assets held for trading. These assets amounted to EUR 302.9 billion at 31 December 2022. In future, we will aim to align our definitions of sustainable acceleration loans as much as possible with the EU taxonomy definitions. However, we also see the need for additional sustainability-related metrics to cover the clients and exposures, such as our SME portfolio, that cannot be included in the GAR from a regulatory point of view.

(in millions)	31 December 2022 Gross carrying amount[9]	- of which taxonomy eligible assets	Proportion of total assets	Proportion of covered assets	31 December 2021 Gross carrying amount[9]	- of which taxonomy eligible assets	Proportion of total assets	Proportion of covered assets
Mandatory eligibility disclosure								
Non-financial corporations subject to the NFRD[1]	4,732	890	1%	2%	4,263	1,358	1%	1%
Financial corporations subject to the NFRD[1,2]	7,704	1,677	2%	3%	10,341		3%	3%
Exposures to households	153,387	153,387	39%	51%	149,114	149,114	37%	49%
Collateral obtained by taking possesions	3	3	0%	0%			0%	0%
Total mandatory taxonomy eligible assets	**165,826**	**155,957**	**42%**	**55%**	**163,717**	**150,471**	**41%**	**54%**
Voluntary eligibility disclosure[3]								
Non-financial corporations not subject to the NFRD	64,984	34,516	16%	21%	64,903	32,741	16%	21%
Total voluntary taxonomy eligible assets	**64,984**	**34,516**	**16%**	**21%**	**64,903**	**32,741**	**16%**	**21%**
Non-eligible assets								
Financial corporations not subject to the NFRD[1]	44,187		11%	15%	45,579		11%	15%
Derivatives (on-balance)[4]	5,212		1%	2%	3,785		1%	1%
On-demand interbank loans[5]	1,769		0%	1%	1,174		0%	0%
Other (Cash and cash-related assets, goodwill, commodities etc.)[6]	20,961		5%	7%	23,190		6%	8%
Total taxonomy non-eligible assets	**72,129**		**18%**	**24%**	**73,728**		**18%**	**24%**
Total covered assets[7]	**302,939**	**190,474**	**76%**	**100%**	**302,349**	**183,212**	**75%**	**100%**
Assets not included in the coverage of the GAR								
Assets held for trading	907		0%		1,155		0%	
Exposures to central governments, central banks and supra-national issuers	92,567		23%		97,498		24%	
Total assets	**396,414**	**190,474**	**100%**		**401,001**	**183,212**	**100%**	
Total of all corporations subject to the NFRD	12,436		3%	4%	14,603		4%	5%
Total of all corporations not subject to the NFRD	109,171		28%	36%	110,482		28%	37%
Mandatory eligibility percentage[8]			39%	51%			38%	50%
Voluntary eligibility percentage			9%	11%			8%	11%

1 Including loans and advances, debt securities and equity instruments.
2 In 2021 Financial corporations subject to the NFRD were classified as non-eligible.
3 Voluntary eligibility based on principal NACE code of the immediate counterparty.
4 Including derivatives held for trading purposes.
5 Defined as overdrafts and current accounts with other credit institutions.
6 Including loans and advances to households, local and state governments and other assets that are not eligible for the EU taxonomy.
7 Defined as the total on-balance sheet assets minus exposures to central governments, central banks and supranational issuers and assets held for trading.
8 If eligibility based on CapEx was used for NFRD companies, the eligibility % with the total assets in the denominator would have been 40% (51% with total covered assets in de denominator) as per 31 December 2022.
9 Excluding fair value adjustments from hedge accounting, which amounted to EUR -12,454 million at 31 December 2022 (31 December 2021: EUR 3,587 million).

The EU taxonomy table contains a few changes compared to last year. As well as the proportions of total assets, the proportions of covered assets are included. The numerator in the proportions of total assets and covered assets is the gross carrying amount of the line items, instead of the eligible amount.

Client Asset Portfolio

(in millions)	31 December 2022	31 December 2021
Potential eligible assets[1]	71,047	90,828
- of which NFRD clients	*31,971*	*36,702*
- of which eligible[2]	*9,713*	*13,340*
- of which non-eligible	*22,259*	*23,362*

1 Scope consists of corporate debt and equity securities, including lookthrough of funds.
2 The eligibility for the client assets is still voluntary. The eligibility is based on the NACE code of the counterparty.

Total assets overview

This table provides a detailed overview of the ABN AMRO portfolio by EAD, based on the Industry Classification Benchmark (ICB) and the bank's internal industry classifications.

(in millions)		31 December 2022	31 December 2021
Industry classification benchmark (ICB)	ABN AMRO global industry classification (AGIC)		
Automobiles and parts	Leasing motor vehicles	875	856
	Manufacturing automotive components	63	75
	Manufacturing motor vehicles	215	214
	Manufacturing tires	6	3
Banks	Commercial banks	10,258	16,273
Basic resources	Forestry	3	5
	Manufacturing and wholesale diamonds	1	1
	Manufacturing other non-ferrous metals	193	159
	Manufacturing pulp and paper	69	60
	Manufacturing steel	174	185
	Mining and manufacturing other basic materials	273	281
	Mining and manufacturing other precious metals	19	17
	Mining bauxite and manufacturing aluminium	52	63
	Wholesale other basic materials	328	439
	Wholesale other non-ferrous metals	134	175
	Wholesale raw lumber, pulp and paper	24	9
	Wholesale steel	172	185
Chemicals	Manufacturing basic chemicals	492	434
	Manufacturing industrial gasses	35	31
	Manufacturing specialty chemicals	499	479
	Wholesale chemicals	205	248
Construction and materials	Construction of residential and non-residential buildings	830	934
	Heavy construction	720	858
	Manufacturing non-metallic mineral products	276	251
	Manufacturing other building materials	405	438
	Manufacturing wood products	188	167
	Sub-contractors	1,246	1,238
	Wholesale building materials	702	700
Financial services	Asset managers	844	580
	Charities and endowments	3	
	Commercial finance	429	370
	Consumer finance	53	606
	Exchanges and clearing	2,751	811
	Hedge funds		93
	Investment bank	30	42
	Leveraged funds - non-hedge funds	42	36
	Mortgage finance	1,296	1,511
	Other funds	331	258
	Pension funds	670	800
	Private equity investment and venture capital	1,839	1,615
	Securities brokers and dealers	8,259	9,766
	Specialty finance	2,034	1,970
	Unleveraged funds	5,983	5,662

continued>

(in millions)		31 December 2022	31 December 2021
Industry classification benchmark (ICB)	ABN AMRO global industry classification (AGIC)		
Food and beverage	Arable farming	1,735	1,813
	Auctions for agriculture and fish products	67	64
	Farming other animals	1,064	
	Fishery	427	402
	Floriculture	630	664
	Horticulture (primary food products, fruit and vegetables)	765	779
	Manufacturing beer	145	133
	Manufacturing meat	340	287
	Manufacturing other food products	1,658	1,663
	Manufacturing soft drinks	225	94
	Manufacturing sugar		59
	Manufacturing wine and spirits	62	68
	Other agriculture	102	113
	Processing of live animal feed and commodity trading	401	481
	Raising of calves/live cattle	163	165
	Raising of dairy cattle/diary	3,220	3,187
	Raising of poultry/eggs	225	234
	Raising of swine/lean hogs	1,064	1,076
	Support activities for agriculture	41	46
	Wholesale agriculture	1,818	1,578
	Wholesale of live cattle		1
Healthcare	Biotechnology drugs	31	38
	General health services	1,503	1,573
	Manufacturing and wholesale medical and surgical equipment	231	164
	Manufacturing drugs	275	165
	Medical practices	1,251	1,215
	Nursing and personal care services	906	950
	Retail drugs	187	175
	Wholesale drugs	72	141
Industrial goods and services	Dealers commercial vehicles	76	70
	Delivery services	104	75
	Employment services and management training	866	789
	Financial administration	32	28
	Freight transport inland water	513	588
	Freight transport rail	88	63
	Freight transport road	1,130	1,107
	Freight transport sea	6,477	6,377
	Leasing aircraft	116	98
	Leasing commercial vehicles	1,433	1,404
	Leasing machinery and metal products	420	306
	Legal and accounting activities	392	719
	Management consultancy	1,316	1,059
	Manufacturing and wholesale aircraft	12	14
	Manufacturing and wholesale packaging materials	750	821
	Manufacturing appliance components	144	168
	Manufacturing commercial vehicles	126	134

continued>

(in millions)		31 December 2022	31 December 2021
Industry classification benchmark (ICB)	ABN AMRO global industry classification (AGIC)		
Industrial goods and services (continued)	Manufacturing defense equipment	1	1
	Manufacturing electrical machinery	228	225
	Manufacturing electronic equipment	5	6
	Manufacturing general machinery	484	424
	Manufacturing lifting and handling equipment	57	69
	Manufacturing measuring and control machinery	106	82
	Manufacturing metal products	209	215
	Manufacturing optical instruments	7	9
	Manufacturing other transportation equipment	59	62
	Manufacturing plastic products	161	155
	Manufacturing rubber products	16	18
	Manufacturing ships	370	352
	Manufacturing special industrial machinery	327	276
	Metal working	387	367
	Other commercial services	1,164	977
	Research and engineering	89	71
	Transport services air	71	467
	Transport services land	1,927	1,824
	Transport services water	159	347
	Wholesale commercial vehicles	191	298
	Wholesale machinery and metal products	605	524
Insurance	Insurance brokers	92	63
	Insurance composite	146	160
	Life insurance	514	610
	Non-life insurance	546	439
	Reinsurance	120	10
Media	Marketing communications	199	112
	Motion picture production and distribution	482	797
	Printing	135	152
	Publishing	391	373
	Publishing sound recordings	23	20
	Radio, TV and cable	190	184
Oil and gas	Fuel pipelines		1
	Integrated oil and gas	24	
	Non-integrated oil and gas	786	1,382
	Oil and gas services	2,372	2,479
	Wholesale fuels	119	336
Personal and household goods	Manufacturing accessories	20	23
	Manufacturing apparel and sportswear	12	13
	Manufacturing consumer electronics	77	64
	Manufacturing domestic appliances	24	27
	Manufacturing footwear	2	2
	Manufacturing furniture	57	53
	Manufacturing non-durable household products	58	57
	Manufacturing other durable household products	120	111
	Manufacturing other furnishings	112	109
	Manufacturing other recreational products	133	159
	Manufacturing personal care	40	37
	Manufacturing photographic equipment	1	2

continued>

(in millions)		31 December 2022	31 December 2021
Industry classification benchmark (ICB)	ABN AMRO global industry classification (AGIC)		
	Manufacturing textiles	158	124
Personal and household goods (continued)	Manufacturing tobacco	1	
	Manufacturing toys and games	12	10
	Renting recreational products	5	4
	Wholesale hides, skins and leather	24	18
Private individuals	Private individuals	171,139	174,197
Public administration (non-icb)	Central administration and public services	26,908	30,971
	Central bank	63,121	69,992
	Educational services	128	168
	Export credit agency/insurance		15
	International and supranational organisations	3,597	3,235
	Multilateral finance institutions	347	188
	Regional administration and public services	2	8
Real estate	Buying and selling of own real estate	3,442	3,223
	Housing associations and corporations	949	1,233
	Management of real estate on a fee or contract basis	2,291	1,881
	Real estate agencies	799	613
	Real estate developments (project development)	2,780	2,941
	Real estate investment entities	3,126	4,033
	Renting of non-residential buildings	3,918	3,103
	Renting of other residential buildings	1,366	810
Retail	Automotive service	94	111
	Independent fuel stations	47	54
	Personal services	144	196
	Renting of personal and household goods	63	64
	Retail accessories	51	90
	Retail apparel, footwear and sports goods	247	293
	Retail broadline	115	110
	Retail car parts and accessories	23	28
	Retail consumer appliances	72	76
	Retail food	1,960	1,862
	Retail home decoration	357	350
	Retail motor vehicles	498	468
	Retail other household goods	310	367
	Wholesale accessories	120	124
	Wholesale apparel, footwear and sports goods	467	381
	Wholesale broadline	205	224
	Wholesale car parts and accessories	187	139
	Wholesale consumer appliances	133	153
	Wholesale home decoration	181	153
	Wholesale motor vehicles	44	37
	Wholesale other household goods	327	305
Technology	Internet services	821	434
	IT services	1,321	887
	Leasing technology goods	11	14
	Manufacturing computer hardware	120	125
	Manufacturing telecom equipment	46	51
	Publishers computer software	18	12
	Wholesale technology goods	393	387

continued>

(in millions)		31 December 2022	31 December 2021
Industry classification benchmark (ICB)	ABN AMRO global industry classification (AGIC)		
Telecommunications	Fixed line telecom	1,667	1,055
	Mobile telecom	534	324
Travel and leisure	Commercial sports and facilities	265	265
	Cultural activities	100	132
	Gambling and casino facilities	74	85
	Hotels and resorts	1,437	1,527
	Passenger transport air	198	296
	Passenger transport rail, road and water	588	1,972
	Recreational services	363	427
	Restaurants and bars	485	542
	Travel & tourism related services	149	201
Unclassified	Unclassified	5,089	2,556
	Activities of head office	57	43
	Financial holdings	86	115
Utilities	Gas distribution	38	
	Integrated power	76	175
	Power distribution and transportation	1,875	2,507
	Power generation	1,487	1,491
	Waste and disposal services	658	570
	Water collection, treatment and distribution	319	355
Total		**397,077**	**413,494**

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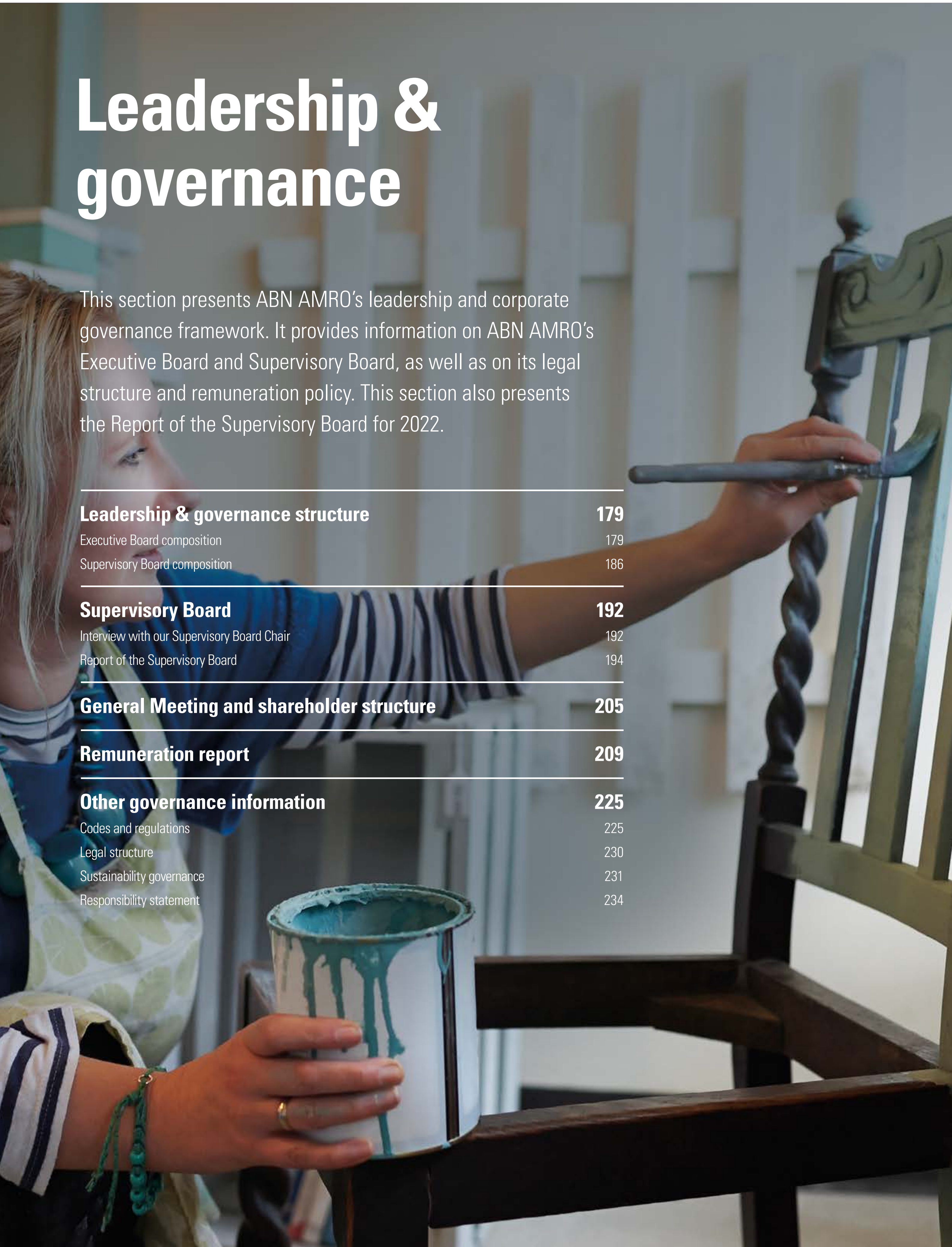


Leadership & governance

This section presents ABN AMRO's leadership and corporate governance framework. It provides information on ABN AMRO's Executive Board and Supervisory Board, as well as on its legal structure and remuneration policy. This section also presents the Report of the Supervisory Board for 2022.

Leadership & governance structure

Executive Board composition

Introduction to leadership & governance

Good corporate governance is critical for us to realise our strategic ambition of being a trusted and professional partner for all our stakeholders: our clients, shareholders, investors, employees and society at large. In 2022, we addressed the question of how we can incorporate sustainability even more into our corporate governance. In doing so, we took into account our societal impact, environmental impact and organisational culture, all in equal measure.

Societal impact refers to how society is impacted by the bank and the ABN AMRO group as a whole, including our influence on all our stakeholders. Environmental impact refers to our geophysical environment and footprint. Organisational culture refers to our relationships within the ABN AMRO group, including our Board members, managers, internal stakeholders and all of our employees.

ABN AMRO has a two-tier governance model consisting of a Supervisory Board and an Executive Board. In this chapter we report on the set-up of our corporate governance, division of duties and responsibilities, and decision-making during the year 2022.

Role and responsibilities of the Executive Board

The Executive Board is the statutory managing board of ABN AMRO within the meaning of Section 2:129 of the Dutch Civil Code. It is responsible, among other things, for: (i) the general course of business of ABN AMRO, ensuring compliance with laws and regulations and the adequate financing of its activities, (ii) the continuity of ABN AMRO and its business, aimed at long-term value creation for ABN AMRO and taking into account interests of stakeholders, and (iii) setting ABN AMRO's mission, strategy, risk appetite, risk framework, budgets, financial and non-financial targets, and for the realisation thereof.

The Executive Board ensures close cooperation with the Supervisory Board in the discharge of its responsibilities and seeks the approval of the Supervisory Board for the bank-wide strategy in line with the pursued culture aimed at long-term value creation and targets. The Executive Board is accountable to the Supervisory Board and to the General Meeting for the performance of its duties. In performing its duties, the Executive Board develops a view on long-term value creation for ABN AMRO and its business and considers relevant stakeholder interests.

Composition and diversity

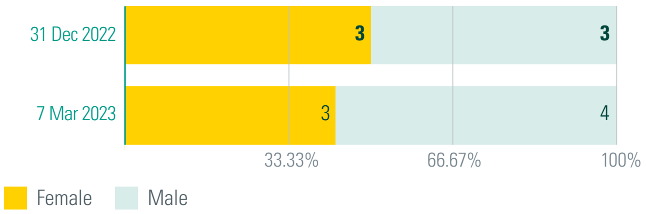
The Executive Board consisted of the Chief Executive Officer (CEO), the Chief Financial Officer (CFO), the Chief Risk Officer (CRO), the Chief Innovation & Technology Officer (CI&TO), three Chief Commercial Officers (CCOs) (Personal & Business Banking, Corporate Banking and Wealth Management) and a Chief Human Resources Officer (CHRO). On 1 February 2023, ABN AMRO announced that a Chief Operations Officer (COO) will be added to the Executive Board, with primary responsibility for the bank's operational performance. An executive search process for a new COO has started. ABN AMRO also announced that the CHRO role will fall directly under the CEO and will no longer be part of the Executive Board.

The Executive Board's composition is based on ABN AMRO's guiding principle that diversity of thought, expertise, background, competences and interpersonal styles is a prerequisite for effective management and, by extension, for long-term value creation. The vision set by ABN AMRO is to become a company that mirrors, at all levels, the diversity of the communities in which it operates. A diverse Executive Board fosters a variety of views and experiences and facilitates independent opinions and sound decision-making within the Executive Board.

To that effect, the following diversity aspects have been identified as relevant for the composition of the Executive Board: gender, age, educational and professional background, and geographical provenance. These aspects were taken into consideration for the appointments in 2022. In line with ABN AMRO's diversity policy, ABN AMRO strives to meet its gender target. According to ABN AMRO's gender diversity target, at least one-third (1/3rd) of ABN AMRO's Executive Board should consist of the underrepresented gender. The Executive Board currently consists of 4 male members and 3 female members. When vacancies arise and in succession planning, ABN AMRO gives due consideration to any applicable diversity requirements in its search for suitable new members who meet the fit and proper requirements stipulated in the Dutch Financial Markets Supervision Act.

The Rules of Procedure of the Executive Board are available on abnamro.com. These Rules of Procedure were last updated in 2022 to include reference to the newly established Group Sustainability Committee.

Diversity Executive Board
(male/female)



In 2021, a search process for a new CCO Personal & Business Banking and member of the Executive Board was initiated and resulted in the appointment of Annerie Vreugdenhil from 1 March 2022. To ensure continuity of decision-making, interim arrangements were put in place for the period until the appointment and starting date of Annerie Vreugdenhil.

In addition, on 7 January 2022, ABN AMRO announced that Christian Bornfeld, CI&TO of ABN AMRO and Vice-Chair of the Executive Board, would leave ABN AMRO with effect from 1 May 2022. He had decided to pursue a new opportunity, which allows him to work closer to his family in Denmark. The Supervisory Board initiated the process of finding a new CI&TO, resulting in the Supervisory Board's nomination of Carsten Bittner to succeed Christian Bornfeld as ABN AMRO's CI&TO. Interim arrangements were put in place for the period until the appointment and starting date of Carsten Bittner as the new CI&TO from 1 January 2023 and member of the Executive Board to ensure continuity of decision-making. Lars Kramer was appointed Vice-Chair of the Executive Board with effect from 1 May 2022.

On 18 October 2022, ABN AMRO announced that Gerard Penning, Chief Human Resources Officer and member of the Executive Board, would leave the bank on 1 December 2022. This was decided by the bank and Gerard Penning in mutual agreement. Interim arrangements have been put in place.

In addition, on 11 January 2023, ABN AMRO announced that Lars Kramer, Chief Financial Officer of ABN AMRO and Vice-Chair of the Executive Board, has decided to step down from his position and will leave ABN AMRO on 30 April 2023 to pursue an opportunity outside ABN AMRO. The process of finding a new Chief Financial Officer has been initiated. Ferdinand Vaandrager will replace Lars Kramer as interim CFO, subject to regulatory approval.

Appointment, suspension and dismissal
Members of the Executive Board are appointed and reappointed by the Supervisory Board for a term of up to four years, provided that the term of office continues up to and including the first General Meeting to be held after expiry of the term. When preparing the appointment and reappointment of the members of the Executive Board, the Selection & Nomination Committee and the Supervisory Board consider the diversity objectives laid down in ABN AMRO's internal policies. Only candidates who meet the fit and proper test under the Dutch Financial Markets Supervision Act are eligible for appointment.

The Employee Council renders advice on the appointment of members of the Executive Board. The Supervisory Board notifies the General Meeting of the intended appointment or reappointment of a member of the Executive Board, accompanied by a short resume of the candidate including the candidate's age, gender, educational and professional background, and geographical provenance.

The Supervisory Board may appoint one of the members of the Executive Board as Chair (to be granted the title of Chief Executive Officer). Pursuant to the relationship agreement with NLFI, the Supervisory Board will give NLFI the opportunity to advise on the decision to appoint or reappoint any member of the Executive Board, as long as NLFI directly or indirectly holds at least 10% of the issued share capital of the bank. The Supervisory Board may at all times suspend or dismiss a member of the Executive Board.

Further information on the suspension and dismissal procedure of the Executive Board is provided in ABN AMRO's Articles of Association and the Rules of Procedure of the Executive Board as published on abnamro.com.

Executive Board

Executive Board (from left to right): Lars Kramer, Annerie Vreugdenhil, Tanja Cuppen, Robert Swaak, Dan Dorner, Choy van der Hooft-Cheong, Carsten Bittner

Personal details of the members of the Executive Board

The personal details of all members of the Executive Board who were active in 2022 can be found on our website: abnamro.com/en/about-abn-amro/product/executive-board. The information below refers to the members of the Executive Board as at 7 March 2023.

Dutch, male, 1960

Robert Swaak

Chief Executive Officer and Chair of the Executive Board

Robert Swaak was appointed as CEO and Chair of the Executive Board of ABN AMRO effective 22 April 2020. As CEO, Robert Swaak is also responsible for Group Audit, Legal & Corporate Office, Strategy & Innovation, Sustainability Center of Excellence, and Brand, Marketing & Communications. Ad interim he is also responsible for Human Resourses, Detecting Financial Crime and Execution Office. His current term ends at the close of ABN AMRO's Annual General Meeting in 2024.

Relevant positions pursuant to CRD V: Chief Executive Officer and Chair of the Executive Board of ABN AMRO Bank N.V.

Other relevant ancillary positions: member of the Supervisory Council of Stichting Nationale Opera & Ballet, member of the Supervisory Council of Stichting Paleis Het Loo, member of the Board of Stichting Amerika-Europese Gemeenschap (Nederland) of Stichting American European Community Association (Netherlands), member of the Board of directors of the Nederlandse Vereniging van Banken (NVB), member of the Advisory Board IRCC (Integrated Reporting and Connectivity Council) of the IFRS Foundation, member of the Board of Directors of Stichting Nationaal Fonds 4/5 mei.

Dutch, male, 1967

Lars Kramer

Chief Financial Officer of the Executive Board and Vice-Chair of the Executive Board

Lars Kramer was appointed as CFO of the Executive Board of ABN AMRO effective 1 June 2021. As CFO, Lars Kramer is responsible for Finance, including Asset & Liability Management and Treasury, Controlling, Financial Accounting, Tax and investor Relations.

Lars Kramer was appointed Vice-Chair of the Executive Board with effect from 1 May 2022. His current term would end at the close of ABN AMRO's Annual General Meeting in 2025, he has however decided to step down from his position and will leave ABN AMRO on 30 April 2023.

Relevant positions pursuant to CRD V: Chief Financial Officer of the Executive Board of ABN AMRO Bank N.V.

Dutch, female, 1969

Tanja Cuppen

Chief Risk Officer of the Executive Board

Tanja Cuppen was appointed to the Executive Board of ABN AMRO effective 1 October 2017 and was appointed CRO with effect from 1 November 2017. As CRO, she is responsible for Risk including Risk Management, Financial Restructuring & Recovery, Compliance, Security & Intelligence Management and Regulatory Execution Oversight. The Supervisory Board reappointed Tanja Cuppen for a second term with effect from the Annual General Meeting in April 2021 for a period of three years. Her current term ends at the close of ABN AMRO's Annual General Meeting in 2024.

Relevant positions pursuant to CRD V: Chief Risk Officer of the Executive Board of ABN AMRO Bank N.V., member of the Supervisory Board Coöperatie Menzis U.A.

German, male, 1971

Carsten Bittner

Chief Innovation & Technology Officer

Carsten Bittner was appointed to the Executive Board of ABN AMRO as CI&TO effective 1 January 2023. As CI&TO, he is responsible for Innovation and Technology, including IT, Platforms & Technology, Data Management, the Corporate Information Security Office, Procurement, Customer Care & Operations and Change Management & Consultancy. His current term ends at the close of ABN AMRO's Annual General Meeting in 2027.

Relevant positions pursuant to CRD V: Chief Innovation & Technology Officer of the Executive Board of ABN AMRO Bank N.V.

Dutch, female, 1971

Choy van der Hooft-Cheong

Chief Commercial Officer Wealth Management and member of the Executive Board

Choy van der Hooft-Cheong was appointed to the Executive Board of ABN AMRO as CCO Wealth Management effective 24 November 2021. As CCO Wealth Management, she is responsible for the client unit Wealth Management. Her current term ends at the close of ABN AMRO's Annual General Meeting in 2026.

Relevant positions pursuant to CRD V: Chief Commercial Officer Wealth Management and member of the Executive Board of ABN AMRO Bank N.V.

Other relevant ancillary positions: Founder and board member of Stichting Children's Khazana Foundation.

Dutch, male, 1976

Dan Dorner

Chief Commercial Officer Corporate Banking and member of the Executive Board

Dan Dorner was appointed to the Executive Board of ABN AMRO as CCO Corporate Banking effective 24 November 2021. As CCO Corporate Banking, he is responsible for the client unit Corporate Banking. His current term ends at the close of ABN AMRO's Annual General Meeting in 2026.

Relevant positions pursuant to CRD V: Chief Commercial Officer Corporate Banking and member of the Executive Board of ABN AMRO Bank N.V.

Other relevant ancillary positions: member of the Advisory Board of Euronext, member of the Executive Board of Vereniging VNO-NCW (Confederation of Netherlands Industry and Employers).

Dutch, female, 1963

Annerie Vreugdenhil

Chief Commercial Officer Personal & Business Banking and member of the Executive Board

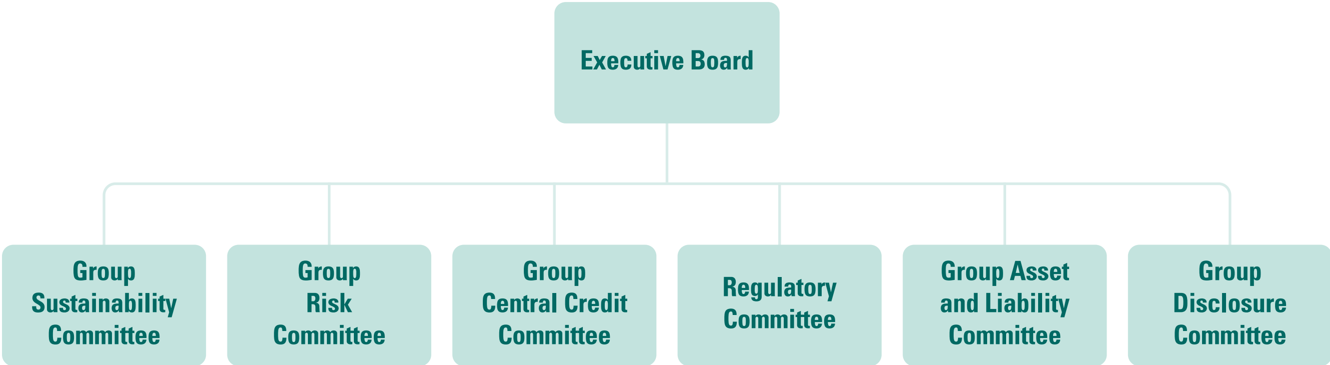
Annerie Vreugdenhil was appointed to the Executive Board of ABN AMRO as CCO Personal & Business Banking effective 1 March 2022. As CCO Personal & Business Banking, she is responsible for the client unit Personal & Business Banking. Her term ends at the close of ABN AMRO's Annual General Meeting in 2026.

Relevant positions pursuant to CRD V: Chief Commercial Officer Personal & Business Banking and member of the Executive Board of ABN AMRO Bank N.V.

Other relevant ancillary positions: member of the Board of directors of the Nederlandse Vereniging van Banken (NVB), member of the Supervisory Board of Stadsherstel Amsterdam N.V.

Committees

The Executive Board has established a number of committees that are responsible for preparing the decision-making on certain subjects, taking certain delegated decisions and advising the Executive Board on certain matters.



Most recently, the Executive Board established the Group Sustainability Committee to assist and support the Executive Board in the performance of its duties regarding matters relating to ESG oversight and strategy for the entire Group and its functions and client units, in particular (but not limited to) ESG opportunities, long-term, medium-term and short-term strategy, value creation, targets, KPIs, commitments, support for the stakeholder dialogue on ESG and due diligence obligations with respect to the Group's own operations and value chains. This involves preparing decision-making by the Executive Board, taking decisions on these topics within its mandate and maintaining oversight over ESG commitments.

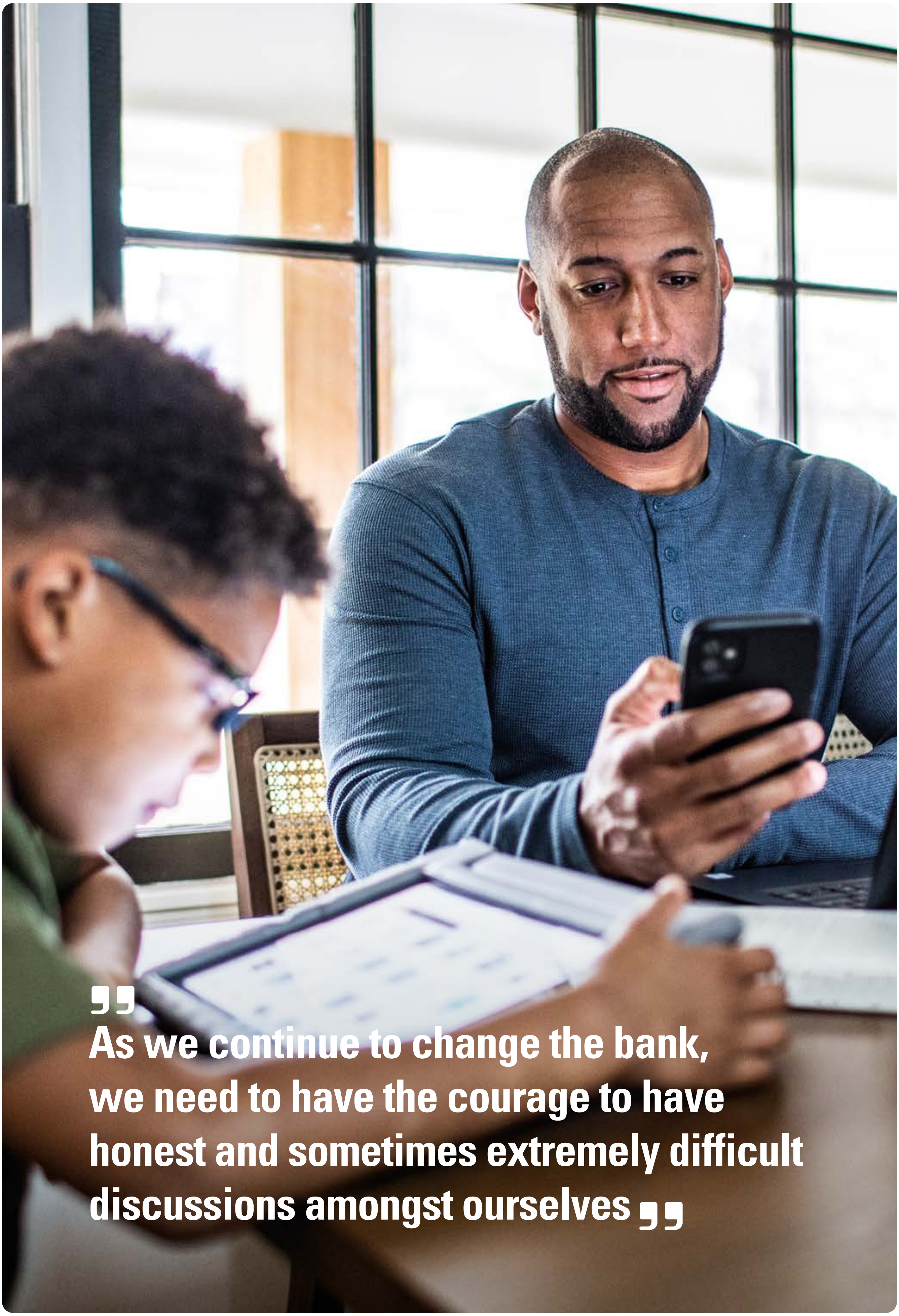
Furthermore, the Executive Board has three risk-related committees:
- the Group Risk Committee;
- the Group Regulatory Committee;
- the Group Central Credit Committee.

More information on the delegated authority of these committees is provided in the Risk, funding & capital management chapter.

In addition, the Executive Board has installed a Group Disclosure Committee and a Group Asset & Liability Committee.

The Group Disclosure Committee's responsibilities include advising and supporting the Executive Board in relation to (i) supervision of the accuracy, effectiveness and timeliness of public disclosures by the group, and (ii) integrity with regard to the financial statements and other public disclosures as required by Dutch and European legislation, in particular (but not limited to) financial and non-financial disclosures, changes to group target ratios, prospectus disclosures, stress tests, public corporate governance statements, changes in key capital requirements (SREP), changes in dividend policy, changes in ratings and disclosures about environmental, social and governance (ESG) performance, social and employee matters, human rights performance and anti-corruption and anti-bribery matters.

The Group Asset & Liability Committee has been mandated by the Executive Board to decide on matters relating to the interest rate and liquidity risk profile, as well as the group's solvency, within the parameters set by the Executive Board.


As we continue to change the bank, we need to have the courage to have honest and sometimes extremely difficult discussions amongst ourselves

Supervisory Board composition

Role and responsibilities of the Supervisory Board

The Supervisory Board supervises, advises, challenges and supports the Executive Board in the exercise of its powers and duties. Together with the Executive Board, the Supervisory Board is responsible for ABN AMRO's long-term value creation, requiring members to execute their duties in a sustainable manner with due observance of the long-term viability of the strategy being pursued. In discharging its task, the Supervisory Board takes into account the dynamics and the relationship between the Executive Board and its members. The Supervisory Board's early and close involvement with the Executive Board is required when formulating the bank-wide strategy and targets in line with the pursued culture aimed at long-term value creation.

In performing their duties, the members of the Supervisory Board are guided by the interests of ABN AMRO and its businesses, taking due consideration of the legitimate interests of all of ABN AMRO's stakeholders (such as its clients, savers and deposit holders, shareholders, holders of depositary receipts, employees and the society in which ABN AMRO operates). Certain decisions taken by the Executive Board are subject to the approval of the Supervisory Board.

Changes in 2022

At the Annual General Meeting of 20 April 2022, Tom de Swaan was reappointed to the Supervisory Board for a period of four years. Upon the reappointment of Tom de Swaan as member by the General Meeting, the Supervisory Board also reappointed him as Chair of the Supervisory Board.

At the Annual General Meeting of 20 April 2022, Sarah Russell was appointed as a new Supervisory Board member for a period of four years, replacing Tjalling Tiemstra. Since Tjalling Tiemstra was not available for a new term, there was a vacancy within the Supervisory Board for a financial expert.

Appointment, suspension and dismissal

Members of the Supervisory Board are appointed by the General Meeting, following nomination by the Supervisory Board itself. Only candidates who have passed the fit and proper test under the Dutch Financial Markets Supervision Act are eligible for appointment. The General Meeting and the Employee Council may recommend candidates to the Supervisory Board to be nominated as members of the Supervisory Board. The diversity objectives laid down in ABN AMRO's internal policies are taken into consideration when preparing the appointment and reappointment of the members of the Supervisory Board. The Supervisory Board notifies the General Meeting of the intended appointment or reappointment of a member of the Supervisory Board, accompanied by a short resume of the candidate including the candidate's age, gender, educational and professional background, and geographical provenance.

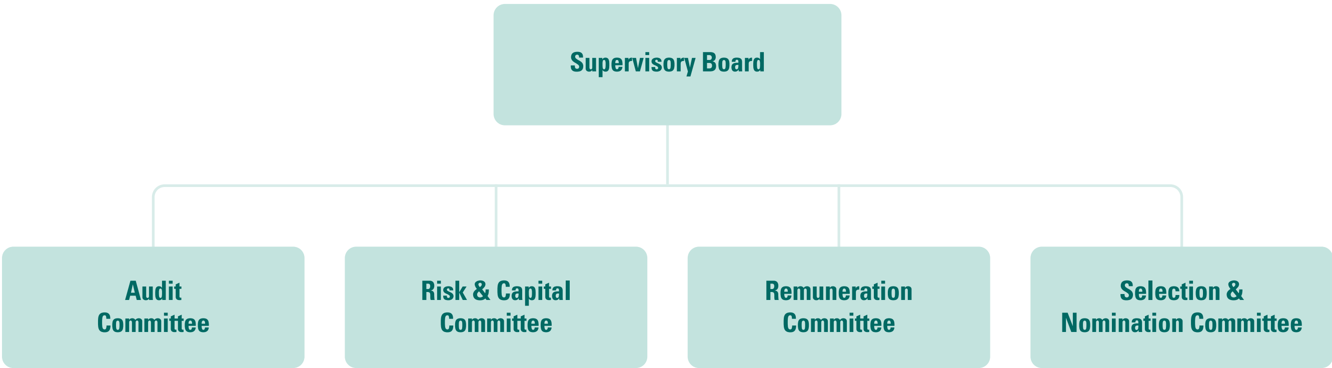
In accordance with the best practice provisions of the Dutch Corporate Governance Code, Supervisory Board members are appointed for a period ending at the close of the first Annual General Meeting held after four years have passed since their last appointment, unless a shorter period was set at the time of the appointment. The Supervisory Board is required to nominate a candidate recommended by the Employee Council in respect of one-third of the members of the Supervisory Board (the 'enhanced recommendation right'). The Supervisory Board must accept the recommendation of the Employee Council unless it believes that the recommended candidate is unsuitable to fulfil the duties of a member of the Supervisory Board or if the Supervisory Board would not be properly composed if the appointment was made as recommended.

The Supervisory Board may suspend any of its members at any time. The General Meeting may dismiss the Supervisory Board in its entirety due to a lack of confidence in the Supervisory Board. This requires an absolute majority of the votes cast, representing a quorum of at least one-third of the issued share capital. If this quorum is not met, there is no possibility to hold a second General Meeting at which no quorum applies. Further information on the suspension and dismissal procedure is provided in ABN AMRO's Articles of Association and the Supervisory Board Rules of Procedure as published on the ABN AMRO website.

Committees

The Supervisory Board has established four committees to prepare its decision-making and to advise the Supervisory Board on specific matters. These committees are composed exclusively of Supervisory Board members.

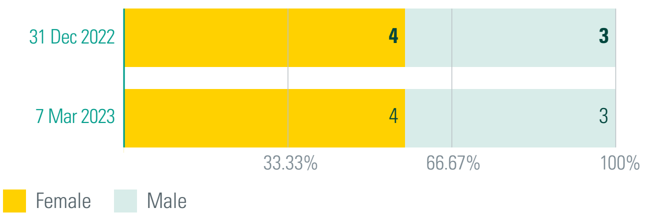
These committees are the:
- Audit Committee;
- Risk & Capital Committee;
- Remuneration Committee;
- Selection & Nomination Committee.



Composition and diversity

The Supervisory Board's composition is based on the guiding principle that diversity of thought, expertise, background, competences and interpersonal styles is a prerequisite for effective supervision and, by extension, for long-term value creation. To that effect, the following diversity aspects have been identified as relevant for the composition of the Supervisory Board: gender, age, educational and professional background, and geographical provenance.

Diversity Supervisory Board
(male/female)



The gender diversity target has been reviewed in light of new legislation for a more balanced ratio between men and women in the board of directors and supervisory board. According to ABN AMRO's current gender diversity target, at least one-third (1/3) of ABN AMRO's Supervisory Board should consist of the underrepresented gender.
ABN AMRO's Supervisory Board currently consists of 3 male members and 4 female members. When vacancies arise, the Supervisory Board gives due consideration to any applicable gender requirements in its search for suitable new members meeting the fit and proper requirements stipulated in the Dutch Financial Markets Supervision Act.

Collectively, the members have expertise in personal and business banking, wealth management and corporate banking, investment banking, risk management, financial management, strategy formulation and execution, cultural and other change management, IT, digitalisation, innovation, economics, remuneration and human resources management, sustainability and corporate social responsibility, legal and compliance matters and the development of products and services, and experience in the key markets in which the bank is active. The Supervisory Board has one financial expert, in accordance with the formal definition and requirements, accompanied by highly experienced bankers, who collectively have broad and deep banking experience across all key areas of domestic and international banking.

All members of the Supervisory Board have passed the fit and proper test required under the Dutch Financial Supervision Act. The Supervisory Board confirms that all members of the Supervisory Board are independent within the meaning of best practice provision 2.1.10 of the Dutch Corporate Governance Code.

Competence matrix

Competences	 **Tom de Swaan** Chair of the Supervisory Board	 **Arjen Dorland** Vice-Chair of the Supervisory Board	 **Laetitia Griffith** Member	 **Michiel Lap** Member	 **Sarah Russell** Member	 **Anna Storåkers** Member	 **Mariken Tannemaat** Member
Executive experience	★★	★★	★★	★★	★★	★★	★★
Banking and finance experience	★★	★	★	★★	★★	★★	★★
Audit experience	★★	★★	★★	★★	★★	★★	★
Risk experience	★★	★★	★★	★★	★★	★★	★★
IT and digitalisation experience	★★	★★	★	★★	★★	★★	★★
Transformation and innovation experience	★★	★★	★	★★	★★	★★	★★
Environmental experience	★★	★	★★	★★	★	★	★★
Social experience	★★	★★	★★	★★	★★	★★	★
Governance experience	★★	★★	★★	★★	★★	★★	★★
Compliance and conduct experience	★★	★★	★★	★	★★	★★	★★

★ Has good understanding of the subject but is not expert ★★ Can make a balanced independent judgment on the subject (expert).

Supervisory Board

Supervisory Board (from left to right): Michiel Lap, Laetitia Griffith, Tom de Swaan, Mariken Tannemaat, Anna Storåkers, Arjen Dorland, Sarah Russell

Personal details of the members of the Supervisory Board

The personal details of all members of the Supervisory Board who were active in 2022 can be found on our website: abnamro.com/en/about-abn-amro/product/supervisory-board. The information below refers to the members of the Supervisory Board as at 7 March 2023.

Dutch, male, 1946

Tom de Swaan

Chair of the Supervisory Board

Tom de Swaan was appointed to the Supervisory Board of ABN AMRO effective 12 July 2018 and reappointed for a second term effective 20 April 2022. His current term expires at the close of the Annual General Meeting in 2026.

Last executive position held: CEO ad interim, Zurich Insurance Group. Ltd

Relevant positions pursuant to CRD V: Chair of the Supervisory Board of ABN AMRO Bank N.V.

Other relevant ancillary positions: Chairman of the Board of Foundation National Opera & Ballet Fund, the Netherlands, member of the International Advisory Board of Akbank, chairman of the Management Board of Stichting Fondsen Nederlands Kankerinstituut, member of the Supervisory Board of Foundation Holland Festival, the Netherlands, member of the Advisory Board of Stichting tot Instandhouding van de Diergaarde van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, member of the Board of Stichting Liszt Concours, member of the Board of Directors of The International Centre for Missing & Exploited Children.

Dutch, male, 1955

Arjen Dorland

Vice-Chair of the Supervisory Board

Arjen Dorland was appointed to the Supervisory Board of ABN AMRO effective 18 May 2016. His current term expires at the close of the Annual General Meeting in 2024.

Last executive position held: Executive Vice-President of Technical and Competitive IT, Royal Dutch Shell.

Relevant positions pursuant to CRD V: Vice-Chair of the Supervisory Board of ABN AMRO Bank N.V., vice-chairman of the Supervisory Board of Essent N.V., chairman of the Supervisory Board of Bovemij N.V. and N.V. Schadeverzekering-Maatschappij Bovemij.

Other relevant ancillary positions: Chairman of the combined Supervisory Council of Stichting Naturalis Biodiversity Center and Stichting Japanmuseum Sieboldhuis, chairman of the Supervisory Council of Haaglanden Medisch Centrum.

Dutch, female, 1965

Laetitia Griffith

Member

Laetitia Griffith was appointed to the Supervisory Board of ABN AMRO effective 17 December 2019. Her current term expires at the close of the Annual General Meeting in 2024.

Last executive position held: Member of Parliament on behalf of the VVD (portfolio: Home Affairs), House of Representatives of the Netherlands.

Relevant positions pursuant to CRD V: Member of the Supervisory Board of ABN AMRO Bank N.V., member of the Supervisory Board of Tennet TSO GmbH, member of the Supervisory Board of Tennet Holding B.V., member of the Supervisory Board of Benno Leeser Holding B.V.

Other relevant ancillary positions: Chairman of the Supervisory Board of the Dutch Film Fund, chairman of the Board of Stichting Nederlandse Vioolconcoursen, member of the Advisory Council of Stichting Impact Economy Foundation, chairman of the Supervisory Council of Stichting Metropole Orkest, chairman of the Supervisory Council of Stichting Save the Children Nederland, member of the Supervisory Council of the Kadaster, member of the Electoral Council (Kiesraad), member of the Board of Stichting Assurances KLM.

Dutch, male, 1962

Michiel Lap

Member

Michiel Lap was appointed to the Supervisory Board of ABN AMRO effective 24 April 2019. His current term expires at the close of the Annual General Meeting in 2023.

Last executive position held: Partner and Head of Northwest Europe, Goldman Sachs.

Relevant positions pursuant to CRD V: Member of the Supervisory Board of ABN AMRO Bank N.V., chairman of the Supervisory Board of Arcadis N.V., non-executive board member of Rijn Capital B.V.

Other relevant ancillary positions: Member of the Supervisory Board of Stichting Het Nederlands Kanker Instituut – Antoni van Leeuwenhoek Ziekenhuis.

Swedish, female, 1974

Anna Storåkers

Member

Anna Storåkers was appointed to the Supervisory Board of ABN AMRO effective 24 April 2019. Her current term expires at the close of the Annual General Meeting in 2023.

Last executive position held: Head of Personal Banking Sweden, Nordea Bank AB.

Relevant positions pursuant to CRD V: Member of the Supervisory Board of ABN AMRO Bank N.V., chairman of the Board of Directors of Kreditz AB.

Dutch, female, 1971

Mariken Tannemaat

Member

Mariken Tannemaat was appointed to the Supervisory Board of ABN AMRO effective 15 December 2020. Her current term expires at the close of the Annual General Meeting in 2025.

Last executive position held: Chief Innovation Officer at Robeco N.V.

Relevant positions pursuant to CRD V: Member of the Supervisory Board of ABN AMRO Bank N.V., vice-chairman of the Supervisory Board of CM.com N.V. and member of the Supervisory Board of CM Payments B.V., member of the Supervisory Board of VLC & Partners B.V., non-executive director of Prudential Assurance Company Limited, non-executive director of Investment Funds Direct Limited.

Other relevant ancillary positions: Advisor to the Executive Board of Erasmus Enterprise B.V., chairman to the Women in Leadership working group of EGN Nederland B.V.

Australian, female, 1962

Sarah Russell

Member

Sarah Russell was appointed to the Supervisory Board of ABN AMRO effective 20 April 2022. Her current term expires at the close of the Annual General Meeting in 2026.

Last executive position held: CEO of AEGON Asset Management Holding B.V. and member of the Managing Board of AEGON N.V.

Relevant positions pursuant to CRD V: Member of the Supervisory Board of ABN AMRO Bank N.V., member of the Supervisory Board of APG Groep N.V., member of the Supervisory Board of APG Asset Management N.V., member of the Supervisory Board of The Currency Exchange Fund N.V.

Supervisory Board

Interview with our Supervisory Board Chair

I encourage people to celebrate success more, because it gives enormous satisfaction and reinforces the idea that they work for a fantastic bank with an incredible brand name and a great purpose

Tom de Swaan
Chair of the Supervisory Board

Last year, we saw the start of the war in Ukraine and we now face high inflation, rising interest rates and macroeconomic headwinds. How would you say the bank performed in 2022?

"I think we did well. Obviously, the bank benefited from the positive interest rate environment, which pushed up net interest income. But what I very much laud is the increase in fee income, which is clearly something ABN AMRO generated itself as it aims to become less dependent on NII. Also, the bank is doing extremely well on the capital front. Our capital position is one of the strongest in Western Europe, which is increasingly important given current volatility."

What needs to be done to navigate this challenging environment?

"Going forward, the macroeconomic situation could lead to a deterioration in the quality of the loan portfolio. In this environment, it's even more important for the bank to further develop its capabilities to measure, monitor and proactively manage risk. In that light, the Supervisory Board is pleased with the arrival of Carsten Bittner as the new Chief Innovation & Technology Officer. In addition to his strong track record in IT and innovation strategy, Carsten brings a wealth of expertise that can help link financial data with risk management data, which is particularly important in these uncertain times."

In 2020, ABN AMRO presented its strategy to become a personal bank in the digital age. How is the execution of the strategy progressing?

"I'm pleased with the level of focus that the leadership team has created. If you have so many projects going on, it's inevitable that some will be behind schedule and some will be ahead of schedule. But all in all, I believe we are gradually leaving behind the notion that ABN AMRO is excellent at making plans, but poor at executing them. If you look at the wind-down of most of the activities in Southeast Asia and the Americas, we can see that it was meticulously executed. Another example are the efforts related to AML. The bank is right on track to meet the deadlines agreed with the Dutch central bank. It's an enormous effort, and I laud the people who are making this happen."

What do you think about the strength of the Executive Board and its relationship with the Supervisory Board?

"What I consider an enormous accomplishment in the last few years is that we have created two excellent teams who work together very closely. We have the right attitude towards each other and this is benefiting the bank: open, transparent, and friendly without being friends.

If we look at the Executive Board, I am sorry we lost a few talented people last year. At the same time, I'm confident that the team is strong enough to absorb these changes. What matters is whether you have talent in-house to replace them and whether you are attractive enough to the outside world to find new people. The bank has made good progress on both fronts."

At the same time, employee engagement in the bank took a hit in 2022. How do you explain that?

"Indeed, the results of the Employee Engagement Survey were disappointing. This clearly requires our attention. It was another challenging year for the people in the bank, with yet more reorganisations and difficult CLA negotiations. As a result, employee satisfaction has suffered. Given the macroeconomic challenges and the competitive landscape for banks, it's inevitable that ABN AMRO will be in a more or less permanent state of transition. But as you change the bank, it's crucial to keep your people engaged. In 2023, we will therefore continue our transparent dialogue with the Executive Board on how to improve this."

Focusing on the Supervisory Board, what's something you changed last year to improve your supervision?

"Early last year, we selected a number of important themes that in our opinion need special attention from the entire Supervisory Board. These themes are sustainability, IT, data management and cybersecurity, and compliance. If you set up a special committee, only part of the Board will be involved. That's why we decided to assign these themes to individual members who regularly report back their findings to the Board. In 2023, we will evaluate this approach and whether these are still the right issues to focus on. So far, this setup has worked well as it helps to enhance the quality of our discussions and ensures that the whole Board is up to speed."

In 2022, you were reappointed as Supervisory Board Chair. If you look at the focus areas, how will your second term be different from your first?

"In the first couple of years, we mainly focused on internal issues. We had a strong agenda on governance, which was partially driven by the AML settlement. Now we are looking much more at where we want to go. How do we view the environment in which ABN AMRO operates, and what will that mean for the future of the bank in the next five to ten years?

A great example are the intense and good discussions we had on the bank's climate strategy. If anything is forward-looking, it's the climate strategy. Leading up to its publication, we had quite a few sessions with the people involved and with members of the Executive Board. Going forward, the Supervisory Board will shift its focus further to the execution of the strategy. It's based on a vision for the future, but what do you have to do to get there?

The bank also has to take a fundamental look at where growth is coming from. That will be an increasingly important topic for the Supervisory Board. Where are the best opportunities for growth and what are ways to get there? For that kind of discussion, you need a stable base, and we have that now."

In conclusion, what would you like to say to the people in the bank?

"I think they should celebrate success more. Whether it's the finalisation of the wind-down of the CIB non-core portfolio, progress in AML remediation, the inaugural share buyback programme, or the growth in fee income, there are successes to celebrate across the bank. I encourage people to do that, because it gives enormous satisfaction and reinforces the idea that they work for a fantastic bank with an incredible brand name and a great purpose."

Tom de Swaan
Supervisory Board Chair of ABN AMRO Bank N.V.

Report of the Supervisory Board

Meetings of the Supervisory Board

During 2022, the Supervisory Board held six regular meetings according to the pre-set schedule and fourteen additional meetings. The regular meetings were held physically, whereas most of the additional meetings were held online.

Regular Supervisory Board meetings take place following the meetings of the Remuneration Committee, Selection & Nomination Committee, Risk & Capital Committee and Audit Committee. These committees report to the Supervisory Board on their deliberations and findings after their meeting, and the Supervisory Board takes into account their outcomes and recommendations. The Company Secretary (or deputy Company Secretary) attends all meetings and is the secretary to the Supervisory Board and its committees. The quarterly meetings of the Supervisory Board start with a check-in for the Supervisory Members only. Each quarter, after the check-in, the CEO provided an update to the Supervisory Board. Following the CEO update the other Executive Board members attended the quarterly meetings of the Supervisory Board. In March the Supervisory Board held a meeting to discuss and approve the Annual Report and in December the Supervisory Board held a meeting to discuss and approve the Financial Plan. These meetings were attended by the Executive Board as well. Depending on the topics discussed in the additional meetings of the Supervisory Board, the responsible Executive Board members also attend these meetings. The quarterly meetings take six hours on average. Other bank staff and the internal and external auditor are frequently invited to give presentations on specific topics such as Detecting Financial Crime (DFC), the Risk Management Foundation Plan, Future Credit Domain, Future Payments Domain, information security, performance highlights, the capital & funding plan, strategy execution, investor relations updates, the culture change plan, risk appetite, quarterly audit reports and the quarterly report of the interaction with the supervisors ECB, DNB and AFM. The CCOs provided the Supervisory Board with quarterly business updates and deep-dives on their respective client units, with a focus on the dilemmas and challenges facing these units. Client satisfaction (NPS) and duty of care were important items for the Supervisory Board during the business updates. In the beginning of the year the Supervisory Board discussed and decided to adjust the ABN AMRO compensation scheme for clients with a revolving consumer credit facility.

In addition to the regular meetings of the Supervisory Board, additional meetings were held to discuss the desired composition of the Supervisory Board and its committees, as well as the division of tasks in the areas of IT, data and digitalisation, ESG, conduct and compliance. Due to the resignations of Jurgen Stegmann and Tjalling Tiemstra, the agenda included the selection of a new Chair of the Risk & Capital Committee and the Audit Committee. In its meeting in March the Supervisory Board concluded that there was no immediate need for an additional member and that seven members was at that time sufficient. The Supervisory Board noted that it might be difficult to write a specific position profile for an eight member at that time, but in case the bank would come across a person that might be of added value to the Supervisory Board, this could be considered at that time. It was also agreed that each Supervisory Board committee should consist of four members. Arjen Dorland was consequently appointed as a member of the Audit Committee and Tom de Swaan as a member of the Risk & Capital Committee. The Supervisory Board also agreed on the allocation of expertise areas among the Supervisory Board members.

Culture and behaviour were key topics for the Supervisory Board during the year as these play a fundamental role in executing the bank's strategy. With the Culture Change Plan an integrated approach was designed, with the aim to strengthen the organisation's execution power and capability for sound risk-taking, both of which are crucial enablers for successfully achieving the bank's purpose and realising its strategy to grow the business. Progress on the implementation of the Culture Change plan was discussed and challenged by the Supervisory Board each quarter.

The Supervisory Board had an in-depth discussion on the non-performing exposure (NPE) strategy for Personal & Business Banking and Corporate Banking, together with Risk and the business, with a particular focus on the governance and design of the NPE strategy. The Supervisory Board challenged whether the NPE targets were ambitious enough and in line with ABN AMRO's moderate risk profile. The Supervisory Board also requested a more detailed strategy for the subsectors. Taking into account the bank's moderate risk profile, the NPE strategy sets the main objectives with regard to NPE management and describes bank-wide standards and key elements for achieving these objectives.

In addition, the meetings discussed certain specific subjects, including the appointing of a successor for the CI&TO and Head of Group Audit. Other topics on the agenda included the financial plan for 2023-2027, performance management, innovation and technology, cybersecurity and ancillary positions of Supervisory Board members and members of the Executive Board. Anna Storåkers and Sarah Russell were mandated by the Supervisory Board to discuss the Recovery Plan with Risk, and this plan was subsequently approved.

Details of the composition of the Supervisory Board in 2022 can be found in the Composition and diversity paragraph in the Supervisory Board section. The personal details of the members of the Supervisory Board are considered to be incorporated, by reference, in this Report of the Supervisory Board. In the Annual General Meeting held on 20 April 2022 Tjalling Tiemstra resigned as a member of the Supervisory Board and Sarah Russell was appointed as a member of the Supervisory Board.

The attendance rate in 2022 of the Supervisory Board members and the Committee members as well as the number of meetings held while being a member of the Board or a Committee are listed in the following table.

Attendance rate Supervisory Board committees

Attendance	Tom de Swaan	Arjen Dorland	Laetitia Griffith	Michiel Lap	Sarah Russell	Anna Storåkers	Mariken Tannemaat	Tjalling Tiemstra
Supervisory Board	100% 20/20	90% 18/20	85% 17/20	90% 18/20	100% 11/11	95% 19/20	75% 15/20	67% 6/9
Audit Committee		100% 4/4		89% 8/9	100% 5/5	100% 9/9		100% 4/4
Remuneration Committee	100% 10/10	90% 9/10	70% 7/10				100% 10/10	
Risk & Capital Committee	100% 4/4				100% 8/8	100% 11/11	91% 10/11	100% 3/3
Selection and Nomination Committee	100% 17/17	88% 15/17	88% 15/17	94% 16/17				

Focus areas and activities of the Supervisory Board

The Supervisory Board's key areas of focus included the bank's compliance with legislation, codes and regulations. Regarding the regulatory environment, ABN AMRO continued to work on retaining trust and making only proper use of client data. The remediation programmes within DFC were closely monitored by the Supervisory Board. DFC is now in the final stages of remediation and can transition towards BAU. The Supervisory Board extensively discussed the McKinsey Financial Crime benchmark and its report, which includes recommendations for achieving a sustainable cost level for financial crime operations in BAU.

The Supervisory Board was regularly updated on ABN AMRO's key financial and non-financial risks and the design of the internal risk management and control systems. During these updates the Executive Board's assessment of the adequacy and effectiveness of the risk management and control systems was monitored and discussed. The Enterprise Risk Management report was discussed quarterly and showed the developments in ABN AMRO's risk profile in the past quarter. The report includes an integrated analysis of the risk profile of ABN AMRO, based on the Strategic Risk Appetite Statement. Based on this, the Supervisory Board is able to assess whether ABN AMRO operates within the moderate risk profile that has been set. The Risk Management Foundation Plan continued to be an important topic and the Supervisory Board receives a quarterly progress update on the execution of this plan. An important part of the Risk Management Foundation Plan is the Future Credit Domain, where alignment on the end-to-end value chain and IT landscape are important elements for execution.
The Supervisory Board assessed that progress was being made on the Future Credit Domain roadmap. The bank's risk appetite and ICAAP/ILAAP were also discussed and approved. In addition, the Supervisory Board had in-depth discussions on material legal, credit, tax and compliance files.

Following the updated strategy communicated in November 2020, the Supervisory Board receives a quarterly update on strategy execution. The priorities for execution in 2021 were the Regulatory Core and Building Foundation themes. These continued to be priorities in 2022, with a specific focus on deliverables evidencing significant progress on the four priorities in the Risk Management Foundation Plan. As part of the 2020 strategy review, specific checkpoints were formulated within themes that have been given high priority and are conditional for other themes. Checkpoints have currently been set for (1) Regulatory Core, (2) Data Joint Master Plan, (3) Data & Digital Capabilities, (4) Future Product & Service Portfolio, and (5) IT Transformation.
The key highlights and challenges regarding these five checkpoint themes were discussed each quarter with the Supervisory Board. The key items discussed and challenged by the Supervisory Board in this respect were the available change capacity, attrition, and the reskilling and outsourcing model as the Supervisory Board regards employees as key for successfully executing the strategy.

The Execution Office that supports the Executive Board in executing the strategy is actively working to further strengthen the strategy execution and steering capabilities.

Showing improvement in this area is also a qualitative requirement arising from the Supervisory Review & Evaluation Process (SREP) 2021 letter, which was also a key topic for the Supervisory Board. The Acceleration Programme was initiated and driven by the Execution Office in January 2022 to enhance execution of the strategy transition plan. The main objective is to recalibrate the underlying business cases of initiatives and develop a more effective process to manage the change portfolio by linking value cases to required (IT) deliverables and thereby provide insight in the critical path.

Each quarter the Supervisory Board receives an update from the Chief Innovation & Technology Officer. After the resignation of the Chief Innovation & Technology Officer, this update was provided by the Chief Information Security Officer. Information security and fraud management are important topics for the Supervisory Board. The Security & Platform Committee was set up in consultation with the Supervisory Board in order to strengthen bank-wide cybersecurity and IT-health governance. Specific attention was also devoted to initiatives in scope of the Future Payments Domain programme, on which the Supervisory Board receives a quarterly status and progress update.

The Climate Strategy announced in December 2022 was a key topic for the Supervisory Board during the year. In various formal and informal meetings the Supervisory Board devoted time to considering and challenging the various elements in the Climate Strategy; in particular, the climate targets and commercial plans for Commercial Real Estate, (New) Energy, Wealth Products, Shipping and Mortgages. Other key items discussed included the carbon intensity of ABN AMRO's portfolio, clients' energy transition and the acceleration of the Renewables portfolio. The Supervisory Board stressed the importance of new legislation for meeting the targets in the Climate Strategy.

The annual joint study trip of the Supervisory Board and the Executive Board took place in Paris from 31 May to 2 June 2022. Two topics – the Entrepreneur & Enterprise model (E&E model) and fintech – had a prominent place on the agenda. The E&E model of Neuflize OBC was discussed, while several clients also talked about their experience with the E&E model, gave presentations on their businesses and explained how the E&E model helps them or where improvements can be made. In the case of fintech, a client provided more insight into the pace of developments and what the client is currently working on.

The Supervisory Board continued to actively engage with its key stakeholders in 2022, both in digital and physical meetings. The two members appointed pursuant to the enhanced recommendation right of the Employee Council, Laetitia Griffith and Arjen Dorland, met regularly with the Employee Council throughout the year so as to maintain an active dialogue and obtain the Employee Council's thoughts and input on various matters, including diversity, work satisfaction, strategy execution, hybrid working and the CLA negotiations. The Chair and other members of the Supervisory Board also met the Employee Council on several formal and informal occasions during the year. The Supervisory Board appreciates the constructive relationship it has with the Employee Council, and highly values the input, engagement, suggestions and considerations provided by the Employee Council in the interests of the bank. Active engagement was also maintained throughout the year with the Dutch Central Bank (DNB), the European Central Bank (ECB), the AFM, STAK AAB and NLFI. The Supervisory Board's aim continued to be to ensure that the bank is well positioned to create long-term value for its shareholders and for society, while focusing firmly on clients' interests and balancing the interests of all stakeholders.

A description of the duties, responsibilities and current composition of the Supervisory Board, including its committees and other positions held by members of the Supervisory Board, is provided in the Supervisory Board section of this chapter. More information on remuneration is provided in the Remuneration report section of this chapter. These subjects are considered to be incorporated, by reference, in this Report of the Supervisory Board.

Supervisory Board Committees

Audit Committee

Introduction

The Audit Committee is tasked with the direct supervision of all subjects relating to financial reporting and control. In doing so, it is responsible for supervising and advising the complete Supervisory Board on matters such as (i) the assessment of the principles of valuation and determination of results for the financial statements, (ii) internal control and financial reporting functions, (iii) internal and external audit, (iv) risk assessment of issues that could impact the financial reporting, (v) regulatory compliance in relation to financial reporting, (vi) mediation between internal or external auditors and/or management where needed, and (vii) reporting to the Supervisory Board.

Members of the Audit Committee

On 1 January 2022, the Audit Committee consisted of Tjalling Tiemstra (Chair), Michiel Lap and Anna Storåkers. Because Tjalling Tiemstra was not available for a new term as Supervisory Board member, his appointment ended on the date of the Annual General Meeting, being 20 April 2022. On that same date, Sarah Russell was appointed as his replacement. On 6 July 2022, Arjen Dorland was appointed as a member of the Audit Committee. The incoming Chair of the Audit Committee undertook an extensive induction programme, which continued throughout the year, to enable her to perform her task as Chair effectively.

Meetings held in 2022 and attendance

The Audit Committee held six regular plenary meetings and three additional meetings in 2022. Tom de Swaan and Laetitia Griffith, in their capacity as Supervisory Board members, attended all regular plenary meetings of the Audit Committee in 2022. Arjen Dorland attended four regular plenary meetings in 2022 in his capacity as a Supervisory Board member before being appointed as a member of the Audit Committee. Mariken Tannemaat joined five regular plenary meetings in 2022 in order to keep abreast of the most important developments relating to the Committee's tasks. All regular plenary meetings of the Audit Committee were also attended by the CEO, the CFO and the CRO. The Head of Group Audit, the Head of Financial Accounting, the Head of Controlling, the external auditor and the deputy Company Secretary were also present during the plenary meetings. As for the additional meetings, Tom de Swaan attended all three, while Mariken Tannemaat and Laetitia Griffith both joined one, in their capacity as Supervisory Board members.

In March 2022 the Audit Committee took a decision, without holding a meeting, on evaluating the external auditor's performance for the purpose of the Annual General Meeting.

In addition to the meetings mentioned above, the Chair and other members of the Audit Committee regularly held separate meetings in 2022 with, for example, the Head of Group Audit, the CFO, the CRO, the Head of Accounting & Consolidation, the Head of Controlling and the Head of Investor Relations. The current Chair of the Audit Committee also met with the external auditor bilaterally on several occasions in 2022, focusing on subjects such as the progress of the external audit, ABN AMRO's climate plan, the internal lessons learned within Ernst & Young Accountants LLP (EY), the EY audit team and other subjects relevant to the Committee's responsibilities. The current Chair also met with the European Central Bank and the Dutch Central Bank on one occasion during the year. Furthermore, the Committee's members met with managers of various departments in order to remain well informed on topics subject to the Committee's supervision. Directly after the first meeting in March 2022, at which the draft annual accounts were discussed, the Audit Committee met bilaterally with the external auditor to seek confirmation that all relevant matters emerging from the audit had been brought to the Committee's attention. In addition, the level of cooperation between EY and management, the Audit Committee, the Supervisory Board and Group Audit was discussed.

General discussion items

The Audit Committee's discussions in the plenary meetings covered topics including the quarterly reports, the 2021 Integrated Annual Report of ABN AMRO and key audit matters reported by internal and external audit. In relation to the latter, the Audit Committee discussed all control observations and key audit matters of the internal and external auditors, including progress on improvements, by means of the Group Internal Audit reports and the EY management letter. Please refer to the Management Control Statement in the Risk, funding & capital chapter and the Audit Opinion of EY (see Other) for further details. The Audit Committee also decided to discuss the report on whistle-blowing twice a year instead of annually, considering the discussions in society.

In 2022 the Audit Committee increasingly focused on governance regarding financial reporting controls within the bank, especially involving the second line, with the aim of improving the independent oversight of financial reporting risk. Additionally, the Committee paid attention to the adherence to laws and regulations governing financial and regulatory reporting, with an emphasis on sustainability reporting. Going forward, the biggest challenge for the Audit Committee is preparing for the regulatory and societal expectations regarding the actions, and their monitoring and reporting, regarding the climate plan and sustainability more generally. These preparations will include strengthening the role of the Audit Committee and ensuring seamless engagement with the Risk & Capital Committee and the Supervisory Board in relation to their respective roles.

The Audit Committee extensively discussed the financial performance, with an increased focus on the impairments taken as a result, for example, of the war in Ukraine. The Committee also focused on cost control and the cost development trajectory for the coming years. In addition, the amount of management overlays and the related governance were discussed on several occasions. The Audit Committee continually paid attention to current and future operational results, also in view of the rising interest rate environment and economic developments in general. In addition, the Committee held quarterly discussions on the audit ratings of the bank's first-line and second-line departments, as well as advising on two share buyback transactions, one of which was conditional. The Committee also took note of financial reports issued to supervisory authorities, such as the COREP and FINREP reports, as well as considering the role and performance of and reports from Group Audit, reports from the external auditor, management letters and the auditor's independence and fees. The Committee was also informed of and, if necessary, discussed all relevant letters from the European Central Bank and the Dutch Central Bank.

The external assessment of the internal audit function, required every five years, was undertaken, during 2022, with the findings to be presented to the Audit Committee at the first meeting in 2023. This assessment included reviewing files and work processes and interviewing the former and current chairs of the Audit Committee, as well as executives and other representatives of internal audit.

Discussion items per meeting

In February 2022, in addition to the regular topics noted above, the Audit Committee recommended the Supervisory Board to approve the annually updated Auditor Independence Policy and Group Audit Charter. The Committee also advised the Supervisory Board to approve the final cash dividend for 2021, as well as the share buyback programme in the amount of EUR 500 million. In addition, the Committee exchanged views on the letter from the VEB to audit firms discussing, for instance, the need to explain the impact of Covid-19 in the annual report.

In the same month, an additional meeting was held in combination with the Risk & Capital Committee meeting and focusing on ABN AMRO Clearing Bank. The topics discussed were financial and commercial performance, risk governance and ABN AMRO's oversight of this, risk management, operating effectiveness, and information risk and cybersecurity.

In March 2022, the Audit Committee reviewed and discussed the Integrated Annual Report 2021, including the Impact Report and Human Rights report, the related press release, the external auditor's report on the 2021 consolidated financial statements and the Management Control Statement. The Committee challenged management on various disclosures that were covered in the Integrated Annual Report. Management was also requested to revise the wording regarding AML remediation and the associated deadlines. Another issue was the new requirement to approve and submit the report in ESEF format to the regulator, resulting in a tight review deadline for the Audit Committee.

In May 2022, in addition to the regular agenda items, the Audit Committee discussed the 2022 Audit Plan of the external auditor, as well as the EY Engagement Letter, where a change of staff in the audit team was stipulated. In addition, special attention was paid to the revision of the Finance & Risk Architecture Alignment Initiative (FRAAI). The Audit Committee strongly recommended drafting an alternative plan and adopting the lessons learned, including those relating to the involvement of the Supervisory Board going forward and the budget spent.

In August 2022, the Audit Committee discussed and subsequently advised the Supervisory Board to approve the interim dividend for the first half of the financial year 2022. The Committee also took note of the proposal for the Integrated Annual Report 2022. The Committee stressed the importance of gaining oversight of disclosures on non-financial reporting information such as ESG and climate data reporting. The branchification of Bethmann Bank and its related audit issues and regulatory topics were discussed at a meeting that also considered the conditional share buyback. Communication on this latter topic in the quarterly report was specifically touched upon. Lastly, the Audit Committee provided advice to the Supervisory Board on the appointment of the Head of Group Audit ad interim.

In the last regular meeting of 2022, apart from the recurrent agenda items, the Audit Committee recommended the Supervisory Board to approve the annual review of the Group Audit Charter and the Group Audit Plan 2023. Regarding the latter, the challenge of ensuring sufficient resources and budget to ensure continuous delivery of a solid audit advice was highlighted and acknowledged by the Audit Committee members. The Committee was also informed of the most important developments in tax matters and related risks for ABN AMRO, as well as being updated on the status of the European Central Bank's amendment to the TLTRO conditions. Lastly, EY provided the Audit Committee with its new teaming proposal for 2024 and 2025. In the process of appointing the new audit team, the Audit Committee was involved in meeting and recommending the future signing partner, who will first become the coordinating partner. The Chairs of the Supervisory Board and Audit Committee were involved in the interview process. EY subsequently presented its new team.

In November 2022, an additional meeting was convened to make recommendations to the Executive Board on the appointment of the preferred candidate for the role of Head of Group Audit, based on the outcome of the interviews.

Another additional meeting was held in December 2022, when the Audit Committee extensively discussed the control framework for the climate strategy and the Committee's role with respect to measurement, steering and monitoring, as well as reporting of commitments. The Audit Committee deemed it important to build a robust framework for publications containing sustainable/ESG targets and disclosures, and for the publication's relationship to the integrated reporting to be clearly established. This will be closely monitored by the Audit Committee going forward.

Risk & Capital Committee

The Risk & Capital Committee (R&CC) is responsible for supervising and advising the Supervisory Board on topics such as: (i) risk management and risk control, (ii) the strategies for capital and liquidity management, (iii) the bank's risk appetite and risk strategy and reviewing the business activities in relation to these matters, (iv) compliance with applicable laws and regulations (including codes of conduct and internal procedures), (v) risk and compliance awareness within the bank, (vi) sound remuneration policies and practices in the light of risk, capital, liquidity and expected earnings, (vii) proposing corrective and/or disciplinary measures against members of the Executive Board in the event of a breach of applicable laws and regulations, and (viii) periodic review of the bank's actual risk profile.

With effect from 20 April 2022, Sarah Russell was appointed as a member of the R&CC. The term of appointment of Tjalling Tiemstra expired at the close of the annual general meeting on 20 April 2022 and he indicated that he was not available for reappointment. On 6 July 2022 Tom de Swaan was appointed as a member of the R&CC, and on 17 August 2022 Anna Storåkers was appointed as the permanent Chair of the R&CC. In their capacity as Supervisory Board members, Tom de Swaan (until 6 July 2022), Arjen Dorland, Laetitia Griffith and Michiel Lap attended most of the meetings of the R&CC in 2022 in order to keep abreast of the most important developments relating to the Committee's tasks. All regular plenary meetings of the R&CC were also attended by the CEO, CFO and CRO of ABN AMRO. The Head of Group Audit and the Head of Compliance, the external auditor and the Company Secretary or deputy Company Secretary also attended the full plenary meetings. In addition, when deemed relevant and useful, individual staff members and responsible management were invited to present their case, respond to questions and participate in discussions.

The R&CC held eleven plenary meetings in 2022, consisting of four regular meetings and seven additional meetings. All matters discussed in the R&CC's plenary meeting that were relevant for the Supervisory Board were reported on orally at the subsequent meetings of the full Supervisory Board. The full Supervisory Board also received minutes of the R&CC meetings.

Recurring items on the R&CC's agenda in 2022 were the Enterprise Risk Management (ERM) Report; the Capital & Funding Plan; the Credit Risk Report; Compliance; DFC; Legal updates; a progress report on the Risk Management Foundation Plan; a report on the interaction with the ECB, DNB and AFM; and the Risk Policy Approval Report, which includes a quarterly overview of changes to relevant risk policies. Additionally, the CRO provided quarterly updates at the regular R&CC meetings on relevant developments in her area of control.

The ERM Report provides a concise overview of ABN AMRO's position on all risk types identified in the risk taxonomy. It also aims to identify cross-risk type issues and effects and to provide a single integrated view on the bank's risk profile, benchmarked against the bank's strategy and risk appetite. The ERM Report and all other regular and one-off reports were used by the R&CC to maintain oversight and advise the Supervisory Board on the functioning and efficiency of the bank's operations versus its risk appetite, including the functioning of its internal risk management function. Based, among other things, on the ERM Report, the R&CC extensively discussed the interest rate risk, change risks, credit risks, operational risks, compliance risks, and IT and security risks, with increased attention for sustainability and climate risk.

Every quarter the R&CC assessed the updated Capital & Funding Plan and was informed about the bank's current capital and funding positions. The R&CC discussed the bank's management of its capital and liquidity ratios, including the issuance plans for capital and funding and options for RWA steering. In all instances, the R&CC advised the Supervisory Board to approve the proposed Capital & Funding Plan. The R&CC held an extra meeting to discuss the Capital Adequacy Statement and the Liquidity Adequacy Statement.

Based on the quarterly Compliance and Legal Reports, the R&CC discussed individual Legal, Tax and Compliance files, the performance of the Compliance function, Compliance policies and procedures, and the impact of national and international laws and regulations. The R&CC had a continued focus on compliance-related matters, and particularly on the duty of care, client due diligence, anti-money laundering and the countering of terrorism financing. The R&CC was updated quarterly on the activities of the Detecting Financial Crime unit, while also zooming in on the progress and deliverables of the ongoing remediation programmes.

The R&CC was informed of the bank's correspondence and development of the relationship with the Dutch Central Bank, the European Central Bank, the AFM and other relevant supervisory authorities in quarterly oversight reports.

The R&CC extensively discussed various topics and dilemmas relating to the rapidly changing macroeconomic environment and the risk profile of ABN AMRO, including Covid-related matters and the impact of government measures (and the reduction in these measures) on clients' risk profile. Its discussions also included the impact on clients of second and third-order effects of the Russian-Ukrainian war, including inflation, higher energy prices and rising interest rates.

Attention was also devoted in 2022 to the need to meet increasing regulatory demands within fairly short timeframes, while also investing in future-proof IT platforms. Extra meetings were held to deep-dive on DFC deliverables, remuneration incentives, information risk, the NPE strategy and the climate plan. The R&CC was also updated on the progress of the CIB non-core wind down and discussed the risk review of the pricing methodology.

More information on the risk, capital, liquidity and funding-related topics discussed in the R&CC is provided in the Risk, funding & capital chapter.

Remuneration Committee

The Remuneration Committee is responsible for supervising and advising the Supervisory Board with regard to such things as: (i) remuneration policies and their execution for members of the Executive Board, the Supervisory Board and selected members of senior management, and (ii) reporting on the execution of the bank's remuneration policies in a remuneration report.

During 2022 the Remuneration Committee retained the same composition as last year and was chaired by Arjen Dorland.

In 2022, the Remuneration Committee held six regular meetings and four additional meetings (including one meeting jointly with the Risk & Capital Committee). Two decisions were made without a meeting being held. The Company Secretary (or deputy Company Secretary) attended the meetings. In accordance with legislation, the Supervisory Board continued in 2022 to ratify all decisions made by the Remuneration Committee either at a meeting or in writing without a meeting being held.

The main topics discussed by the Remuneration Committee in February were the regular end-of-year process topics related to 2021, such as the performance of the Executive Board members and CLA+ employees, as well as the allocation of variable remuneration to eligible CLA+ employees. The performance management process was improved by increasing the weighting assigned to the individual part of the targets compared to the previous year, thus leading to more individual accountability.

The Remuneration Committee carefully reviewed the proposed allocation of the variable remuneration pool for 2021 and considered it to be prudent. The allocated budget was underspent by EUR 1 million compared to the previous year. The underspending was mainly due to high staff turnover within ABN AMRO Clearing Bank N.V. and to an additional correction relating to the final performance of ABF UK. The 2022 targets for the Executive Board members were reallocated within the applicable KPI framework, while the KPIs and targets for CLA+ employees were adjusted to put more emphasis on financial growth, with targets for sustainability assets also being added.

In April 2022 the Remuneration Committee discussed the remuneration package of the new Chief Innovation & Technology Officer and recommended that the Supervisory Board should approve the proposal. The remuneration is published on the bank's corporate website. The regulatory approval process subsequently started. Upon receipt of the regulatory declaration of no objection, the Chief Innovation & Technology Officer assumed office effective 1 January 2023.

The boundaries of applicable remuneration legislation, including the prohibition on bonuses for Executive Board members and the freezing of their fixed remuneration, sometimes make it challenging to retain expert leaders, as well as senior staff and other highly qualified employees.

A joint meeting with the Risk & Capital Committee was held in May 2022 to discuss the risk assessment of remuneration incentives. The main risks related to remuneration policies and practices linked to the various areas of the strategic risk appetite. The joint meeting assessed that the bank generally complies with applicable remuneration legislation and internal rules. Proposed enhancements focused on being able to attract and retain staff with the right skills and talent by offering a competitive remuneration package and having a performance management system that awards and recognises staff performance on the basis of impact and individual contribution.

In the meetings held between June and October 2022 the Remuneration Committee closely followed and discussed the negotiations with the trade unions concerning the collective labour agreement (CLA) that reached the end of its term on 1 January 2022 and was subsequently extended to 1 July 2022. The tension between offering appropriate remuneration and rewarding staff in times of high inflation versus the cost targets of the bank was a dilemma duly considered by the Remuneration Committee. On 25 October 2022 the bank announced that agreement had been reached on the CLA for the period from 1 July 2022 to 1 July 2024. In 2021, the Social Plan was extended from 1 January 2022 to 1 January 2025.

The Remuneration Committee was also informed about equal pay, given that equal pay for equal work is an important principle within ABN AMRO. The Remuneration Committee was satisfied with the thorough analysis performed by HR, which demonstrated that the policy being deployed works. Action to achieve further improvements will focus on the international context, especially in the countries where ABN AMRO is growing.

In October 2022, it was announced that the Chief Human Resources Officer would step down, by mutual consent, with effect from 1 December 2022. The Remuneration Committee discussed the relevant termination agreement and recommended that the Supervisory Board should approve the decision to enter into this agreement.

The Remuneration Committee was further updated about employer branding, attracting talent and attrition, with good efforts being undertaken to improve this branding. The Remuneration Committee also discussed the important issue of staff reskilling, given that this contributes to sustainable development of people and to closing critical skills gaps both now and in future, thus enabling the bank to retain staff and avoid unnecessary redundancies and people voluntarily choosing to leave.

In November 2022, the Remuneration Committee reviewed a preliminary draft of the remuneration report, the final version of which is included in this annual report. The report explains how the remuneration policy contributes to long-term value creation and takes into account ESG objectives and how these contribute to creating long-term value.

Lastly, the Remuneration Committee discussed the preliminary variable remuneration pool for 2022 and setting of KPIs for 2023 and provided positive advice on these aspects to the Supervisory Board. The pool for the 2022 performance year increased slightly compared to 2021. This was considered justified, given the competitive market, tight labour market conditions and the absence of a major event in 2022.

Selection & Nomination Committee

The Selection & Nomination Committee’s responsibilities include supervising and advising the Supervisory Board on (i) selection, appointments and reappointments regarding the Supervisory Board and the Executive Board, (ii) succession plans of the Supervisory Board and the Executive Board, (iii) the knowledge, skills, experience, performance, size, composition and profile of these boards, and (iv) the performance of the members of these boards.

During 2022 the Selection & Nomination Committee retained the same composition as last year and was chaired by Tom de Swaan.

In 2022, the Selection & Nomination Committee held six regular meetings and eleven additional meetings, all of which were attended by the Company Secretary or deputy Company Secretary. Two decisions were made in writing without a meeting being held. In accordance with legislation, the Supervisory Board continued in 2022 to ratify all decisions made by the Selection & Nomination Committee either at a meeting or in writing without a meeting being held.

One of the main topics that the Selection & Nomination Committee discussed and provided advice on to the Supervisory Board related to the recruitment, selection and appointment process for a new member of the Executive Board, with the title of Chief Innovation & Technology Officer, to succeed Christian Bornfeld, who decided to leave ABN AMRO on 1 May 2022. The Selection & Nomination Committee discussed and provided advice to the Supervisory Board on temporarily dividing the duties and responsibilities of the Chief Innovation & Technology Officer between the Chief Executive Officer and Chief Financial Officer.

Other important topics discussed were the temporary replacement for Gerard Penning, who left the bank on 1 December 2022 by mutual consent, the related reallocation of his duties and responsibilities within the Executive Board, determination of the profile for the Chief Human Resources Officer position with a good fit for the future, and the options for related organisational changes. The Selection & Nomination Committee also discussed and advised the Supervisory Board on filling the vacancy for a new member of the Supervisory Board and Chair of the Risk & Capital Committee to succeed Anna Storåkers, who is leaving the bank at the end of the 2023 Annual General Meeting.

The Selection & Nomination Committee also discussed and provided positive advice to the Supervisory Board on the appointment of Lars Kramer as the Vice-Chair of the Executive Board, on the proposed changes to the composition of the Risk & Capital Committee and the Audit Committee based on the outcome of the Supervisory Board's annual assessment, on the appointment of the interim Head of Group Audit and the search process initiated for the vacant position of Head of Group Audit, on the annual assessment of members of the Executive Board and the Supervisory Board and the related action plans, on the assessment of various ancillary positions of members of the Supervisory Board and the Executive Board, and on the proposed D&I targets for the Executive Board, for the sub-top of ABN AMRO and for the supervisory and management boards and the sub-top at subsidiaries within the ABN AMRO group that qualify as large companies for the years 2022 to 2025.

Another subject that the Selection & Nomination Committee discussed was ABN AMRO's Succession Management, contributing to the identification, sourcing and selection of great and diverse talent at all levels of the organisation. This will help the bank to achieve its strategic ambitions and to bring the bank's purpose to life.

The bank's talent visibility programme was also discussed, with the objective to increase the Selection & Nomination Committee's insight into the bank's talent population. During this meeting, the outcome of interviews that members of the Selection & Nomination Committee held with senior talents with Executive Board potential were discussed. Other topics on the agenda included the outcome of the resourcing process for the bank's leadership group and management development programme, and the search process for an external advisor for the external self-assessment of the Supervisory Board conducted every three years.

Lastly, the Selection & Nomination Committee periodically discussed cases qualifying as antecedents to decide whether the suitability of the relevant members of the Executive Board and Supervisory Board should be reassessed. This was not found to be the case in 2022.

Performance evaluation

The annual assessment of the Executive Board, the Supervisory Board and the Supervisory Board Committees regarding performance year 2021 was carried out in H1 2022. The functioning of the Executive Board and its members and committees was assessed, based on results assembled from questionnaires completed by all members of the Executive Board and discussions during their meetings, which were evaluated by the Supervisory Board. The assessment of the Supervisory Board and its individual members and committees was based on results assembled from questionnaires completed by all members of the Supervisory Board and discussions within the Supervisory Board. These assessments and evaluations were then used to identify areas of improvement. Actions from previous year included an enhanced focus on various topics in the Lifelong Learning Programme and Permanent Education Programme (such as client centricity, digital capabilities, ESG and the rapidly changing landscape of legal, compliance and regulatory frameworks), the composition of the Executive Committee and the quality of meeting documents, all of which were addressed during 2022.

Recommendations from the assessment finalised in H1 2022 included:

- setting up the Group Sustainability Committee;
- improving the information exchange from the Executive Board to the Supervisory Board;
- making recommendations on the desired experience, knowledge and skills of Supervisory Board members, specifically regarding ESG and IT;
- conducting 'post mortems' on the Supervisory Board's role in executing specific large programmes;
- spending physical time on teambuilding after the Covid-19 restrictions and the new set-up of the Executive Board at the 2021 year-end.

These recommendations were followed up during 2022. The assessments of the Supervisory Board and Executive Board for the 2022 performance year will be carried out in H1 2023 under the supervision of an independent external expert.

Induction Programme and Lifelong Learning Programme

Induction Programme

Following their appointment, all new members of the Supervisory Board and new members of the Executive Board complete an extensive induction programme designed to ensure they have the relevant knowledge needed to fulfil their role, including thorough knowledge of ABN AMRO and its business activities, of the financial reporting of the group ABN AMRO belongs to and of general financial, environmental, social, governance, risk, compliance and legal matters. In view of the different knowledge, background and experience of newly appointed members of these boards, each induction programme has a tailor-made curriculum.

Lifelong Learning Programme

A lifelong learning programme is in place for members of the Supervisory Board and the Executive Board. This is designed to keep their expertise up-to-date and to broaden and deepen their knowledge, where necessary. The objective is for members of the Supervisory Board, Executive Board and Executive Committee to participate in the same training sessions so as to foster knowledge-sharing. The curriculum is developed and updated continually to ensure the programme is of high quality, covers developments related to regulatory requirements and takes account of current developments in the global financial industry. Topics covered in 2022 at sessions attended by the Supervisory Board and the Executive Board included financial accounting (including hedge accounting/ estimations and provisions policy/usage of data analytics), HR remuneration, public private collaboration in detecting financial crime, current affairs, trends in regulatory bodies, good governance as a business enabler, and a geopolitical deep-dive on cybersecurity and data protection in China.

Together with members of the senior management, the members of the Supervisory Board and the Executive Board also participated in the Permanent Education Programme in 2022. The following topics were covered: SFR: bringing sustainability to the core of our business; unravelling clients' needs in a digital age; the impact of technology and new generations on banking; taking model risk management to the next level; what upcoming regulations mean for our business; the age of analytics; competing in a data-driven world; the consumer-data opportunity and the privacy imperative; making friends with the trends; client integrity and our climate strategy.

All sessions on the Lifelong Learning Programme and the Permanent Education Programme were offered online.

Lifelong Learning Programme for members ExBo and SB

Permanent Education for members ExBo/SB/senior management


We want clients to have access to our advice and expertise when making key financial decisions at important moments in their lives

General Meeting and shareholder structure

General meeting

The Annual General Meeting is held each year by 30 June at the latest. The agenda for the Annual General Meeting contains subjects specified in ABN AMRO's Articles of Association and under Dutch law. Extraordinary General Meetings are convened if deemed necessary, for instance to resolve important decisions, such as major acquisitions and divestments or appointments of Executive Board or Supervisory Board members that cannot be deferred until the next Annual General Meeting.

Shareholders or holders of depositary receipts who alone or jointly represent at least 3% of the issued share capital of ABN AMRO are allowed to add items to the agenda of the General Meeting, provided they submit a request for this (including reasons) to ABN AMRO at least 60 days prior to the General Meeting. The Supervisory Board and the Executive Board are both entitled to convene a General Meeting. Shareholders or holders of depositary receipts issued with the cooperation of ABN AMRO may also convene a General Meeting, provided they represent at least 10% of the issued share capital. NLFI may also request the Executive Board or Supervisory Board to convene a General Meeting, as stated in the Relationship Agreement.

General Meetings in 2022

ABN AMRO held four General Meetings in 2022: the Annual General Meeting on 20 April and three Extraordinary General Meetings on 17 February, 29 September and 15 November. The Annual General Meeting was held in a hybrid manner: shareholders and depositary receipt holders could participate by being present at ABN AMRO's head office in Amsterdam or virtually through their own device. The Extraordinary General Meetings were held fully virtual in accordance with the temporary law regarding Covid-19. Shareholders and depositary receipt holders were able to ask questions about items on the agenda prior to and during each meeting.

Annual General Meeting

The agenda of the Annual General Meeting on 20 April 2022 included:

- the adoption of the 2021 annual financial statements;
- the remuneration report;
- the reservation and dividend policy;
- the dividend proposal;
- the discharge of each member of the Executive Board and Supervisory Board;
- the report on functioning of the external auditor;
- the re-appointment of Tom de Swaan as a member of the Supervisory Board;
- the appointment of Sarah Russell as a member of the Supervisory Board;
- the authorisation for the Executive Board to:
  - issue shares and/or grant rights to subscribe for shares,
  - limit or exclude pre-emptive rights, and
  - acquire shares or depositary receipts for shares in ABN AMRO's own capital, for a period of 18 months as from the date of the General Meeting, subject to the approval of the Supervisory Board and provided the total number of shares or depositary receipts held by ABN AMRO is limited to 10% of the issued share capital of ABN AMRO, and
- the cancellation of shares or depositary receipts for shares in the issued share capital of ABN AMRO held by ABN AMRO, and the related reduction of the authorised capital (excluding, for the avoidance of doubt, ordinary shares B).

Extraordinary General Meetings

The agenda of the Extraordinary General Meeting on 17 February 2022 included the introduction of Annerie Vreugdenhil as a proposed member of the Executive Board, with the title Chief Commercial Officer Personal & Business Banking (CCO Personal & Business Banking).

The agenda of the Extraordinary General Meeting on 29 September 2022 included the cross-border merger of ABN AMRO and Bethmann Bank AG.

The agenda of the Extraordinary General Meeting on 15 November 2022 included the introduction of Carsten Bittner as the proposed member of the Executive Board, with the title Chief Innovation & Technology Officer (CI&TO).

Shareholder structure

At 31 December 2022, all shares in the capital of ABN AMRO were held by two foundations: STAK AAB (Stichting Administratiekantoor Continuïteit ABN AMRO Bank), holding 50.1% of the shares in the issued capital of ABN AMRO; and NLFI (Stichting Administratiekantoor beheer financiele instellingen), holding 49.9% of the shares. In addition, NLFI also held 6.4% of the depositary receipts for shares in the capital of ABN AMRO, bringing its stake in ABN AMRO to 56.3% on 31 December 2022.

STAK AAB

History and objectives

STAK AAB is a trust office independent of ABN AMRO and was set up by ABN AMRO with the approval of the Dutch Minister of Finance and NLFI at the time of the initial public offering of ABN AMRO in 2015. NLFI is planning to gradually reduce its stake in ABN AMRO over the coming years, with its ultimate aim being to dispose of all of its ABN AMRO shares. In the event of a sale, the shares to be sold will be transferred by NLFI to STAK AAB. STAK AAB holds these shares for the purpose of administration (*ten titel van beheer*), and in exchange issues depositary receipts that will be traded on Euronext Amsterdam stock exchange. Only STAK AAB's depositary receipts have been issued with the cooperation of ABN AMRO.

The issuing of depositary receipts is primarily used as a protective measure (see section below on Anti-takeover measures). In addition, STAK AAB aims to promote the exchange of information between ABN AMRO and the holders of depositary receipts.

Meeting of depositary receipt holders

By virtue of its trust conditions, STAK AAB must ensure that, no later than two weeks before a General Meeting of ABN AMRO is held, a meeting of depositary receipt holders is held at which the agenda items of that General Meeting are discussed. STAK AAB promotes the acquisition of voting instructions from depositary receipt holders during those meetings. In 2022, STAK AAB held meetings of depositary receipt holders before the Annual General Meeting of ABN AMRO on 5 April 2022 and before the Extraordinary General Meetings on 2 February 2022, 14 September 2022 and 31 October 2022.

Bilateral meetings with ABN AMRO

ABN AMRO and STAK AAB held four periodic meetings in 2022. The items discussed included the published financial results, the long-term strategy of ABN AMRO, the state of affairs between ABN AMRO and STAK AAB, stakeholder updates, macroeconomic developments and their impact on ABN AMRO, and the intended governance in the event of hostile bids and shareholder activism.

Further information on STAK AAB

STAK AAB reports on its activities at least once a year in its own annual report. The STAK AAB website (stakaab.org) provides more information on the activities of STAK AAB, its objectives, as well as its annual report, articles of association, trust conditions and any information relating to meetings of depositary receipt holders.

NLFI

The Dutch State holds an interest in ABN AMRO through NLFI. NLFI was set up to avoid potential conflicting responsibilities that the Dutch Minister of Finance might otherwise face and to avoid undesired political influence being exerted.

Objective of NLFI / Approval right of Dutch Minister of Finance

NLFI is responsible for managing the shares and depositary receipts in ABN AMRO and for exercising all rights associated with these shares under Dutch law, including voting rights. NLFI acts as a stand-alone shareholder that is independent of the Dutch State, including the Dutch Ministry of Finance. However, important decisions taken by NLFI require prior approval by the Dutch Minister of Finance, who can also give binding voting instructions to NLFI with respect to such decisions. NLFI is not permitted to dispose of or encumber the ordinary shares in the capital of ABN AMRO without the prior authorisation of the Dutch Minister of Finance.

Relationship Agreement

NLFI and ABN AMRO entered into a Relationship Agreement governing their relationship after the initial public offering of ABN AMRO in 2015. The full text of the Relationship Agreement is available on abnamro.com. The Relationship Agreement will terminate if and when NLFI (directly or indirectly) holds less than 10% of ABN AMRO's issued share capital. A limited number of clauses will not terminate under any circumstances. The Relationship Agreement includes the following provisions, subject to certain conditions stated in the agreement:

- Consultation right - NLFI's right to be consulted by (a) the Supervisory Board on the appointment or reappointment of (i) members of the Executive Board and (ii) the Chair of the Executive Board or the Supervisory Board, and (b) the Executive Board on a proposal for the appointment of the external auditor;
- Approval right share issuance – NLFI has right of prior approval of any issuance of (or granting of rights to acquire) shares in ABN AMRO for as long as NLFI holds, directly or indirectly, at least 33 1/3% of the shares in ABN AMRO;
- Approval right investments or divestments – NLFI has right of prior approval of: (a) any investments or divestments by ABN AMRO or any of its subsidiaries with a value of more than 5% of the equity of ABN AMRO for as long as NLFI holds, directly or indirectly, more than 50% of the shares in ABN AMRO and (b) any investment or divestments by ABN AMRO or any of its subsidiaries with a value of more than 10% of the equity of ABN AMRO for as long as NLFI holds, directly or indirectly, 50% or less but 33 1/3% or more of the shares in ABN AMRO;

- NLFI's obligation to effect sell-downs of ABN AMRO shares through STAK AAB;
- Certain orderly market arrangements; and
- Certain information rights for NLFI as long as it holds at least 33 1/3% of the shares in ABN AMRO.

Anti-takeover measures

The Netherlands has traditionally embraced the use of defence measures to ensure long-term value creation for stakeholders. In large part, these measures involve the use of a Dutch foundation (stichting) that is granted special rights intended to prevent an unsolicited takeover or other hostile activity. This also applies to ABN AMRO. ABN AMRO has implemented a structure whereby the Dutch foundation (stichting) STAK AAB is the holder of shares in ABN AMRO's issued share capital and has issued depositary receipts representing such shares with the cooperation of ABN AMRO. The purpose of having a structure under which depositary receipts are created and STAK AAB is the legal owner of the underlying shares is to create a defence measure and ensure long-term value creation for stakeholders.

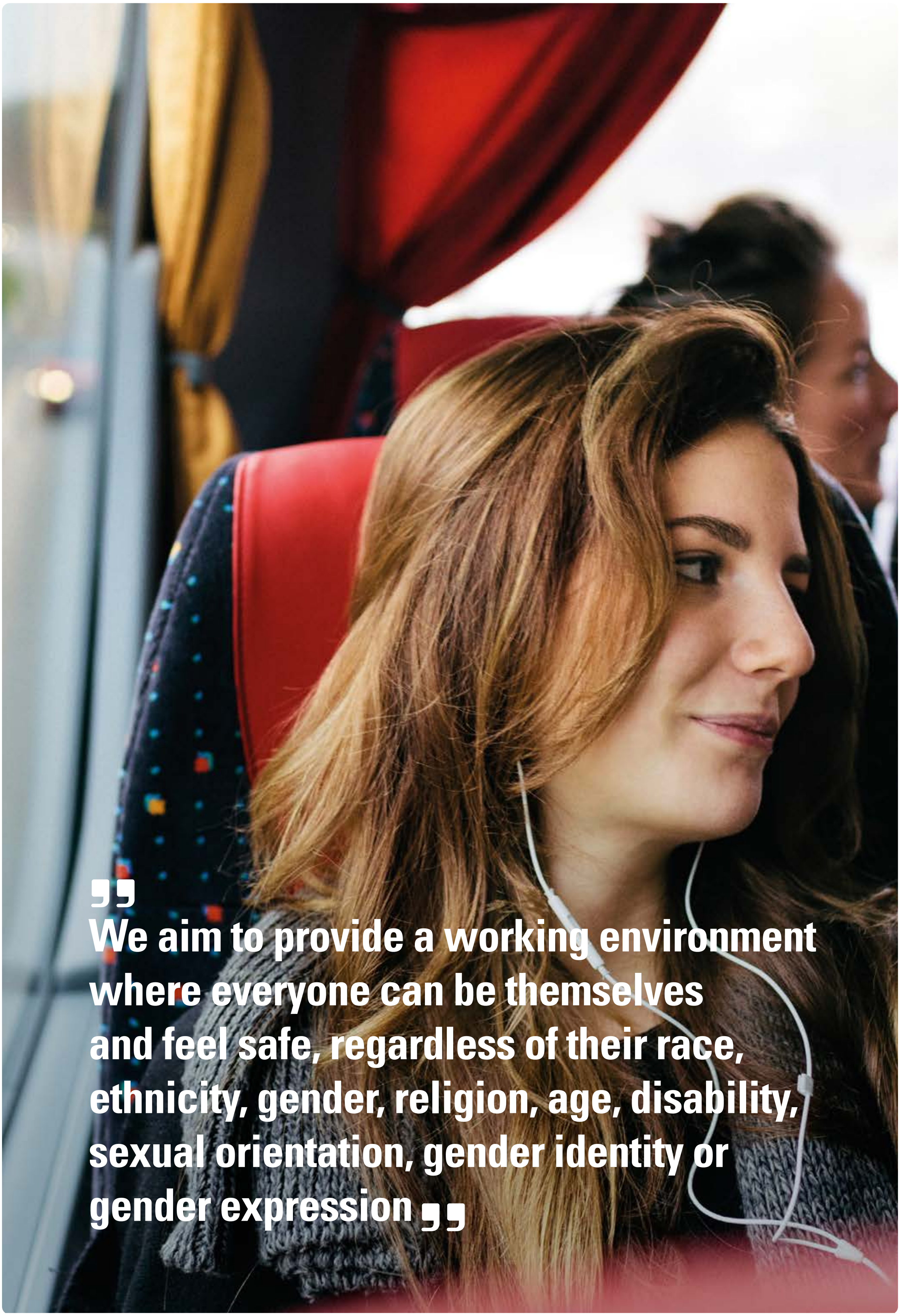
STAK AAB will do everything in its power to deter any action that could affect the independence, continuity or identity of ABN AMRO. In a non-hostile situation, STAK AAB will act primarily in the interests of depositary receipt holders. In a hostile situation, STAK AAB will act primarily in the interests of ABN AMRO and its business enterprises. Under all circumstances, STAK AAB will also take into account the legitimate interests of all other stakeholders: clients, debt investors, shareholders, depositary receipt holders, employees, and the society in which ABN AMRO operates.

In a non-hostile situation, STAK AAB will grant a power of attorney to the depositary receipt holders to exercise the voting rights attached to the underlying shares. STAK AAB will not exercise voting rights on the shares, unless holders of depositary receipts have requested it to do so. This may be different under hostile circumstances as described in Section 2:118a of the Dutch Civil Code. In this case, STAK AAB may refuse or revoke powers of attorney for up to two years (whereby NLFI must pre-approve this decision by STAK AAB as long as NLFI holds at least 33 1/3% of the shares in ABN AMRO) and STAK AAB itself will exercise the voting rights. In doing so, it should, pursuant to the trust conditions and the articles of association of STAK AAB, focus primarily on ABN AMRO's interests, taking into account the legitimate interests of the stakeholders mentioned above.

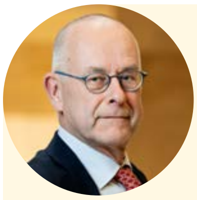
Employee Council

ABN AMRO's employees are represented by works councils (*ondernemingsraden*) at all levels of its group in which specifically appointed delegates are centralised in the overarching Employee Council (*Raad van Medewerkers*). Under Dutch law, the managing board of any company running an enterprise in which a works council has been established must seek the non-binding advice of the works council before taking certain decisions with respect to the enterprise. Examples are decisions related to a major restructuring, a change of control, or the appointment or dismissal of a member of the managing board. Certain other decisions directly involving employment matters that apply either to all employees or certain groups of employees may only be taken with the works council's consent.

The Employee Council deals primarily with topics that affect all parts of the group's organisation and meets regularly with members of the Executive Board and Supervisory Board on various other occasions throughout the year, including an annual joint meeting of the Executive Board, the Supervisory Board and the Employee Council.
The Employee Council and ABN AMRO have entered into an agreement under which the Employee Council has been granted certain additional rights (the Works Council Covenant). Under the Works Council Covenant, the Employee Council has the right of inquiry (*enquêterecht*) within the meaning of Section 2:346 of the Dutch Civil Code in the event of a hostile situation. The Works Council Covenant defines the following situations as hostile: (i) a public offer has been announced or is made in respect of shares in the capital of ABN AMRO (or in respect of depositary receipts representing such shares) or there is a justified expectation that this will take place, without agreement first having been reached between the bidder and ABN AMRO, (ii) the exercise of the voting rights by a depositary receipt holder or shareholder would effectively be in conflict with the interests of ABN AMRO and its business, or (iii) any other situation in which the independence, continuity or identity of ABN AMRO and the enterprises associated with ABN AMRO could be harmed. The Employee Council and ABN AMRO can also agree that other situations qualify as hostile. Furthermore, if NLFI requests the consent or cooperation of or a position statement from ABN AMRO in the event of a subsequent placement or a private sale of shares or depositary receipts, ABN AMRO will also request advice from the Employee Council within the meaning of Articles 25 and 26 of the Works Councils Act (*Wet op de ondernemingsraden)*.


"We aim to provide a working environment where everyone can be themselves and feel safe, regardless of their race, ethnicity, gender, religion, age, disability, sexual orientation, gender identity or gender expression"

Remuneration report



Letter from the Chair of the Remuneration Committee

Dear reader,
We hereby present our remuneration report for the year 2022. In this letter, I would like to reflect briefly on some key topics and considerations for the Remuneration Committee in the past year.

Annual end of year process

One of the key topics for the Remuneration Committee is the annual performance management process. The weighting assigned to the individual objectives increased in comparison to the previous year, leading to more individual accountability. In addition, the 2022 targets for the Executive Board members were redistributed within the applicable Executive Board KPI framework, in accordance with the Executive Board Remuneration Policy. The KPIs and targets for CLA+ employees (i.e. employees appointed at a job level that exceeds the CLA job level) were also adjusted to put more emphasis on financial growth and targets for sustainability assets were included.

Composition of Executive Board and Supervisory Board

Tom de Swaan was reappointed Chair of the Supervisory Board for another four years at the Annual General Meeting in April 2022. Sarah Russell was appointed to the Supervisory Board at the same meeting.

The Executive Board underwent various changes in 2022. Christian Bornfeld stepped down as Chief Information & Technology Officer (CITO) effective 1 May 2022, while Gerard Penning stepped down as Chief Human Resources Officer (CHRO) effective 1 December 2022. Annerie Vreugdenhil was appointed CCO Personal & Business Banking effective 1 March 2022, and Carsten Bittner was appointed CI&TO effective 1 January 2023. On 11 January 2023, Lars Kramer announced that he would step down as Chief Financial Officer (CFO) effective 30 April 2023. On behalf of the Remuneration Committee, I would like to express my appreciation for the contributions of Christian Bornfeld, Gerard Penning and Lars Kramer and am pleased to welcome Annerie Vreugdenhil and Carsten Bittner to the Executive Board.

It was announced on 1 February 2023 that ABN AMRO also planned to change the composition of the Executive Board to further strengthen strategy execution. A Chief Operations Officer (COO) position has consequently been added to the Executive Board. The COO will have primary responsibility for bank-wide operational performance and for accelerating change management in close consultation with the other Executive Board members. The COO will head the central management of operations, including the Detecting Financial Crime unit. In addition, the CHRO will no longer sit on the Executive Board and will report directly to the CEO.

Negotiations on Collective Labour Agreement ('CLA')

Our Collective Labour Agreements (comprising of the Employment Conditions CLA and the Social Plan) are applicable to the vast majority of the bank's employees in the Netherlands.

In the meetings held between June and October 2022, the Remuneration Committee closely followed and discussed the negotiations with the trade unions on the Employment Conditions CLA that reached the end of its term on 1 July 2022. The tension between offering appropriate remuneration and rewarding staff in times of high inflation versus the cost targets of the bank was a dilemma duly considered by the Remuneration Committee.

CLAs were also agreed in France, Germany and Belgium in 2022, as further described in detail in this report.

Diversity & equal pay

We aim to provide a working environment where everyone can be themselves and feel safe, regardless of their race, ethnicity, gender, religion, age, disability, sexual orientation, gender identity or gender expression. In 2022, we received the first ever IT Vitae Diamond Award for employers who have successful and sustainable policies for recruitment, communication and guidance of highly gifted employees and employees with autism.

Equal pay for equal work and work of equal value is an important principle at ABN AMRO and our progress in this area is continuously monitored. The results and our progress on this topic were published on 11 November 2022. In the past few years, ABN AMRO has achieved good results on equal pay for the CLA population in the Netherlands. With effect from 1 January 2022, a new remuneration methodology was introduced for Dutch CLA+ employees (i.e. employees in jobs above the CLA job levels) to improve our efforts to ensure equal pay for equal work or work of equal value. The gender pay gap and equal pay developments in offices abroad are also annually monitored.

Diversity percentages are continually monitored. The gender diversity of the Extended Leadership Team decreased from 47% female employees on 1 January 2022 to 44% female employees on 31 December 2022.

In 2022, 3 of the 8 board positions (per year end) of the Executive Board and 4 of the 7 board positions of the Supervisory Board were female. The current composition of the Supervisory Board complies with the Act on Gender Balance in Management and Supervisory Boards (Wet Evenwichtiger verhouding tussen mannen en vrouwen in bestuur en raden van commissarissen), which entered into force on 1 January 2022.

Employee Engagement

An annual Employee Engagement Survey is performed throughout the bank. The Supervisory Board considers employee engagement and employee satisfaction key topics and monitors the results of the periodic engagement.

In 2023, one of the key focus areas of the Remuneration Committee will be the update of the Executive Board Remuneration Policy and the Supervisory Board Remuneration Policy, on which we will report in the 2024 annual report.

On behalf of the Remuneration Committee of the Supervisory Board,

Arjen Dorland
Chair of the Remuneration Committee

Remuneration principles and policies

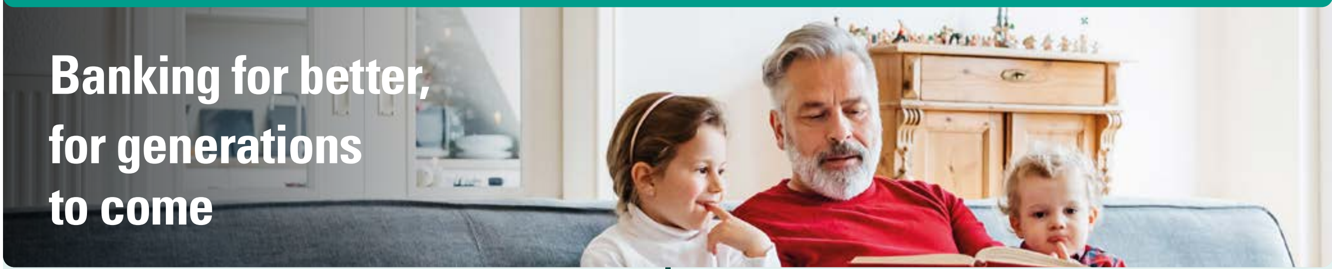
General

Our purpose – Banking for better, for generations to come – guides us through change, is the basis for how we shape and deliver on our strategy, and encourages high performance and engagement from our employees. Our strategy has three strategic pillars: customer experience, sustainability and future-proof bank. These are our guiding principles in acting on our purpose.

We want to create value for society, not only as a provider of financial services to our clients, but also as an employer. We refer to the Strategy, value creation & performance chapter of the Integrated Annual Report for further context.

Remuneration principles

Purpose & Strategy



Our strategic pillars

Customer experience | **Sustainability** | **Future-proof bank**

Reward philosophy

Our reward framework enables ABN AMRO to attract, motivate, develop and retain the right talent in a sustainable manner to realise our business strategy

Compliant & Responsible
- Compliant with the boundaries of all applicable remuneration legislation and guidelines
- Respectful of our societal role and impact, our client's interests and other stakeholders

Reward philosophy

Fair & Transparent
- Clear remuneration policies and processes
- Principle of equal pay for equal work or work of equal value
- Balanced total remuneration package in line with the relevant market

Align Employee with ABN AMRO interests
- Clarity in how (individual) performance and remuneration are connected
- Balanced risk taking in line with our moderate risk appetite
- Encourages personal development and values-led behaviour as integral part of performance

To successfully execute our strategy we aim to create conditions in which all our employees can use their talents to contribute to our goals and to develop or acquire the right skills. We strive to achieve a future-proof workforce, with an excellent employee experience and inspiring leadership, alongside efficient organisational structures, processes and IT systems that help our employees work more effectively.

Key in achieving a future-proof workforce is a remuneration framework that enables ABN AMRO to attract, motivate, develop and retain the right talent to realise our strategy. Our remuneration policy and principles are set out in the Global Reward Policy, providing a framework for effectively managing reward and performance to support the strategy (including the risk strategy), KPIs, values and long-term interests of the bank. The Global Reward Policy applies to all employees within ABN AMRO and at all group companies, subsidiaries, branches, representative offices and legal entities under its control.

The Executive Board and Supervisory Board approve the Global Reward Policy and are responsible for its maintenance and implementation. The policy is reviewed regularly, taking into consideration the company's strategy and desired culture, as well as factors such as risk awareness, targets, corporate values and any updates due to laws and regulations.

Composition of remuneration packages

A typical remuneration package for ABN AMRO employees consists of an annual base salary, annual variable remuneration (if the relevant market practice so requires, mainly outside the Netherlands) and fringe benefits. Different ranges apply to the various salary scales in each country, but in principle we position our remuneration levels around the median of the relevant labour market, based on benchmarking, while keeping labour costs under control.

ABN AMRO's Employment Conditions CLA governs the remuneration packages for CLA employees based in the Netherlands (including Identified Staff).

Employment conditions supporting environmental and social awareness

Sustainability is an important aspect of our strategy and purpose. Therefore, our employment conditions and practices aim to promote environmental and social awareness.

Gender pay gap

The gender pay gap is the difference in average gross salaries between men and women. ABN AMRO calculates the overall gender pay gap, as well as the gender pay gap corrected per job level (whereby each job level is linked to a salary scale), for its employees in the Netherlands. For ABN AMRO employees working in the Netherlands, the gender pay gap corrected per job level amounts to 0.65% in favour of men (compared to 0.27% in 2021). The overall gender pay gap (i.e. uncorrected per salary scale) in 2022 amounted to 15% in favour of men (compared to 14.7% in 2021). The overall gender pay gap is mainly caused by more men than women holding positions at higher job levels. We will continue to focus on increasing gender diversity in higher job levels to reduce the overall gender pay gap. Our ambition is illustrated by the D&I targets which are set to this extent.

Equal pay

We are committed to the principle of equal pay for equal work or work of equal value. The New Job Model (NJM) is our generic job profile methodology, in which all Dutch CLA jobs are plotted and which is also implemented in other countries where ABN AMRO is operating. Each NJM job profile has a job grade that is determined in line with the Hay methodology, which is recognised as a gender-neutral, objective and verifiable job-grading methodology. In the Netherlands, each Hay level at CLA and CLA+ level has its own salary scale. Our remuneration policy contains guidelines for various moments of remuneration, i.e. salary setting for new hires, annual salary increases, incidental salary increases, promotion and variable remuneration.

Periodic research is conducted on the development of equal pay in our remuneration policies and practices, whereby salaries of men and women are compared (at CLA and CLA+ level), as well as salaries of western and non-western employees. Our research shows a consistent practice of equal pay. Where the research reveals differences in salaries, further research is conducted. Our research results in the Netherlands for 2022 were published on the ABN AMRO website on 11 November 2022 (Equal Pay Day).

Employment conditions

The CLA contains the following employment conditions aiming to promote environmental and social awareness:

- hybrid working is an explicit employment condition
- the transportation budget (which could be used for lease cars) will be phased out, partly because hybrid working significantly reduces home-to-work travel compared with the pre-Covid-19 situation
- allowances for working from home (reimbursement for home office equipment, a monetary allowance for working from home and an internet allowance)
- reskilling (e.g. through the 'Bank in the classroom' programme that facilitates moves from jobs at the bank to jobs in teaching)
- ABN AMRO assigns 0.25% of its total salary expenses to improving the position of minority groups
- our Reboot programme, which sets targets for hiring refugees and employees with a disability

The Diversity & Inclusion section of this Integrated Annual Report describes our various other initiatives relating to sustainable employment conditions.

Sustainable KPI-setting

Variable remuneration is awarded based on pre-defined KPIs. For our Identified Staff, sustainability is included in the KPIs for sustainability assets and gender diversity in the sub-top, while for the Executive Board it is included in the KPIs for sustainability (Dow Jones Sustainability Index, or DJSI) and diversity. Sustainability is part of the strategy. Non-Identified Staff are requested to set objectives in line with the strategy.

The applicable sustainability KPIs are included when calculating the pool for variable remuneration.

Bonus prohibition

As long as the Dutch State holds an interest in ABN AMRO, the bonus prohibition is applicable to a specific group of senior staff, as defined in the Wbfo legislation; in other words, the Executive Board (also of subsidiaries in our group with a Dutch banking licence) and a specific group of senior staff. Due to the bonus prohibition, the Executive Board and a specific group of senior staff are also not entitled to variable remuneration or individual salary increases. The salary increases applying to this group are those provided for in the CLA for the banking sector.

Performance management and KPI-setting

General

Performance management is a crucial process in pursuing ABN AMRO's purpose and strategy. Our performance management process gives guidance on objectives in line with the bank's strategy, purpose and values. It strengthens our culture by stimulating accountability, development and collaboration, and it is the basis for remuneration (where applicable). ABN AMRO's performance management process is called Together & Better and it applies to all employees globally, with an adjusted version for Identified Staff. Besides being a tool for steering performance, Together & Better focuses on motivating, developing and showing appreciation to employees in order to create a working environment where employees can make a difference. Employees are encouraged to take control of their performance, development and careers in a mature employment relationship. As part of Together & Better, employees take the initiative to set objectives. It is the joint responsibility of the manager and the employee to agree on the applicable objectives.

Within Together & Better, objectives are set around the themes of Results ('What are the results of your work?'), Behaviour ('How do you perform your work?') and Development ('What talents do you want to develop?'). Employees are requested to align at least one objective with ABN AMRO's strategic pillars and to align objectives with our core values (care, courage and collaboration).

Our performance management aims to create a clear link between performance (realistic, sustainable results) and reward in a way that ensures that any award of fixed and variable remuneration is aligned with both the employee's and the bank's performance. The KPIs used are financial and non-financial, as well as qualitative and quantitative.

Identified Staff

The Together & Better process is slightly adjusted for Identified Staff (at CLA and CLA+ level) to meet specific legal requirements for this group. A specific KPI framework applies to Identified Staff (CLA and CLA+); this is linked to ABN AMRO's bank-wide strategic KPIs and is approved by the Executive Board and Supervisory Board. For 2022, the group non-financial KPIs consisted of sustainability assets and the group financial KPI was the C/I ratio. The non-financial KPIs for the client units and functions were gender diversity in the sub-top and NPS, and the financial KPIs were cost level, net growth in strategic segments and Segment ROE. At the individual level, objectives were set for results, behaviour and development. Identified Staff members receive a final performance score after each performance year, conveying the desired compliance and risk culture, which is taken into account at client unit/function and individual level.

Executive Board

The annual KPI framework for the Executive Board is approved by the Supervisory Board. The performance criteria for Executive Board members are based on financial and non-financial measures at organisational, client unit/function and individual level, as set out in the Executive Board Remuneration Policy. The performance criteria and targets reflect and contribute to key elements of ABN AMRO's strategy and long-term value creation, especially Sustainability and House in Order. Annual targets are set for all KPIs.

In consultation with all relevant departments at ABN AMRO, the Supervisory Board continually monitors and assesses the Executive Board members' performance on these KPIs and the targets set.

Developments and business events in 2022

Collective Labour Agreements

In the Netherlands, ABN AMRO has two CLAs: the Employment Conditions CLA and the Social Plan. In 2022, an Employment Conditions CLA applied from 1 January 2022 until 1 July 2022. Following a series of negotiations, agreement was reached in 21 October 2022 on the Employment Conditions CLA applying from 1 July 2022 to 1 July 2024. The main elements of this are a salary increase of 4% from 1 October 2022, a salary increase of 2.5% from 1 July 2023 and a one-time gross payment of EUR 2,000 for each CLA employee (pro rated for parttime employees). In 2021, the Social Plan was extended from 1 January 2022 to 1 January 2025.

CLAs were also agreed in France, Germany and Belgium in 2022. In France, CLA salary increases of 3% - 5% were negotiated for annual base salaries up to EUR 100,000 (i.e. 5% for annual base salaries below EUR 40,000, 4% for annual base salaries of EUR 40,000 - EUR 85,000 and 3% for annual base salaries of EUR 85,000 - EUR 100,000), in addition to a temporary increase in healthcare arrangements. In Germany, the CLA for the banking industry provides for a 3% salary increase from August 2022 and 2%

from August 2023 (not applicable to Corporate Banking and Clearing, who have discretionary salary increase arrangements). In Belgium, base salaries were automatically increased in 2022 by 10.15%. The average increase in the health price index, which is used for indexation of wages, is expected to be 5.2% in 2023 and 3.2% in 2024 (forecasts: Belgian Federal Planning Bureau).

Relevant regulatory developments

The rules applying to remuneration in the Dutch financial sector are the European rules that apply in all EU Member States. The Netherlands has opted for a wider scope of the remuneration rules and a variable remuneration cap of 20% (instead of the European cap of 100%). The Dutch Financial Supervision Act (Wet financieel toezicht or 'Wft') sets additional requirements for variable remuneration, including the cap on variable remuneration, rules relating to retention payments, welcome and severance packages and publication obligations.

In addition, with effect from 1 January 2022, the revised EBA Guidelines on Sound Remuneration Policies, which had been published on 2 July 2021. came into force. The revised guidelines require institutions, inter alia, to apply sound and gender-neutral remuneration policies to all staff and to incorporate changes introduced by CRD V (which entered into force on 28 December 2020).

On 21 January 2022, the EBA launched two consultations for updating its Guidelines on the remuneration benchmarking exercise and its Guidelines for collecting data on high earners. On 30 June 2022, the final versions of these guidelines have been published.

Where necessary, ABN AMRO adjusts its remuneration policies to ensure compliance with applicable legislation and regulations, and requests shareholders' approval where required.

Forecast for 2023

Legislation expected in 2023

Environmental, social and governance (ESG) issues are highly important for credit institutions. ESG-related regulations, guidelines and other publications (such as the Taxonomy Regulation, SFDR, NFRD, CSRD, CRD V, CRR II, EBA guidelines and reports, ECB guidance and reports, and the European Commission's proposals and delegated acts) include ESG disclosure requirements applying, among other things, to remuneration policies. Some of those requirements entered into force in 2020 and 2021, while others apply from 2022 or a later date.

The Dutch act on further remuneration measures for financial undertakings (Wet nadere beloningsmaatregelen financiële ondernemingen) entered into force on 1 January 2023. This introduced the following changes: (1) a five-year statutory retention period for fixed remuneration in shares or instruments; (2) the obligation for financial undertakings to explain in their remuneration policy how they take into account the pay ratio between the remuneration of their managing directors, supervisory directors and employees and their function in society, and the way in which such ratio has been established; and (3) a limitation of the possibility to derogate from the cap on variable remuneration for non-CLA staff. The new legislation includes a transitional regime.

The above list of legislation and regulations is a non-exhaustive summary. Reference is also made to the Regulatory developments section in the Introduction chapter of the Integrated Annual Report 2022. If necessary, ABN AMRO will adjust its remuneration policies to ensure compliance with applicable legislation and regulations. When required, shareholders' approval will be requested.

Executive Board Remuneration Policy

In 2023, we will initiate internal and external stakeholder engagements on updating our Executive Board Remuneration Policy, more specifically the performance KPIs for Executive Board members, in order to align these more closely with our strategy, also taking into account expected sustainability legislation. The updated Executive Board Remuneration Policy will be submitted to the Annual General Meeting in 2024, in line with the regular timelines for approval of the Executive Board Remuneration Policy.

Remuneration for all staff and Identified Staff

Remuneration for all staff

In general, the remuneration packages for all staff are structured in accordance with the applicable remuneration regulations and restrictions applying to the financial sector. A remuneration package for all staff may consist of the following components (depending on local market practice):
- Fixed remuneration;
- Variable remuneration;
- Pension contribution;
- Benefits and other entitlements.

ABN AMRO takes into account relevant business dynamics (e.g. market conditions, local labour legislation and tax legislation) when deciding on the composition of remuneration packages. Globally, any and all variable remuneration is capped at 100% of the fixed remuneration. In the Netherlands, only a small group of employees receive variable remuneration, which is capped at 20% of the fixed remuneration, unless the average 20% exception is applicable.

The award of performance-related variable remuneration is linked to the performance of the bank and the underlying client units and functions. As ABN AMRO's financial results in 2022 improved in comparison to 2021, the performance related variable remuneration – including Identified Staff – amounted to EUR 53 million in 2022 (in comparison to EUR 45 million in 2021). The total retention payments, mainly in relation to the wind-down of certain non-European CIB activities, amounted to EUR 27 million in 2022. In addition, sign-on payments in 2022 amounted to EUR 1 million. As described above, the total variable remuneration awarded to all staff globally (consisting of various types of variable remuneration) amounted to EUR 81 million in 2022.

Remuneration details of Identified Staff

Variable remuneration is awarded to Identified Staff in line with the terms and conditions of ABN AMRO's Variable Compensation Plan, which implements the applicable remuneration restrictions on variable remuneration. The variable remuneration is split into an upfront award of 60% and a deferred award of 40%. Deferred variable remuneration in the current Variable Compensation Plan (current version applicable since 29 December 2020) vests in equal instalments in the four years after the first payment. Both the upfront award and the deferred award consist of a 50% cash award and a 50% non-cash award. The instrument underlying the non-cash award consists of performance certificates. The value of the performance certificates depends on the share price of ABN AMRO and hence fluctuates in line with the market. The value of the performance certificates will be paid out in cash. A one-year retention period applies to the non-cash award.

The remuneration details of Identified Staff are specified in the various tables below.

Tables - Remuneration details of Identified Staff

The following tables contain remuneration details of Identified Staff. The first table is the segregated overview of the number of Identified Staff and their aggregated remuneration (in thousands) per client unit/function.

	2022		2021	
	Number of FTEs (Identified Staff)[2]	Aggregated remuneration (in thousands)	Number of FTEs (Identified Staff)[2]	Aggregated remuneration (in thousands)
Personal & business banking	56	11,593	44	10,714
Wealth management	32	10,442	31	9,874
Corporate banking	108	38,154	104	39,743
Group Functions[1]	158	44,741	171	45,156
Total	**354**	**104,930**	**350**	**105,487**

1 Executive and Supervisory Board members are included under Group Functions.
2 The number of FTEs includes all employees that were Identified Staff during the year (including leavers).

The following two tables contain an overview of the number of employees where total annual remuneration attributed to the financial year (including, for example, severance payments) exceeds EUR 1 million. The first table specifies the number of employees per client unit/function. The second table specifies the number of employees per organizational level.

	Remuneration in millions[2]							
(in FTE)	1-1.5	1.5-2	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	>4.5
Personal & business banking								
Wealth management								
Corporate banking	1	2						
Group Functions[1]	2							

1 Executive and Supervisory Board members are included under Group Functions. In 2022, the remuneration of the Executive and Supervisory Board members did not exceed EUR 1 million.
2 Remuneration reflects the amounts attributed to the financial year, in accordance with the EBA requirement, as opposed to the remuneration disclosures in the tables Remuneration of Executive Board and Supervisory Board, which represent the remuneration allocated to the financial year in accordance with EU IFRS.

	Remuneration in millions[2]							
(in FTE)[1]	1-1.5	1.5-2	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	>4.5
Executive Board								
CLA+	2	1						
Other Identified Staff	1	1						

1 Identified staff only.
2 Remuneration reflects the amounts attributed to the financial year, in accordance with the EBA requirement, as opposed to the remuneration disclosures in the tables Remuneration of Executive Board and Supervisory Board, which represent the remuneration allocated to the financial year in accordance with EU IFRS. Therefore, Executive Board member G.R. Penning is not included, as the amounts paid out to him in 2022 did not exceed EUR 1 million.

The table below provides an overview of the total remuneration, specified per type of remuneration (i.e. fixed or variable). For the variable remuneration, the amounts are further specified in the relevant cash and non-cash components in line with the Variable Compensation Plan.

	Number of FTEs (identified staff)		Aggregated remuneration (in thousands)
	SB, ExBo and CLA+	Other identified staff	
Fixed remuneration over 2022	139	215	95,319
Variable remuneration over 2022[1, 2]	86	67	9,611
- of which in cash			*4,806*
- of which in non-cash instruments			*4,805*
- of which unconditional (up-front payment)			*5,766*
- of which conditional (deferred payment)			*3,844*
Retention payments over 2022	2	9	3,054
Sign-on payments over 2022	1	1	60
Severance payments over 2022[3]	15	12	6,326

1 Retention payments and sign-on payments are also included in the total variable remuneration over 2022.
2 Due to their specific nature, certain variable compensation elements are paid out in cash and are not or only partially subject to deferral.
3 The highest severance pay amounted to EUR 918 thousand.

For Identified Staff, 50% of the variable remuneration is awarded in the form of a non-cash instrument. From performance year 2020, the non-cash instrument has changed from depositary receipts to performance certificates. The table below reflects the number of all non-cash awards that were in place on 31 December 2022 for performance years 2016 to 2021 (inclusive). According to the Variable Compensation Plan, the value of a non-cash award equals the value of one share of ABN AMRO.

(In thousands of DRs)		2022		2021
Outstanding at 1 January		**854**		**859**
Granted during the year		385		313
Forfeited during the year	11		12	
Paid out during the year cash	444		279	
Paid out during the year DRs	38		27	
Less: total paid out/forfeited		-493		-318
Outstanding at 31 December		**746**		**854**

Malus assessment in 2022
ABN AMRO has several risk-mitigating measures in place that apply to variable remuneration. As part of our end-of-year process, an ex-ante and ex-post risk assessment are conducted. A malus (downward adjustment of variable remuneration that has not yet been paid out) and/or clawback (clawing back variable remuneration that has already been paid out) may be applied. To this extent, the following criteria are used:

- evidence of misconduct or serious error by the staff member (e.g. breach of a code of conduct or other internal rules, especially concerning risks);
- a significant downturn in the financial performance of the institution or business unit (based on specific indicators);
- a significant failure of risk management in the institution or business unit in which the Identified Staff member works;
- significant changes in the institution's economic or regulatory capital base.

The Executive Board and Supervisory Board decide on the application of a malus based on the advice of Risk, Compliance and Audit, with input from other ABN AMRO departments (e.g. HR and Finance).

The malus assessment 2022 relates to the vesting of:

- The first tranche of deferred variable compensation for the 2021 performance period;
- The second tranche of deferred variable compensation for the 2020 performance period;
- The third tranche of deferred variable compensation for the 2019 performance period.

The Supervisory Board concluded, after an assessment against the malus criteria as stipulated above, that no malus is applied for performance year 2022.

2022 performance indicators for Identified Staff

KPIs are applicable to all Identified Staff. From a job level perspective, there are three different groups of Identified Staff. Each group has its own weighting of different KPIs and allocation between financial and non-financial KPIs.

	Weighting Executive Board[5]	Weighting CLA+ identified staff	Weighting CLA identified staff
Organisation level KPIs	40-65%	10-20%	10-15%
Businessline level KPIs	0-25%	35-50%	25-30%
Individual KPI[1]	35%	40-45%	60%
Total	**100%**	**100%**	**100%**
- of which financial[2,4]	*20-30%*	*30%*	*18-23%*
- of which non-financial[3,4]	*70-80%*	*70%*	*77-82%*

1 Individual KPI: For CLA+ employees, the individual KPI refers to the score on individually determined KPIs.
2 Financial KPIs include a selection of Return on Equity, CET1 ratio, Cost/income ratio, Cost ceiling, Cost level and Segment ROE.
3 Non-financial KPIs include a selection of Sustainability DJSI, Employee engagement, House in Order, NPS, Sustainability assets, Gender diversity sub-top and Net growth in strategic segments.
4 The mix and weighting of KPIs are tailored to specific function of the identified staff member.
5 The CEO only has KPIs on an individual and organisation level.

Executive Board

Executive Board Remuneration Policy

The Executive Board Remuneration Policy was adopted by the Annual General Meeting on 22 April 2020 and took effect on 1 January 2020. The policy provides for a collective indexation of salaries for the Executive Board members in line with the CLA for the banking sector. In 2022, the members of the Executive Board all decided to waive their right to the salary increase of 2.5% per 1 March 2022 of the CLA Banken.

Executive Board Remuneration Policy - scenario analyses

Scenario analyses are the analyses conducted by the Supervisory Board at the time the remuneration policy was formulated and before determining the remuneration of individual Executive Board members. They show the possible outcomes of the variable remuneration components and the way in which these affect the remuneration of the Executive Board members. The Supervisory Board establishes whether the scenario analyses result in appropriate levels of remuneration, and whether measures are required to limit the remuneration.

As a matter of principle, the total target remuneration of the Executive Board members is below the median in the relevant benchmarking population. It was decided to continue the previous remuneration policy with only some refinements to safeguard alignment with the new Shareholders Rights Directive. Considering that no variable remuneration is awarded and the remuneration restrictions that apply to ABN AMRO, the Supervisory Board was of the opinion that scenario analyses had resulted in the appropriate levels of remuneration and that further scenario analyses were less relevant at the time.

However, in light of the ongoing applicability of the salary freeze due to the bonus prohibition, it's sometimes difficult to retain expert leaders (as well as other senior staff and other highly qualified employees). During the last period, there seems to be an increasing discrepancy between the current remuneration levels of the Executive Board in comparison to the relevant benchmarking populations, which has the attention of the Supervisory Board.

Contractual elements

All members of the Executive Board have a services agreement (overeenkomst van opdracht) with ABN AMRO for an unlimited period of time, which constitutes the contractual relationship between ABN AMRO and the Executive Board member. The Executive Board member may terminate the agreement subject to a notice period of three months, whereas ABN AMRO must observe a notice period of six months.

Fixed remuneration

As the Executive Board members all waived their right to the salary increase provided for in the CLA for the banking sector in 2022, there was no income adjustment to Executive Board salaries in 2022.

From 1 January 2022 to 31 December 2022:

- Membership of the Executive Board: EUR 654,195 (EUR 770,618 for the CEO)

Variable remuneration

As long as the Dutch State holds shares in ABN AMRO, the Executive Board members are not entitled to variable remuneration due to the applicable bonus prohibition, as described above. As the bonus prohibition continued to apply in the 2022 performance year, the Executive Board did not receive any variable remuneration. The Executive Board members therefore only received fixed remuneration.

Benefits

The Executive Board participates in ABN AMRO's pension schemes applicable to all employees in the Netherlands. For pensionable salary up to the applicable threshold, which for 2022 amounted to EUR 114,866, a collective defined contribution (CDC) pension scheme applies. The total pension contribution is 37%, of which 5.5% is an employee contribution. In the event of death or when the Executive Board member reaches the state pension age (AOW), the services agreement automatically ends by operation of law. The intended pension accrual is 1.875%, based on a pension age of 68. In 2022, the pension accrual was 1.875%. For pensionable salary in excess of EUR 114,866, Executive Board members (just like employees of ABN AMRO) receive an allowance that can be used to build up a net pension in a group defined contribution (DC) plan. The allowance amounted to 30% in 2022. In addition to pension benefits, Executive Board members are eligible for benefits such as a company car and a chauffeur.

Severance

The remuneration policy for Executive Board members provides for a severance payment up to a maximum of one year's gross salary if their contract is terminated at ABN AMRO's initiative. The current Executive Board members all have the same contractual right to a severance payment equal to three months' gross fixed salary.
No severance was paid to Executive Board members in 2022. As they resigned, Christian Bornfeld and Lars Kramer are not entitled to a severance payment. In good mutual understanding, ABN AMRO and Gerard Penning agreed on the termination of his services agreement. Gerard Penning is therefore entitled to a severance payment of three months' gross fixed salary, which will be paid out in 2023.

2022 Remuneration for the individual Executive Board members

								2022
	Base salary	Variable remuneration[4]	Other short-term benefits[5]	Total short-term benefits	Severance payments	Total pension-related contributions[6]		Total
(In thousands)						Post-employment pension (a)[6]	Short-term allowances (b)[6]	
R.A.J. Swaak	771			771		32	197	999
C.M. Bornfeld[1]	218		45	263		11	54	327
T.J.A.M. Cuppen	654		34	688		32	162	881
D. Dorner[2]	654		32	686		32	162	879
C. van der Hooft - Cheong[2]	654		27	682		32	162	875
L. Kramer[2]	654		133	787		32	162	981
G.R. Penning[1, 2]	927			927	164	46	227	1,364
A.M. Vreugdenhil[2]	545		18	563		26	135	724
Total	**5,077**		**289**	**5,366**	**164**	**241**	**1,260**	**7,031**
								2021
R.A.J. Swaak	765			765		31	196	992
C.M. Bornfeld[1]	650		162	812		31	161	1,004
C.J. Abrahams[1]	108		20	128		5	27	159
T.J.A.M. Cuppen	650		34	684		31	161	876
D. Dorner[2]	67		4	70		3	17	90
C. van der Hooft - Cheong[2]	67		3	69		3	17	89
L. Kramer[2]	381		65	446		18	95	558
G.R. Penning[1, 2]	67			67		3	17	87
A. Roest[3]	161		11	172		8	40	220
Total	**2,915**		**298**	**3,213**		**133**	**730**	**4,075**

[1] The following members left ABN AMRO: C.J. Abrahams (1 March 2021) and C.M. Bornfeld (1 May 2022). G.R. Penning stepped down as Executive Board member on 1 December 2022 and will leave ABN AMRO as per 1 June 2023. For G.R. Penning, all remuneration components (including severance, which is awarded in 2022 and paid in 2023) for the period until the end of his employment contract on 1 June 2023 are included above.

[2] The following members were appointed as an Executive Board member: L. Kramer (1 June 2021), D. Dorner (24 November 2021), C. van der Hooft - Cheong (24 November 2021), G.R. Penning (24 November 2021) and A.M. Vreugdenhil (1 March 2022).

[3] The remuneration components for A. Roest relate to her interim Executive Board appointment from 1 March 2021 until 1 June 2021.

[4] Owing to the Bonus Prohibition Act, the Executive Board members are not entitled to receive variable compensation. This prohibition has applied since the 2011 performance.

[5] Other short-term benefits consists of flight tickets, a housing allowance, compensation for lease car expenses, mortgage interest rate benefit and international schooling costs for Executive Board members' children when applicable.

[6] The Executive Board members participate in ABN AMRO Bank's pension plans for employees in the Netherlands. Total pension-related contributions refer to (a) the employer contribution to the pension fund (for the CDC pension scheme for pensionable income up to EUR 114.866 (2021: EUR 112,189) and (b) the arrangement in accordance with the ABN AMRO Collective Labour Agreement ('ABN AMRO CAO').

2022 Loans from ABN AMRO to Executive Board members

(In thousands)	2022 Outstanding 31 December	2022 Redemptions	2022 Interest rate	2021 Outstanding 31 December	2021 Redemptions	2021 Interest rate
D. Dorner[1]	463	21	2.2%	484		1.4%
C. van der Hooft - Cheong[1]	1,559	32	1.5%	1,591		1.5%
G.R. Penning[1, 2]	225	40	2.9%	265		0.7%
A. Roest[3]				3,158		1.8%

1 The following members were appointed: D. Dorner (24 November 2021), C. van der Hooft-Cheong (24 November 2021) and G.R. Penning (24 November 2021).
2 G.R. Penning stepped down as Executive Board member on 1 December 2022 and will leave ABN AMRO as per 1 June 2023.
3 A. Roest was an interim ExBo member from 1 March 2021 until 1 June 2021.

Development of annual remuneration of Executive Board members

The following table shows the annual development in the remuneration of Executive Board members. The table shows how changes in annual remuneration relate to the previous year, to ABN AMRO's performance and to developments in the average employee remuneration. For a like-for-like comparison, the average employee remuneration is shown excluding social security charges. The column 'Absolute change' shows the difference in the indicator over two periods in time, while the column 'Relative' shows the increase or decrease as a percentage.

Since 2021, other short-term benefits have been included in the disclosure of total Executive Board remuneration. The comparative figures are adjusted accordingly.

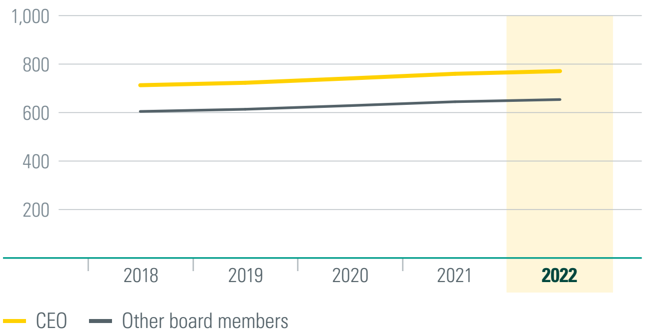
(in thousands)	Function	2017 - 2018 Absolute	2017 - 2018 Relative	2018 - 2019 Absolute	2018 - 2019 Relative	2019 - 2020 Absolute	2019 - 2020 Relative	2020 - 2021 Absolute	2020 - 2021 Relative	2021 - 2022 Absolute	2021 - 2022 Relative	Reporting year 2022
ExBo												
R.A.J. Swaak[1]	CEO					701	n/a	291	n/a	7	1%	999
C.M. Bornfeld[2]	CI&TO	825	n/a	218	n/a	-30	-3%	-9	-1%	-676	n.a.	327
T.J.A.M. Cuppen[3]	CRO	643	n/a	26	3%	7	1%	-15	-2%	5	1%	881
D. Dorner[4]	CCO							90	n/a	789	n.a.	879
C. van der Hooft - Cheong[5]	CCO							89	n/a	786	n.a.	875
L. Kramer[6]	CFO							558	n/a	422	n.a.	981
G.R. Penning[7]	CHRO							87	n/a	1,277	n.a.	1,364
A.M. Vreugdenhil[8]	CCO									724	n.a.	724
Company performance												
Profit		-441	-16%	-304	-13%	-2,091	-102%	1,279	n/a	634	51%	1,867
Cost/Income ratio		-1.3%	-2%	2.4%	4%	5.2%	8%	10.0%	15%	-7.2%	-9%	69.2%
Return on Equity		-3.1%	-21%	-1.4%	-12%	-108.0%	-108%	6.7%	n/a	2.8%	48%	8.7%
Average employee remuneration		**3**	**3%**	**3**	**3%**	**-5**	**-5%**	**4**	**4%**	**4**	**4%**	**107**

1 R.A.J. Swaak joined the Executive Board on 22 April 2020.
2 C.M. Bornfeld joined the Executive Board on 1 March 2018 and stepped down on 1 May 2022.
3 T.J.A.M. Cuppen joined the Executive Board on 1 October 2017.
4 D. Dorner joined the Executive Board on 24 November 2021.
5 C. van der Hooft-Cheong joined the Executive Board on 24 November 2021.
6 L. Kramer joined the Executive Board on 1 June 2021.
7 G.R. Penning joined the Executive Board on 24 November 2021 and stepped down on 1 December 2022.
8 A.M. Vreugdenhil joined the Executive Board on 1 March 2022.

The 5-year development of the annualised base salary of the CEO and other Executive Board positions is shown below. The collective salary increase in the CLA for the banking sector has not been applied to the fixed remuneration in 2022, resulting in an almost straight line from 2021 to 2022, as depicted below.

5-year annualised average base salary – Executive Board

(in thousands)



Pay ratio

The pay ratio is the comparison between the total annual remuneration of the CEO and the average salary of all ABN AMRO employees. In line with our overall remuneration philosophy, we strive for a moderate pay ratio. The salary of our CEO does not fluctuate as it has been set in line with the Executive Board Remuneration Policy and does not contain any variable elements.

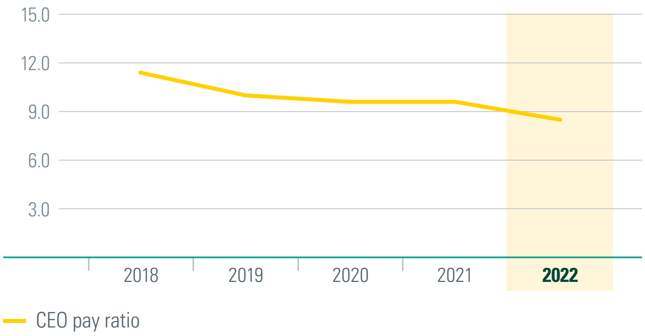
The ratio of the mean annual employee remuneration and the total annual remuneration of the CEO has been calculated in line with the guidance from the Corporate Governance Code Monitoring Committee, whereby temporary agency workers and external contractors have been excluded. The ratio was 8.5 in 2022. The ratio represents the CEO's total remuneration, including pension costs and social security charges, divided by the mean employee remuneration including pension costs and social security charges during 2022. This ratio is considered to be a fair reflection of ABN AMRO's current position. The ratio decreased in light of the fact that employees' salaries increased based on the Employment Conditions CLA, but the CEO salary was not increased as the Executive Board waived the salary increase of the CAO Banken.

Since 2021, in line with the Guidance from the Corporate Governance Code Monitoring Committee, the social security charges have been taken into consideration, whereas these charges were not taken into consideration in previous years. The pay ratio at ABN AMRO is substantially lower than in other AEX and AMX companies.

The ratios published in 2016, 2017, 2018, 2019, 2020 and 2021 were 11.4, 10, 9.6, 9.6, 10.2 and 8.78 respectively.

CEO pay ratio

(in thousands)



2022 Performance of the Executive Board

The 2022 performance targets for Executive Board members were set in line with the Executive Board Remuneration Policy, which was adopted by the Annual General Meeting in 2020. All financial KPIs are focused on long-term profitable growth, a healthy balance of capital and the need to control our costs in order to be sustainable. The scores are given within a 1-5 bandwidth, with a score of 1 is the lowest score, a score of 3 is defined as 'meets requirements' and an almost score of 5 is the highest score.

At an organisational level, the targets for the financial KPIs (ROE and Cost/Income ratio) were exceeded, mainly due to a further increase in income in 2022. The non-financial KPIs Sustainability and House in Order focus specifically on ABN AMRO's long-term strategy. The KPI Sustainability and its targets and measures are linked to the Dow Jones Sustainability Index (DJSI). Our top-10 position in the DJSI results in a score of 2. The KPI Employee Engagement, and its targets and measures are linked to the results obtained in the relevant annual employee engagement survey and focused on both short- and long-term achievements. The bank-wide Employee Engagement score of 78% resulted in a score of 1, compared with a score of 3 in 2021 (82% score). The KPI House in Order means actively conveying the desired compliance and risk culture, effective risk management and solution management.

At a client unit/function level, strict targets have been set to reduce costs. Exceeding the target cost ceiling by more than 1% led to a score of 1. On average, targets were met with regard to the net growth in strategic segments. Employee Engagement is also measured at a function level, resulting in an average score of 2 (based on a score of 79-80%). With respect to the NPS score, customers are starting to appreciate the digital experience we offer, but do not yet see us as a personal bank. At an individual level, KPIs are set with regard to House in Order, Permanent Education, Diversity and Behaviour. All Executive Board members met or exceeded their targets in this respect, leading to an average score of 4.

The overall assessment of the Supervisory Board is that, on average, all members of the Executive Board had good overall performance ratings in 2022.

Score 1-5	Type	KPI	Score 2022[2]
Organisation			
	Financial	ROE	5
		Cost/income ratio	5
	Non-financial	Sustainability	2
		Employee engagement	1
		House in order	3
Business line			
	Financial	Cost level	1
		Net Growth Stategic Segments	3
	Non-financial	Employee engagement	2
		NPS	2
Individual			
	Financial	n/a	
	Non-financial[1]		4

[1] The score is the average of the absolute individual of all Executive Board members.
[2] The scores are the over-all scores per KPI, where the weight/applicability of each KPI differs per Executive Board member.

Supervisory Board

Supervisory Board Remuneration Policy

The remuneration of the Supervisory Board is set in line with the Supervisory Board Remuneration Policy. Consequently, a 1.5% indexation of the annual fees was applied with effect from 1 January 2022, as well as an increase of 2.5% with effect from 1 March 2022, in accordance with the CLA for the banking sector.

Fixed remuneration

The annual fees for 2022 were as follows:

From 1 January 2022 until 1 March 2022:

- Membership of the Supervisory Board: EUR 54,322 (EUR 70,619 for the Chair)
- Membership of a Committee: EUR 13,581 (EUR 16,297 for the Chair)

From 1 March 2022 until 31 December 2022:

- Membership of the Supervisory Board: EUR 55,680 (EUR 72,384 for the Chair)
- Membership of a Committee: EUR 13,920 (EUR 16,704 for the Chair)

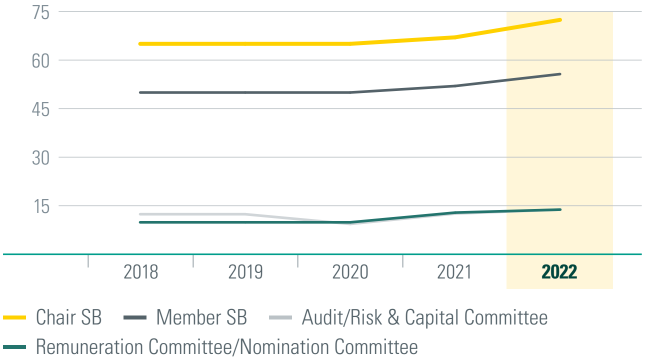
The remuneration for Supervisory Board committee membership is limited to two committee memberships. ABN AMRO does not grant any variable remuneration or equity to Supervisory Board members. Supervisory Board members are appointed by the General Meeting upon nomination by the Supervisory Board. The initial appointment period is four years unless a shorter period is set at the time of appointment. Supervisory Board members can be reappointed. Details of the remuneration of the individual members of the Supervisory Board are provided in Note 36 and Note 38 to the Consolidated Annual Financial Statements.

2022 Remuneration for the individual Supervisory Board members

(In thousands)	2022[4]	2021[4]
T. de Swaan	103	98
A.C. Dorland	86	82
L.J. Griffith	83	80
M.P. Lap	83	80
S.A.C. Russell[1]	60	
A.M. Storåkers	86	80
M.L. Tannemaat	83	80
J.S.T. Tiemstra[2]	26	82
J.B.J. Stegmann[3]		72
Total	**610**	**654**

[1] S.A.C. Russell was appointed as a member of the Supervisory Board with effect from 20 april 2022.
[2] J.S.T. Tiemstra stepped down as a member of the Supervisory Board with effect from 20 april 2022.
[3] J.B.J. Stegmann stepped down as a member of the Supervisory Board with effect from 14 November 2021.
[4] Remuneration amounts excluding VAT.

5-year annualised average base salary – Supervisory Board
(in thousands)



2022 Loans from ABN AMRO to Supervisory Board members

	2022			2021		
(In thousands)	Outstanding 31 December	Redemptions	Interest rate	Outstanding 31 December	Redemptions	Interest rate
T. de Swaan	1,586	5	1.0%	1,591	6	1.0%
L.J. Griffith		339	1.8%	339	89	1.8%
S.A.C. Russell	370		2.1%			
M.L. Tannemaat	715	57	1.7%	772		1.7%

Stakeholder views

Annual General Meeting 2022

During the Annual General Meeting of 20 April 2022, the 2021 remuneration report was put to an advisory vote, with 99.33% of the votes cast being in favour of a positive advice. ABN AMRO was pleased to note the positive advisory vote.

During the Annual General Meeting in 2022, shareholders raised questions about the CEO's remuneration, how ABN AMRO benchmarks such remuneration against its peers and if ABN AMRO can include the results of the benchmark in the remuneration report. The Chair of the Remuneration Committee responded by referring to the Executive Board Remuneration Policy and the fact that such policy is also based on a benchmark. The benchmark itself, however, is not part of the remuneration report, as such information is publicly available in the remuneration reports of peers.

In general, the primary objective of ABN AMRO's remuneration policies is to enable ABN AMRO to attract, motivate and retain qualified and expert leaders, as well as senior staff and other highly qualified employees. In the preparations for the updated version of our Executive Board Remuneration Policy in 2024, we will invite stakeholders to consultation meetings to enable the Chair of our Remuneration Committee to hear feedback and explore ways of implementing our new remuneration policies to address areas of concern. We also took note of the feedback following the 2021 remuneration report and will, of course, take such views into consideration when reviewing the policy.

Works Council meetings in 2022

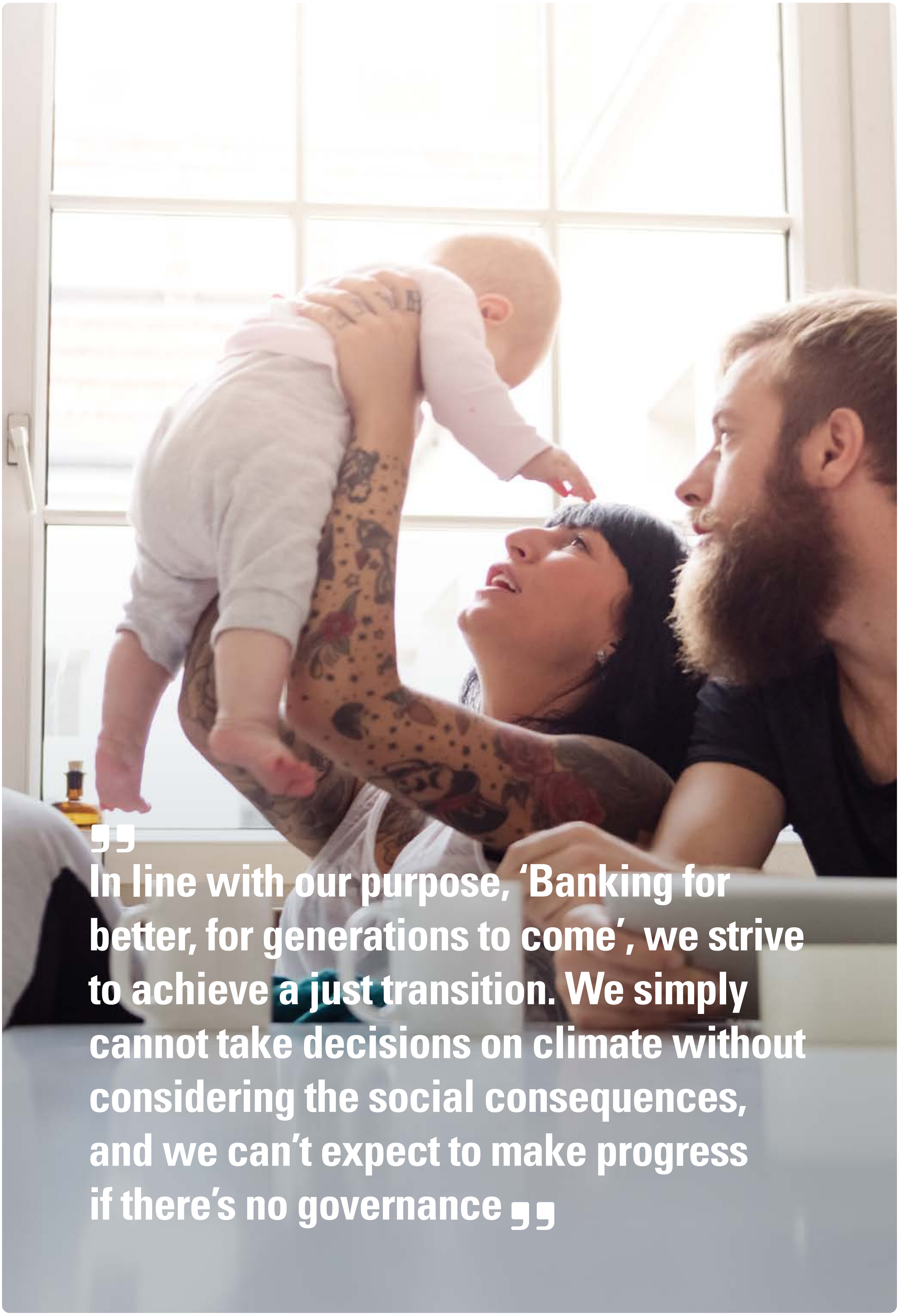
ABN AMRO has a general Employee Council (Raad van Medewerkers), the European Staff Council (at a European level) and four separate Works Councils.

In 2022, the Works Councils received a total of 65 requests for advice, 15 requests for consent and 51 information memoranda. These requests and memoranda were to a large extent related to ABN AMRO's further implementation of its strategy throughout the various layers of the organisation.

With regard to remuneration policies and practices, the relevant Works Council is updated annually on ABN AMRO's remuneration policies and practices. In the event of changes to the remuneration policies that are subject to the right of consent, the relevant Works Council is involved accordingly. In 2022, no changes were made to remuneration policies that were subject to a right of consent. Instead, the Employee Council was updated with regard to developments in remuneration practices, mainly in relation to equal pay.

Normally the Employee Council, Executive Board and the Supervisory Board meet each other three times a year. In 2022, two meetings were held: the first to discuss the climate plan and the second to discuss the gap between management and other employees and how to bridge it.

As employee participation is shaped around the organisational structure of ABN AMRO, the organisational changes also led to a reassessment of the way the various Works Councils are structured. On 9 January 2023, the Employee Council announced that, in 2023, the current four Works Councils would be reduced to two Works Councils. Elections will be held in spring 2023.


“In line with our purpose, ‘Banking for better, for generations to come’, we strive to achieve a just transition. We simply cannot take decisions on climate without considering the social consequences, and we can’t expect to make progress if there’s no governance”

Other governance information

Codes and regulations

ABN AMRO is required to comply with a wide variety of governance codes and regulations, including the Dutch Corporate Governance Code, the Banking Code and CRD V. This section explains how ABN AMRO complies with these codes and regulations. More comprehensive overviews of ABN AMRO's compliance with such codes and regulations are published under the Governance Codes and regulations section on abnamro.com.

Dutch Corporate Governance Code

We believe that when corporate governance meets high international standards, it significantly boosts the confidence of a company's stakeholders. Since depositary receipts for shares in ABN AMRO are listed on Euronext Amsterdam, ABN AMRO adheres to the Dutch Corporate Governance Code.

General compliance and explanations

ABN AMRO complies with all principles and best practices of the Dutch Corporate Governance Code, except for the deviations and nuances described below. Under the Dutch Corporate Governance section on its website, ABN AMRO also publishes a detailed comply or explain list with regard to its adherence to the Dutch Corporate Governance Code.

Best practice provision 1.3.6
(Absence of an internal audit department)
This best practice provision does not apply since there is a separate department for the internal audit function within ABN AMRO.

Best practice provision 2.1.3 (Executive Committee)
This best practice provision is not applicable to ABN AMRO as, since 24 November 2021, ABN AMRO has no longer had an Executive Committee.

Best practice provision 2.1.9
(Independence of the Chair of the Supervisory Board)
ABN AMRO applies this best practice provision, which states that the Chair of the Supervisory Board should not be a former member of the management board of the company. Although Tom de Swaan was a member of the management board of the former ABN AMRO, the current ABN AMRO is the result of various legal and operational separations and combinations, a merger and a legal demerger that took place after the acquisition of the former ABN AMRO Holding N.V. (the former ABN AMRO Group) by a consortium of banks in October 2007. The consortium consisted of the Royal Bank of Scotland Group, Fortis and Banco Santander S.A (the Consortium). In October 2008, when the Fortis group experienced financial difficulties, the Dutch State acquired certain operations of the Fortis group, as well as Fortis' interest in the vehicle that had acquired the former ABN AMRO group. ABN AMRO Group N.V. (ABN AMRO Group) was newly incorporated on 18 December 2009 to hold the operations, assets and liabilities of parts of the former ABN AMRO group and the part of the Fortis group acquired by the Dutch State. On 6 February 2010, the new and current ABN AMRO demerged from the former ABN AMRO Bank N.V. into a newly incorporated entity. The former ABN AMRO Bank N.V. was subsequently renamed Royal Bank of Scotland N.V. On 1 July 2010, the new ABN AMRO Bank and Fortis Bank (Nederland) N.V. merged pursuant to a legal merger, following which the current ABN AMRO was the surviving entity and Fortis Bank (Nederland) N.V. was the disappearing entity. ABN AMRO Group was merged into ABN AMRO on 29 June 2019. The former ABN AMRO Group and ABN AMRO are different entities than the former ABN AMRO Holding N.V. or former ABN AMRO Bank N.V.

Best practice provision 3.1.3
(Remuneration - Executive Committee)
This best practice provision is not applicable to ABN AMRO as, since 24 November 2021, ABN AMRO has no longer had an Executive Committee.

Principle 3.2. and best practice provisions 3.2.1 – 3.2.2
(Management Board remuneration)
ABN AMRO complies with this principle. The Bonus Prohibition Act (Wet aansprakelijkheidsbeperking DNB en AFM en bonusverbod staatsgesteunde ondernemingen), which became effective in 2011, does not allow such compensation for board members of financial institutions that fall under the scope of this act during the period of state support through shareholding by the Dutch State. The members of the Executive Board are therefore not entitled to receive variable remuneration during the period of government ownership.

Best practice provision 4.1.3 (Agenda)
ABN AMRO applies this principle, which states, among other things, that (a) each substantial change in the corporate governance structure of ABN AMRO and in the compliance with the Dutch Corporate Governance Code and (b) material changes in the Articles of Association should be presented to the General Meeting as a separate discussion item or voting item, as applicable.

The only exception to this best practice provision is that the Executive Board and the Supervisory Board may decide to place certain topics on the agenda under one agenda item if these topics are justifiably related. ABN AMRO considers this to be a further substantiation of this best practice provision, which may be necessary when proposals to amend the Articles of Association or the corporate governance structure of ABN AMRO are interrelated in such a way that separate votes on each of these proposals could result in an imbalanced voting result and, in turn, an imbalance in the corporate governance structure.

Best practice provision 4.3.3
(Cancelling the binding nature of a nomination or dismissal)
This provision is not applicable to ABN AMRO since it applies the rules applicable to a large company regime (structuurregime).

Best practice provision 4.3.4
(Voting right on financing preference shares)
This best practice is not applicable to ABN AMRO since ABN AMRO has not issued financing preference shares.

Principle 4.4. (Issuing depositary receipts for shares)
ABN AMRO does not apply this principle. In contradiction to this principle and provision, the issuing of depositary receipts by STAK AAB is primarily used as a defence measure and not to prevent shareholder absenteeism from enabling a minority of shareholders to control the decision-making process at a General Meeting. Regulatory considerations have been decisive in choosing a structure with depositary receipts as a protective measure. Declarations of no objection are required in the event of the direct or indirect acquisition of a qualified holding in regulated entities in which ABN AMRO holds an interest. Therefore, this structure provides ABN AMRO with the greatest possible certainty of adequate protection against a hostile takeover. Although the issuing of depositary receipts has been set up primarily as a defence measure and not to prevent absenteeism, STAK AAB aims to promote the exchange of information between ABN AMRO on the one hand and holders of depositary receipts and shareholders on the other by, for example, organising a meeting of depositary receipt holders before every General Meeting. More information on the purpose and functioning of the depositary receipts and STAK AAB, including information on situations in which STAK AAB may decide to limit, refuse or revoke powers of attorney (and to not observe any voting instructions received) can be found on the STAK AAB website (stakaab.org).

Best practice provisions 4.4.1 – 4.4.5 and 4.4.7 – 4.4.8
Compliance with these best practices is a responsibility of the board of STAK AAB. With respect to best practice provisions 4.4.5 and 4.4.8, the following applies. In a non-hostile situation, STAK AAB will act primarily in the interests of depositary receipt holders. In a hostile situation, STAK AAB will act primarily in the interests of ABN AMRO and its business enterprises. Under all circumstances, STAK AAB will also take into account the legitimate interests of all other stakeholders: clients, savers and deposit holders, shareholders, depositary receipt holders, employees, and the society in which ABN AMRO operates. Furthermore, STAK AAB in principle has the obligation to grant a power of attorney to depositary receipt holders to exercise the voting rights attached to the underlying shares and will not exercise voting rights on the shares in ABN AMRO (unless depositary receipt holders have requested STAK AAB to do so). The foregoing could be different in the hostile situations described in Article 2:118a of the Dutch Civil Code. STAK AAB may then decide to (a) limit, exclude or revoke powers of attorney, and (b) not observe voting instructions received for a period of up to two years. Furthermore, under the depositary receipt terms, when exercising the voting rights in a hostile situation, STAK AAB should focus primarily on the interests of ABN AMRO and its business enterprises as set out above.

Principle 5.1 and best practice provisions 5.1.1 - 5.1.5
(One-tier governance structure)
This principle and these best practice provisions are not applicable since ABN AMRO has a two-tier board instead of the one-tier board to which these best practice provisions relate.

How ABN AMRO complies with the best practice provisions for long-term value creation, culture and diversity

Long-term value creation

Strategy to achieve short- and long-term value creation
Please refer to the Strategy, value creation & performance chapter in this report for a detailed explanation of the Executive Board's view on long-term value creation and the strategy for achieving it, as well as for a description of the contributions made to long-term value creation during 2022. Reference is also made to the appendix in this report for a detailed overview of the value-creating topics.

In line with best practice provision 1.1.3 of the Dutch Corporate Governance Code, ABN AMRO's Supervisory Board (i) supervises the manner in which the Executive Board implements the long-term value creation strategy, and (ii) regularly discusses the strategy, its implementation and the principles associated with it. This role of the Supervisory Board is incorporated in the Supervisory Board Rules of Procedure:

- The Supervisory Board discusses, monitors and constructively challenges the Executive Board with respect to the group's strategy, including the long-term

value creation strategy, and the values that contribute to a culture focused on long-term value creation.
- At least once every calendar year, the Supervisory Board discusses the long-term value creation strategy and its implementation. The Supervisory Board also assesses the actual outcome of the strategy and objectives formulated in the preceding period(s).
- The Executive Board discusses the progress and realisation of the long-term strategy with the Supervisory Board on a quarterly basis.
- The exercise of all powers and duties by the Executive Board and the cooperation with the Supervisory Board focus on ensuring long-term value creation by the group and on building and maintaining the culture required for that purpose, taking into account stakeholder interests and applicable legislation and regulations.

Please refer to the Supervisory Board report for more information on the Supervisory Board's involvement in establishing the strategy and the way in which it monitors its implementation.

Diversity

Supervisory Board profile

In line with best practice provision 2.1.1 of the Dutch Corporate Governance Code, the Supervisory Board has drawn up a profile of its scope and composition, taking into account the nature and activities of ABN AMRO. The current collective profile is set out in Annex 3 of the Rules of Procedure of the Supervisory Board, which are published on ABN AMRO's website. For more information we refer to the Supervisory Board composition chapter in this report.

In line with best practice provision 2.1.5 of the Dutch Corporate Governance Code, ABN AMRO has drawn up a diversity policy for the composition of the Supervisory Board and Executive Board. This is part of the ABN AMRO Suitability Policy.

Please refer to the Leadership and governance structure chapter in this report for details on gender diversity within ABN AMRO's management bodies.

Diversity & Inclusion Policy

ABN AMRO is committed to diversity and inclusion, including promoting equal treatment of and equal opportunities for employees, preventing harassment, ensuring non-discrimination and ensuring compliance with national and local labour and employment laws. A summary of ABN AMRO's Diversity & Inclusion Policy is published on our website.

The objective of ABN AMRO's Diversity & Inclusion Policy is to create a diverse and inclusive workforce and to recognise the human rights and equal opportunities of all the bank's employees. To achieve this objective, all ABN AMRO employees, regardless of their position, must adhere to the following principles:
- displaying respect for every individual;
- drawing strength from equal opportunities and a diverse and inclusive workforce, while supporting personal growth and development;
- recognising the value and benefiting from the uniqueness of every individual;
- displaying respect for the human rights of ABN AMRO's employees.

Diversity targets, initiatives and achievements

Please refer to the Strategy, value creation & performance chapter in this report for detailed information on diversity targets, initiatives and achievements.

ABN AMRO's results are also monitored externally by, for example, the SER (Talent to the Top) and Equileap.

Culture

Our culture and core values

Please refer to the Introduction - Our bank chapter for a description of our culture and core values.

Bringing our values to life

Please refer to the Strategy, value creation & performance chapter for details on how ABN AMRO brings our values to life.

Culture and long-term value creation

We place great value on fostering a culture of execution power, sound risk taking and entrepreneurship within the organisation. And a culture in which we feel empowered and valued. This is key to strategy execution and our licence to operate. To this end, we promote engagement across the organisation by organising 'Engagement Circles'. We have implemented structured dialogues focused on reflecting on our behaviour and culture. These dialogues are held within teams and across the organisation. Through structural reflection and on-going sharing of insights, we aim to further strengthen a mindset of continuous learning from lessons from the past, and also to further enhance engagement.

Leadership and culture are inextricably connected. Our Executive Board – the most senior leadership body – and our Extended Leadership Team set the tone, the example and the standards that we expect of everyone. Our executive leadership programme focuses, among other things, on building competency and properly weighing the interests of all stakeholders, in both the short and the long term. Where norms, rules or standards are insufficiently clear or pose a dilemma, we invest in moral learning and moral decision-making. Our Ethics Committee, chaired by our CEO, discusses ethical dilemmas on a strategic level to determine our moral position in areas where regulations or policies do not provide clear guidance. Throughout the organisation, moral position sessions, dilemma dialogues and speak-up cafes are being used to help improve ethical decision-making skills and help determine what is right, taking into account the interests of all stakeholders. We have strengthened the approachability and awareness of the various speak-up channels, ranging from speak-up ambassadors in the workplace to trusted persons and the whistle-blowing hotline, in order to lower the threshold for speaking up, giving voice to values and signalling risks or possible issues.

Tax Governance Code

General compliance and explanations

ABN AMRO complies with all principles and transparency requirements of the VNO-NCW Dutch Tax Governance Code, as further described below. Under the Dutch Tax Governance section on its website, ABN AMRO also publishes a detailed 'comply or explain' list with regard to its adherence to the Dutch Tax Governance Code.

The Dutch Tax Governance Code establishes a clear and transparent system in which accountability and supervision of tax policies are intrinsic elements. Like the Corporate Governance Code, the Tax Governance Code is based on the principle of 'comply or explain': companies must render account for any principles in the Code where they are not, or not yet, compliant.

As stated in the Dutch Tax Governance Code, ABN AMRO has both a clear tax strategy as well as clear tax principles. ABN AMRO's tax principles, which apply to all entities in the corporate group, are published on abnamro.com.

ABN AMRO has a tax governance structure in place. The Board plays the principal role in that governance structure. ABN AMRO's tax principles state that it acts in accordance with both the letter and the spirit of tax law, both domestic and foreign. ABN AMRO only uses structures that are driven by commercial considerations and that are appropriate for its business operations (including a realistic presence). It does not use tax havens to avoid taxation: a presence in a tax haven is permitted only if it has real economic significance.

Dutch Banking Code

The Dutch Banking Code sets out principles that banks with a corporate seat in the Netherlands (i.e. with a Dutch banking licence) should observe in terms of corporate governance, risk management, audit and remuneration. The Dutch Banking Code applies to ABN AMRO as the main entity within a group that holds a Dutch banking licence. ABN AMRO is therefore committed to complying with the Dutch Banking Code and devotes a great deal of effort to ensure that the spirit of the code is reflected in the behaviour of the employees and the culture of the bank. As such, we are pleased to confirm that ABN AMRO complies with the principles of the Dutch Banking Code. A principle-by-principle overview of the manner in which ABN AMRO Bank complied with the Dutch Banking Code during 2022 is published on abnamro.com.

Throughout 2022, we continued to improve the manner in which we apply the principles of the Dutch Banking Code, taking into account the focus areas indicated by the Dutch Banking Code Monitoring Committee. In particular, the bank devoted a great deal of attention to leadership, integrity and its societal role, including increased efforts regarding sustainability and providing services to clients in their best interests, as also reflected in our strategy.

All members of the Supervisory Board and Executive Board have taken the Banker's Oath, as required by Dutch law. The oath is a confirmation of ABN AMRO's existing policies, which are fully in line with the bank's cultural principles and core values. Along with the introduction of a Social Charter and the Banking Code, the Dutch banking industry has taken the initiative to have all employees take the Banker's Oath. Employees take the oath to affirm their commitment to upholding high standards of ethical behaviour. They are personally responsible for complying with these rules of conduct and may be held accountable for non-compliance.

Subsidiaries of ABN AMRO and the Dutch Banking Code

On 31 December 2022, ABN AMRO Bank had four Dutch subsidiaries with a banking licence: ABN AMRO Clearing Bank N.V., ABN AMRO Groenbank B.V., ABN AMRO Hypotheken Groep B.V. and International Card Services B.V. ABN AMRO applies the principles of the Dutch Banking Code to all of these Dutch subsidiaries on a consolidated basis by developing group-wide policies and standards that promote compliance with internal and external rules and best-practice provisions. However, in view of the differences between the activities, organisation and risk management of the subsidiaries, the application of group-wide policy and standards may vary from one subsidiary to another. An explanation of the manner in which these subsidiaries complied with the Dutch Banking Code during 2022 is published on abnamro.com.

CRD V

Article 96 of CRD V requires financial institutions to explain on their website how they comply with the requirements of articles 88 - 95 of CRD V. These articles set out governance, disclosure, remuneration, nomination and management body requirements for financial institutions. The obligation to publish such an overview was implemented in Dutch law by article 134b of the Decree on prudential measures FMSA (*Besluit prudentiële regels Wft*).

ABN AMRO has published an overview of how the bank complies with article 134b of the Prudential Measures Decree FMSA and article 96 of CRD V on abnamro.com.

Legal structure

Global structure
The complete list of subsidiaries and participating interests as at 31 December 2022 referred to in Article 414, Book 2, of the Dutch Civil Code has been filed with the Trade Register.

Personal & Business Banking
The Personal & Business Banking unit of ABN AMRO is supported by the following subsidiaries (this list is not exhaustive):
- ABN AMRO Hypotheken Groep B.V. - Responsible for the mortgage activities within ABN AMRO for residential real estate, providing mortgage products through various channels and distributed under various brands, including the Florius brand.
- International Card Services B.V. (ICS) - Provides secure payment services and issues, promotes, manages and processes more than 25 different credit cards in partnership with other companies. ICS is market leader in the Netherlands and serves both retail clients and clients in the business market.
- ALFAM Holding N.V. - Offers consumer credit through the labels ABN AMRO, DEFAM and Green Loans. ALFAM actively contributes to a healthy Dutch credit market and is the largest finance company in the Netherlands in the field of consumer credit.
- New10 B.V. - Provides SMEs in the Netherlands with standard loans through a fully digital product offering.

ABN AMRO Bank also holds a minority interest of 49% in Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V. (ABN AMRO Verzekeringen), in which Nationale-Nederlanden N.V. holds the majority interest (51%). ABN AMRO Verzekeringen offers insurance products under the ABN AMRO brand.

Wealth Management
ABN AMRO's Wealth Management business is conducted in France and Germany by Banque Neuflize OBC S.A. and the ABN AMRO Frankfurt branch (operating under the Bethmann Bank label). Banque Neuflize OBC S.A. brings together all the expertise needed to enhance clients' assets, both privately and professionally: advice, financing and wealth management, offering an integrated approach for entrepreneurs and their families. Neuflize Vie S.A. is a joint venture between Banque Neuflize OBC (60%) and AXA (40%) and offers innovative and sophisticated unit-linked life insurance products to high net worth clients.

Bethmann Bank, now merged with the ABN AMRO Frankfurt branch, continues to offer private banking and private wealth management-related services, covering all major regions in Germany under the Bethmann Bank label. Its Entrepreneur & Enterprise concept offers entrepreneurs and their businesses an integrated approach to their banking affairs.

Corporate Banking
ABN AMRO's Corporate Banking business is supported by the following subsidiaries (this list is not exhaustive):
- ABN AMRO Clearing Bank N.V. – Is a global leader in derivatives and equity clearing. It is one of the few players currently offering global market access and clearing services on more than 85 of the world's leading exchanges, and operates from several locations across the globe.
- ABN AMRO Asset Based Finance N.V. - Provides asset-based solutions (working capital solutions, equipment leases, equipment loans and vendor lease services) to its clients in the Netherlands, France, Germany and the United Kingdom.
- Franx B.V. - Offers a unique digital banking platform where currencies can be converted, and international and euro payments can be executed.
- ABN AMRO Groenbank B.V. - Provides financing for sustainable and green investments based on the Green Scheme, a facility through which the Dutch government encourages sustainable investments.
- Banco ABN AMRO S.A. - Is the Brazilian subsidiary of ABN AMRO Bank N.V. and has its own local banking licence.

The joint venture ABN AMRO – ODDO BHF B.V., provides equity brokerage services and focuses on the Benelux region. Both ABN AMRO and ODDO BHF have an equal share in this strategic partnership.

Group Functions
ABN AMRO's Group Functions are supported by the following subsidiaries and participating interests (this list is not exhaustive):
- ABN AMRO Captive N.V. is a captive reinsurance company.
- Transactie Monitoring Nederland B.V. is a participating interest of ABN AMRO Bank N.V. (30%). Other major Dutch banks hold the remaining shares.
- ABN AMRO Funding USA LLC is active in the US market, issuing ABN AMRO's US dollar commercial paper funding for clients operating in the US and for clients with US dollar loans.

Sustainability governance

Introduction - Board oversight of sustainability-related matters

We define sustainability in its broadest sense, including ESG matters. To govern ESG matters effectively, the Executive Board and Supervisory Board need to be equipped with the right tools to make the best possible decisions for the long, medium and short-term resilience of ABN AMRO and society.

The Executive Board is responsible for ABN AMRO's overall strategy, which includes setting out the strategy and oversight of the implementation and execution of matters relating to environmental, social and governance matters within ABN AMRO, including climate-related topics.

The Supervisory Board in turn supervises the policies set by the Executive Board, ABN AMRO's general affairs and the business connected with it, and assists the Executive Board by providing advice on ESG matters, including the climate strategy.

Our sustainability governance is continuously monitored so as to further embed ESG matters within our existing governance structure. ABN AMRO thus aims to address ESG matters more effectively where possible and keep up with regulatory expectations and legislation. In doing so, ABN AMRO also takes note of the quickly evolving market practice in this area.

ABN AMRO has set up a Sustainability Centre of Excellence in the core of the bank, led by our Chief Sustainability Officer, who reports directly to the CEO.

The establishment of the Group Sustainability Committee, chaired by the CEO, is another step forward in terms of integrating sustainability into our governance. Various parts of the bank are represented in the Group Sustainability Committee. This committee has been mandated by the Executive Board to assist and support the Executive Board in the performance of its duties with respect to matters relating to ESG oversight and strategy for the entire group and its functions and client units. This includes (but is not limited to) ESG opportunities, long, medium-term and short-term strategy, value creation, targets, KPIs, commitments, stakeholder dialogue on ESG, and due diligence obligations with respect to the group's own operations and value chains. The Group Sustainability Committee effectively replaces the former Sustainability Advisory Committee (SAC) and has more extended duties and responsibilities than the SAC.

The Group Risk Committee is responsible for risk management in relation to ESG. ABN AMRO has also set up a Sustainable Finance Programme for the implementation of the sustainable finance regulations (SFR Programme, sponsored by the CRO). The Group Sustainability Committee uses its expertise to provide advice to the Group Risk Committee and the SFR Programme.

Our long-term success in this area depends on a collaborative relationship between ABN AMRO's Supervisory Board, Executive Board and all employees. The Executive Board identifies and prioritises risks and opportunities in order to manage and disclose them as appropriate. At the same time, training programmes on these risks and opportunities are integrated into policies and processes in order to provide the bank with insight into ESG risks and the related data, strategy and targets.

The Group Disclosure Committee is responsible for disclosures relating to changes in ratings and disclosures required by Dutch and European legislation on ESG performance, social and employee matters, human rights performance, and anticorruption and antibribery matters. The Group Sustainability Committee advises the Group Disclosure Committee, based on its expertise. The Group Disclosure Committee serves as a central point for providing information on matters regarding materiality, consistency and the need for disclosure.

Climate change is obviously an important area within ABN AMRO's sustainability focus. ABN AMRO published its climate strategy in December 2022. The Executive Board and Supervisory Board were actively involved in establishing this strategy. ABN AMRO's climate strategy is an action plan that presents the bank's principles, priorities and key levers. It provides insight into how ABN AMRO will bring its portfolios into line with the scenario of limiting global warming to 1.5°C and support the transition to a net-zero economy by 2050. ABN AMRO monitors and steers on the successful execution of its climate strategy in line with the sustainability governance set-up. It has defined the roles and responsibilities for organisational domains and individual key employees, with checks and balances ensured by the full involvement of all three lines of defence.

Further details on ABN AMRO's climate strategy and targets can be found in the separate 2022 Climate Strategy & Targets.

Sustainability-related risks and opportunities

We see sustainability as a business opportunity and a way of supporting the broader transition to a low-carbon economy. To support this transition, we are expanding financing for sustainability, and increasingly incorporating sustainability risk – including climate risk – into our approach to lending and investment services. ABN AMRO has three main sustainability focus areas: climate change, circular economy and social impact.

The Group Sustainability Committee is mandated to decide on the direction and priorities of the client units with respect to ESG opportunities so as to ensure a clear direction for the bank as a whole within the risk appetite set by the Group Risk Committee and the Executive Board.

In addition, the Chief Sustainability Officer focuses on exploring business opportunities that contribute to sustainable top-line growth and on designing an integrated sustainability model to create impact for the bank and for our stakeholders.

Further information on sustainability-related risks, including our sustainability risk governance framework, can be found in the Risk, funding & capital chapter in this Report.

Further details on sustainability-related opportunities can be found in the Strategy, value creation & performance chapter in this Report.

Expertise

Acquiring knowledge on ESG matters is of critical importance to ABN AMRO. ABN AMRO's commitment to sustainability has led the bank to develop expertise among its employees and board members. ABN AMRO is determined to share and leverage this on behalf of its clients and continuously improve its climate-related knowledge and capabilities. ABN AMRO also supports its clients' transition to net zero through partnership initiatives. For further details, see the seperate 2022 Climate Strategy & Targets published on our website.

The Sustainability Centre of Excellence scrutinises trends and developments and translates them into applicable knowledge for the benefit of our clients, colleagues and other stakeholders. Based on external developments, best practices and expertise, the Sustainability Centre of Excellence defines the sustainability policies for the bank as a whole and for the client units/functions, and submits them for endorsement to the Group Risk Committee or, if necessary, the Executive Board. The Sustainability Centre of Excellence also provides input on the sustainability policies drawn up by Risk, which are endorsed via the Group Sustainability Committee in the Group Risk Committee and, if necessary, by the Executive Board.

Using its in-depth knowledge and expertise, the Sustainability Centre of Excellence advises and challenges the Executive Board on its sustainability ambitions to ensure that ABN AMRO not only complies with laws and regulations, but also successfully pursues commercial opportunities.

Both ABN AMRO and our regulators focus on climate-related and environmental risks in particular as part of the collective suitability of the Executive Board and Supervisory Board. All Executive Board and Supervisory Board members should have a sufficient level of knowledge and understanding of ESG and ESG risk-related matters. When appointing or reappointing members of the Executive Board and Supervisory Board, ABN AMRO also assesses the candidate's knowledge and experience of ESG matters to ensure the individual and collective suitability of the respective board. Following their appointment, all new members of the Executive Board and Supervisory Board follow an extensive induction programme, which includes knowledge sessions on ESG-related matters. As part of the Lifelong Learning Programme, members of the Executive Board and Supervisory Board also keep their knowledge on ESG matters up to date by attending training sessions. In addition, several Supervisory Board members are dedicated ESG experts. They continually develop and update knowledge on ESG matters through in-depth tailor-made training sessions in addition to the regular Lifelong Learning Programme. These members participate in the four Supervisory Board committees, thus embedding expertise in these committees and ensuring a balanced distribution of members with specific expertise.

The Group Sustainability Committee may receive assistance from internal or external subject experts, and preparatory sessions may be organised with a broader group of stakeholders (including external experts) before matters are discussed in the Group Sustainability Committee.

Further details on sustainability-related expertise can be found in the separate 2022 Climate Strategy & Targets.

Responsibility statement

Pursuant to section 5:25c sub 2 part c of the Dutch Financial Supervision Act, the members of the Executive Board state that to the best of their knowledge:

- the Annual Financial Statements give a true and fair view of the assets, liabilities, financial position and profit or loss of ABN AMRO Bank N.V. and the companies included in its consolidation;
- the Executive Board report gives a true and fair view of the state of affairs on the balance sheet date and the course of business during the 2022 financial year of ABN AMRO Bank N.V. and the affiliated companies included in its Annual Financial Statements;
- the Executive Board report describes the material risks with which ABN AMRO Bank N.V. is faced.

Amsterdam, 7 March 2023

Executive Board

Robert Swaak, Chief Executive Officer and Chair
Tanja Cuppen, Chief Risk Officer
Lars Kramer, Chief Financial Officer
Carsten Bittner, Chief Innovation and Technology Officer (from 1 January 2023)
Annerie Vreugdenhil, Chief Commercial Officer - Personal & Business Banking (from 1 March 2022)
Choy van der Hooft-Cheong, Chief Commercial Officer - Wealth Management
Dan Dorner, Chief Commercial Officer - Corporate Banking

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Annual Financial Statements 2022

Consolidated income statement

(in millions)	Note	2022	2021
Income			
Interest income calculated using the effective interest method		7,698	6,760
Other interest and similar income		236	258
Interest expense calculated using the effective interest method		2,455	1,397
Other interest and similar expense		57	411
Net interest income	4	**5,422**	**5,210**
Fee and commission income		2,271	2,213
Fee and commission expense		493	550
Net fee and commission income	5	**1,778**	**1,664**
Income from other operating activities		375	805
Expenses from other operating activities		125	142
Net income from other operating activities	6	**249**	**663**
Net trading income	7	282	145
Share of result in equity-accounted investments		107	23
Net gains/(losses) on derecognition of financial assets measured at amortised cost	8	1	-108
Operating income		**7,841**	**7,597**
Expenses			
Personnel expenses	8	2,458	2,324
General and administrative expenses	9	2,796	3,287
Depreciation, amortisation and impairment losses of tangible and intangible assets	23	172	194
Operating expenses		**5,425**	**5,806**
Impairment charges on financial instruments		39	-46
Total expenses		**5,464**	**5,759**
Profit/(loss) before taxation		**2,376**	**1,838**
Income tax expense	10	509	604
Profit/(loss) for the period		**1,867**	**1,234**
Attributable to:			
Owners of the parent company		1,868	1,231
Non-controlling interests			3
Earnings per share (in EUR)			
Basic earnings per ordinary share (in EUR)[1]	11	1.96	1.21

[1] Earnings per share consist of profit for the period, excluding results attributable to non-controlling interests and payments to holders of AT1 instruments, divided by the average outstanding and paid-up ordinary shares.

Consolidated statement of comprehensive income

(in millions)	Note		2022		2021
Profit/(loss) for the period			**1,867**		**1,234**
Other comprehensive income:					
Items that will not be reclassified to the income statement					
Remeasurement gains/(losses) on defined benefit plans	31		16		24
Gains/(losses) on liability own credit risk	29		8		20
Items that will not be reclassified to the income statement before taxation			**24**		**43**
Income tax relating to items that will not be reclassified to the income statement			5		11
Items that will not be reclassified to the income statement after taxation			**19**		**33**
Items that may be reclassified to the income statement					
Net gains/(losses) currency translation reserve		48		66	
Less: Reclassification currency translation reserve through the income statement		4			
Net gains/(losses) currency translation reserve through OCI			44		66
Net gains/(losses) fair value reserve		-287		107	
Less: Reclassification fair value reserve through the income statement		1			
Net gains/(losses) fair value reserve through OCI			-288		108
Net gains/(losses) cash flow hedge reserve		762		451	
Less: Reclassification cash flow hedge reserve through the income statement		-39		54	
Net gains/(losses) cash flow hedge reserve through OCI			801		396
Net gains/(losses) share of other comprehensive income of associates		-51		16	
Less: Reclassification share of other comprehensive income of associates through the income statement		7			
Share of other comprehensive income of associates			-58		16
Items that may be reclassified to the income statement before taxation			**498**		**586**
Income tax relating to items that may be reclassified to the income statement			132		112
Items that may be reclassified to the income statement after taxation			**367**		**474**
Total comprehensive income/(expense) for the period after taxation			**2,252**		**1,740**
Attributable to:					
Owners of the parent company			2,253		1,737
Non-controlling interests					3

Consolidated statement of financial position

(in millions)	Note	31 December 2022	31 December 2021
Assets			
Cash and balances at central banks	13	60,865	66,865
Financial assets held for trading	14	907	1,155
Derivatives	15	5,212	3,785
Financial investments	17	39,034	43,165
Securities financing	18	20,032	16,138
Loans and advances banks	20	2,982	2,801
Residential mortgages	21	141,121	147,711
Consumer loans	21	9,955	10,518
Corporate loans at amortised cost	21	85,295	84,915
Corporate loans at fair value through P&L	21	66	99
Other loans and advances customers	21	7,491	15,008
Equity-accounted investments	23	474	564
Property and equipment	24	988	1,172
Goodwill and other intangible assets	24	108	127
Assets held for sale	25	13	89
Tax assets	11	565	739
Other assets	26	4,473	4,263
Total assets		**379,581**	**399,113**
Liabilities			
Financial liabilities held for trading	14	641	687
Derivatives	15	4,148	4,344
Securities financing	18	9,652	9,494
Due to banks	27	17,509	38,076
Current accounts	28	122,030	132,983
Demand deposits	28	100,397	98,790
Time deposits	28	30,096	18,780
Other due to customers	28	2,491	665
Issued debt	29	56,259	59,688
Subordinated liabilities	29	7,290	7,549
Provisions	30	1,044	1,201
Tax liabilities	11	22	101
Other liabilities	32	5,187	4,757
Total liabilities		**356,767**	**377,114**
Equity			
Share capital		898	940
Share premium		12,529	12,970
Other reserves (incl. retained earnings/profit for the period)		8,243	7,324
Accumulated other comprehensive income		-842	-1,227
AT1 capital securities		1,985	1,987
Equity attributable to owners of the parent company		**22,812**	**21,994**
Equity attributable to non-controlling interests		2	5
Total equity	33	**22,814**	**21,999**
Total liabilities and equity		**379,581**	**399,113**
Committed credit facilities	35	53,873	54,642
Guarantees and other commitments	35	7,651	7,598

Consolidated statement of changes in equity

(in millions)	Share capital	Share premium	Other reserves including retained earnings	Accumulated other comprehensive income[2]	Net profit/(loss) attributable to owners of the parent company	AT1 capital securities	Equity attributable to the owners of the parent company	Non-controlling interests	Total equity
Balance at 1 January 2021	**940**	**12,970**	**6,870**	**-1,733**	**-45**	**1,987**	**20,989**		**20,989**
Total comprehensive income				506	1,231		1,737	3	1,740
Transfer			-45		45				
Dividend			-639				-639		-639
Interest on AT1 capital securities			-91				-91		-91
Other changes in equity			-2				-2	3	1
Balance at 31 December 2021	**940**	**12,970**	**6,093**	**-1,227**	**1,231**	**1,987**	**21,994**	**5**	**21,999**
Total comprehensive income				385	1,868		2,253		2,252
Transfer			1,231		-1,231				
Dividend			-840				-840	-3	-843
Decrease of capital						-2	-2		-2
Share buyback	-42	-441	-16				-500		-500
Interest on AT1 capital securities			-91				-91		-91
Other changes in equity[1]			-2				-2		-2
Balance at 31 December 2022	**898**	**12,529**	**6,375**	**-842**	**1,868**	**1,985**	**22,812**	**2**	**22,814**

[1] Including EUR one million transaction costs related to the share buyback.
[2] For more information, please refer to Note 33 Equity.

Consolidated statement of cash flows

(in millions)	Note	2022	2021
Profit/(loss) for the period		**1,867**	**1,234**
Adjustments on non-cash items included in profit/(loss)			
(Un)realised gains/(losses)		6,753	-1,622
Share of result in equity-accounted investments		-107	-20
Depreciation, amortisation and impairment losses of tangible and intangible assets	24	172	194
Impairment charges on financial instruments		39	-46
Income tax expense	10	509	604
Tax movements other than taxes paid & income taxes		12	-13
Other non-cash adjustments		848	1,010
Operating activities			
Changes in:			
- Assets held for trading		248	153
- Derivatives - assets		-828	2,399
- Securities financing - assets		-3,081	1,601
- Loans and advances banks		424	126
- Residential mortgages		-4,413	1,059
- Consumer loans		507	356
- Corporate loans		-27	187
- Other loans and advances customers		7,740	-7,073
- Other assets		-349	734
- Liabilities held for trading		-49	124
- Derivatives - liabilities		-677	-2,773
- Securities financing - liabilities		-376	-2,553
- Due to banks		-20,745	1,614
- Due to customers		3,558	12,422
Net changes in all other operational assets and liabilities		346	355
Dividend received from associates and private equity investments		30	64
Income tax paid		-544	-534
Cash flow from operating activities		**-8,142**	**9,602**

continued>

(in millions)	Note	2022	2021
Investing activities			
Purchases of financial investments		-11,902	-10,136
Proceeds from sales and redemptions of financial investments		11,464	13,345
Acquisition of subsidiaries (net of cash acquired), associates and joint ventures	22	-13	-14
Divestments of subsidiaries (net of cash sold), associates and joint ventures	22	272	194
Purchases of property and equipment		-186	-182
Proceeds from sales of property and equipment		127	674
Purchases of intangible assets		-2	-20
Proceeds from sales of intangible assets		1	
Cash flow from investing activities		**-239**	**3,862**
Financing activities			
Proceeds from the issuance of debt	28	35,231	30,226
Repayment of issued debt	28	-30,668	-36,180
Proceeds from subordinated liabilities issued	28	1,540	910
Repayment of subordinated liabilities issued	28	-1,602	-1,514
Proceeds from other borrowing		-2	
Proceeds from capital securities		-1	
Purchase of treasury shares		-500	
Dividends paid to the owners of the parent company	32	-840	-639
Dividends paid to non-controlling interests		-3	
Interest paid AT1 capital securities		-91	-91
Payment of lease liabilities		-115	-94
Cash flow from financing activities		**2,948**	**-7,383**
Net increase/(decrease) of cash and cash equivalents		**-5,433**	**6,082**
Cash and cash equivalents as at 1 January		68,027	61,887
Effect of exchange rate differences on cash and cash equivalents		14	58
Cash and cash equivalents as at 31 December		**62,608**	**68,027**
Supplementary disclosure of operating cash flow information			
Interest paid		2,455	1,397
Interest received		7,934	7,017
Dividend received excluding associates		8	10

(in millions)	Note	31 December 2022	31 December 2021
Cash and balances at central banks	13	60,865	66,865
Loans and advances banks (less than 3 months)[1]		1,743	1,162
Total cash and cash equivalents[1]		**62,608**	**68,027**

[1] Loans and advances banks with an original maturity of 3 months or more is included in loans and advances banks.

Notes to the Consolidated Annual Financial Statements

1 Accounting policies

The notes to the Consolidated Annual Financial Statements, including the audited information in the Risk, funding & capital chapter, are an integral part of these Annual Financial Statements. This section describes ABN AMRO Bank's significant accounting policies and critical accounting estimates or judgements relating to the Annual Financial Statements. If an accounting policy or a critical accounting estimate relates to a specific note, it is included in the relevant note.

Corporate information

ABN AMRO Bank N.V. (referred to as ABN AMRO Bank, ABN AMRO, the bank or the parent company) and its consolidated entities provide financial services in the Netherlands and abroad (together referred to as the group). ABN AMRO Bank is a public limited liability company, incorporated under Dutch law on 9 April 2009 in the Netherlands, and registered at Gustav Mahlerlaan 10, 1082 PP Amsterdam, the Netherlands (Chamber of Commerce number 34334259).

As at 31 December 2022, all shares in the capital of ABN AMRO Bank N.V. are held by two foundations: NLFI and STAK AAB. NLFI holds 56.3% in ABN AMRO Bank N.V., of which 49.9% is held directly via ordinary shares and 6.4% is held indirectly via depositary receipts for shares in ABN AMRO Bank N.V. STAK AAB holds 50.1% of the shares in the issued capital of ABN AMRO Bank N.V. Both foundations have issued depositary receipts for shares in ABN AMRO Bank N.V. Only STAK AAB's depositary receipts are issued with the cooperation of ABN AMRO Bank N.V. and traded on Euronext Amsterdam.

ABN AMRO provides a broad range of financial services to retail, private and corporate banking clients. These activities are conducted primarily in the Netherlands and selectively abroad.

The Consolidated Annual Financial Statements of ABN AMRO Bank for the year ended 31 December 2022 incorporate financial information of ABN AMRO Bank N.V., its controlled entities, interests in associates and joint ventures. The Annual Financial Statements were prepared by the Executive Board and authorised for issue by the Supervisory Board and Executive Board on 7 March 2023.

Statement of compliance

The Consolidated Annual Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Union (EU). They also comply with the financial reporting requirements set out in Title 9 of Book 2 of the Dutch Civil Code, where applicable.

Basis of preparation

The Consolidated Annual Financial Statements have been prepared on a historical cost basis, except for derivative financial instruments, financial assets and liabilities held for trading or designated as measured at fair value through profit or loss, financial instruments not held in a 'hold to collect' business model, debt instruments that do not meet the solely payments of principal and interest (SPPI) test, and equity investments in associates or joint ventures for which the venture capital exemption is applied, all of which are measured at fair value through profit or loss. The carrying values of recognised assets and liabilities that are hedged items in fair value hedges, and otherwise carried at amortised cost, are adjusted to record changes in fair value attributable to the risks that are being hedged. Associates and joint ventures are accounted for using the equity method.

The Annual Financial Statements are presented in euros, which is the presentation currency of ABN AMRO, rounded to the nearest million (unless otherwise stated).

The financial statements are prepared on a going concern basis.

Changes in accounting policies and presentation

Changes in accounting policies

The International Accounting Standards Board issued several amendments to existing standards (and endorsed by the EU), which become effective for the reporting period beginning 1 January 2023. The standards amended are:

- IAS 1 Disclosure of accounting policies;
- IAS 8 Definition of accounting estimate;
- IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction.

The impact of these amendments on the consolidated financial statements are insignificant.

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. IFRS 17 will replace IFRS 4 Insurance Contracts (IFRS 4) that was issued in 2005. IFRS 17 applies to all types of insurance contracts (i.e., life, non-life, direct insurance and re-insurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features. A few scope exceptions will apply. IFRS 17 introduces new accounting requirements for banking products with insurance features that may affect the determination of which instruments or which components thereof will be in the scope of IFRS 9 or IFRS 17.

IFRS 17 is effective for reporting periods beginning on or after 1 January 2023, with comparative figures required. ABN AMRO does not apply for an early application of IFRS 17.

ABN AMRO has completed the assessment of the impacts of adopting IFRS 17.

ABN AMRO offers limited banking products with significant insurance risk embedded, such as equity release mortgages and loans with a death waiver, and has assessed that the impact of IFRS 17 on these insurance contracts is not material, except for the equity release mortgage.

Currently, ABN AMRO applies unbundling of the loan component from the insurance contract for equity release mortgage, which was permitted in accordance with IFRS 4. The loan component was measured at amortised cost in accordance with IFRS 9 and the insurance component, the No Negative Equity Guarantee (NNEG), as an insurance contract in accordance with IFRS 4, which meant the measurement was based on IAS 37.

In accordance with the currently issued IFRS 17, unbundling of the loan component from the insurance contract is not permitted anymore. For loan contracts (such as equity release mortgages and loans with a death waiver) that meet the definition of insurance but limit the compensation for insured events to the amount otherwise required to settle the policyholder's obligation created by the contract, the issuers of such loans, have an option to apply IFRS 9 or IFRS 17. The election would be made at a portfolio level and would be irrevocable. ABN AMRO's policy is to apply IFRS 9 to such loans. Since ABN AMRO has chosen to apply IFRS 9 to the equity release mortgage, these loans in their entirety, i.e. including the NNEG feature, do not meet the SPPI criterion. Therefore they should be measured in their entirety at fair value through profit or loss as of 1 January 2023. ABN AMRO applies the change in classification and measurement retrospectively.

Furthermore, ABN AMRO has a captive insurance entity (ABN AMRO Captive N.V.) and two equity accounted insurance entities (Neuflize Vie S.A. and Nationale Nederlanden – ABN AMRO Verzekeringen Holding B.V.). IFRS 17 has an impact on the shareholders' equity, net result, presentation and disclosures of these entities.

The total IFRS 17 impact on the opening equity balance (retained earnings) of 2023 is approximately EUR 200 million, mainly because the fair value of the equity release mortgages as of 1 January 2023 is significantly below the carrying amount at amortised cost due to the increased mortgage rates.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37

In May 2020, the IASB issued amendments to IAS 37 to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making. The amendments apply a 'directly related cost approach'. The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. The amendments are effective for annual reporting periods beginning on or after 1 January 2022.

Based on the amendments, certain other directly related costs have been included by ABN AMRO in the measurement of provisions in scope of IAS 37.

Changes in presentation

Prior to 1 January 2022, the reconciliation between the carrying amounts at the beginning and the end of the period for each component of equity changes resulting from other comprehensive income were disclosed in a separate table as part of the statement of changes in equity. In 2022, the movement schedule explaining the equity components of other comprehensive income including the comparatives was moved to Note 33 Equity attributable to owners of the parent company.

Furthermore, in 2022, ABN AMRO changed the presentation of 'Items that may be reclassified to the income statement' in the Statement of Other Comprehensive Income including comparatives to provide more relevant information about the effect of the reclassification adjustments.

New standards, amendments and interpretations not yet endorsed

The International Accounting Standards Board issued the following amendments to existing standards that are not yet endorsed by the EU. It is expected that these amendments will become effective for the reporting period beginning 1 January 2024. Since the amendments are not yet endorsed these changes are not open for early adoption. The standards amended are:

- IAS 1 Classification of liabilities as current or non-current;
- IFRS 16 Lease liability in a sale and lease back.

The expected impact of these changes on the consolidated financial statements is insignificant.

Critical accounting estimates and judgements

In preparing the financial statements, management needs to exercise its judgement in the process of applying ABN AMRO's accounting policies and make estimates and assumptions concerning the future. Actual results may differ from those estimates and assumptions. Accounting policies for the most significant areas that require management to make judgements and estimates affecting reported amounts and disclosures are made in the following sections:

- Impairment losses on financial assets measured at AC - Risk, funding & capital management section
- Income tax expense, tax assets and tax liabilities - Note 11
- Impairment of instruments measured at FVOCI - Note 17
- Fair value of financial instruments - Note 19
- Impairment of ROU assets and goodwill - Note 24
- Provisions - Note 30

The year 2022 saw the outbreak of the war in Ukraine, while the impact of Covid-19 became less pronounced. Additionally, energy prices have risen significantly in ABN AMRO's major markets. These developments could impact the estimated expected credit losses of the financial instruments in scope of IFRS 9. The impact on the estimates and assumptions is disclosed in more detail in the Risk, funding & capital management section.

Assessment of risks, rewards and control

Whenever ABN AMRO is required to assess risks, rewards and control, as well as when considering the recognition and derecognition of assets or liabilities and the consolidation or deconsolidation of subsidiaries, it may sometimes be required to use judgement. Although management uses its best knowledge of current events and actions in making such assessments, the actual risks, rewards and control may ultimately differ.

Significant accounting policies

Basis of consolidation

The Consolidated Annual Financial Statements of ABN AMRO Bank N.V. include the financial statements of the parent company and its controlled entities, thus incorporating the assets, liabilities, revenues and expenses of ABN AMRO Bank N.V. and its subsidiaries. Non-controlling interests (held by third parties) in the equity and results of group companies are presented separately in the Consolidated Annual Financial Statements.

Subsidiaries are included using the same reporting period and consistent accounting policies. Intercompany balances and transactions, as well as any related unrealised gains and losses, are eliminated in preparing the Consolidated Financial Statements.

Unrealised gains arising from transactions with associates and jointly controlled entities are eliminated to the extent of ABN AMRO's interest in the entities. Unrealised losses are also eliminated unless the transaction provides evidence of impairment in the asset transferred.

Foreign currency

ABN AMRO applies IAS 21 The Effects of Changes in Foreign Exchange Rates. Transactions in foreign currencies are translated into euros at the rate prevailing on the transaction date. Foreign currency balances of monetary items are translated into euros at period-end exchange rates. Exchange gains and losses on such balances are recognised in the income statement.

The Consolidated Annual Financial Statements are stated in euros, which is the presentation and functional currency of ABN AMRO. The bank's foreign operations may have different functional currencies. The functional currency is the currency that best reflects the economic substance of the underlying event and circumstances relevant to that entity. Prior to consolidation (or equity accounting), the assets and liabilities of non-euro operations are translated into euros at the closing rate, and items in the income statement and other comprehensive income are translated at the rate prevailing on the transaction dates. Exchange differences arising on the translation of foreign operations are included in the currency translation reserve within equity. These are transferred to the income statement when the bank loses control, joint control or significant influence over the foreign operation.

Financial assets and liabilities

Classification and measurement of financial assets

ABN AMRO classifies financial assets based on the business model in which they are held in accordance with IFRS 9. The business model is determined at portfolio level. Portfolios are based on how ABN AMRO manages financial assets in order to achieve a particular business objective. The business model assessment is based on the level of sales, risk management, performance evaluation and management compensation. Derecognition is used as a condition to determine whether a transaction results in a sale.

Three business models are distinguished:
- 'Hold to collect' business model, in which cash flows are primarily generated by collecting contractual cash flows until maturity of the financial instrument. Sales can occur, as long as they are incidental, infrequent and insignificant. The assessment of the frequency and significance of sales is determined for each underlying portfolio. Sales that result from increases in the credit risk of the counterparty or take place close to maturity do not contradict the 'hold to collect' business model;
- 'Hold to collect and sell' business model, in which the selling of financial assets is integral to achieving the business objective. In this business model, sales take place more frequently and have a greater value than in a hold-to-collect business model;
- Other business models not meeting the criteria of the business models mentioned above, for example business models in which financial assets are managed with the objective of generating cash flows from sales (trading book), are measured at FVTPL.

After the business model has been determined, the contractual cash flows of financial assets are assessed. Debt instruments can be classified at amortised cost or FVOCI only when the contractual cash flows are solely payments of principal and interest (SPPI). Contractual cash flows that are SPPI are consistent with a basic lending arrangement in which consideration for the time value of money and credit risk are typically the most significant interest elements. Debt instruments that do not meet the SPPI requirements are mandatorily measured at FVTPL. Financial assets are assessed in their entirety, including any embedded derivatives that are not separated from the host contract.

Based on the business model determined and the SPPI assessment, the following measurement categories are identified under IFRS 9:
- Amortised cost – Financial instruments measured at amortised cost are debt instruments within a 'hold to collect' business model with fixed or determinable payments which meet the SPPI criteria. These instruments are initially measured at fair value (including transaction costs) and subsequently measured at amortised cost using the effective interest rate method. Financial instruments measured at amortised cost are presented net of credit loss allowances in the statement of financial position;

- FVTPL – Financial instruments measured at FVTPL include instruments held for trading, derivatives, equity instruments for which the FVOCI option has not been elected and instruments whose cash flows do not meet the SPPI requirements. Changes in the fair value of these instruments are directly recognised in the income statement;
- FVOCI – Financial instruments measured at FVOCI are debt instruments which are held in a 'hold to collect and sell' business model and which meet the SPPI criteria. They are initially measured at fair value, with subsequent unrealised changes recognised in other comprehensive income. Equity instruments for which the fair value option is elected are also measured at FVOCI.

Reclassifications of financial assets are expected to be very infrequent and occur only when ABN AMRO changes its business model for a certain portfolio of financial assets.

Please refer to the Risk, funding & capital management section for our accounting policies on the measurement of expected credit losses on financial instruments measured at amortised cost and FVOCI.

Classification of assets and liabilities held for trading

A financial asset or financial liability is classified as held for trading if it is:
- Acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
- Part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking; or
- A trading derivative (except for a derivative that is a designated and effective hedging instrument).

Classification and measurement of financial liabilities

Financial liability is initially recognised at its fair value minus, in the case of a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial liability. Under IFRS 9, financial liabilities are classified as subsequently measured at amortised cost, except for the following instruments:
- Financial liabilities held for trading are measured at fair value through profit or loss;
- Financial liabilities that ABN AMRO has irrevocably designated at initial recognition as held at fair value through profit or loss when the instruments are held to reduce an accounting mismatch are managed on the basis of their fair value or include terms that have derivative characteristicsby nature.

Under IFRS 9, the changes in fair value attributable to changes in the credit risk of financial liabilities designated at FVTPL are presented in other comprehensive income. The cumulative amount of changes in fair value attributable to credit risk of such liabilities is presented as liability own credit risk reserve in equity.

Financial liabilities are never reclassified after initial recognition.

Recognition and derecognition

Traded instruments are recognised on the trade date, which is defined as the date on which ABN AMRO commits to purchase or sell the underlying instrument. If the settlement terms are non-standard, the commitment is accounted for as a derivative between the trade and settlement dates. Loans and advances are recognised when they are acquired or funded by ABN AMRO and derecognised when settled. Issued debt is recognised when issued, and deposits are recognised when the cash is deposited with ABN AMRO. Other financial assets and liabilities, including derivatives, are recognised when ABN AMRO becomes a party to the contractual provisions of the asset or liability.

Financial assets are derecognised when ABN AMRO loses control and the ability to obtain benefits from the contractual rights that comprise that asset. This occurs when the rights are realised or expire, or when substantially all risks and rewards are transferred. Financial assets are also derecognised if the bank has neither transferred nor retained substantially all risks and rewards of ownership, but control has passed to the transferee. Financial assets continue to be recognised in the balance sheet, and a liability recognised for the proceeds of any related funding transaction, unless a fully proportional share of all or specifically identified cash flows are transferred to the lender without material delay and the lender's claim is limited to those cash flows, and substantially all the risks, rewards and control associated with the financial instruments, that have been transferred, in which case that proportion of the asset is derecognised.

When the terms and conditions of a financial asset have been renegotiated or otherwise modified to the extent that, substantially, it becomes a new financial asset, ABN AMRO derecognises the financial asset, with the difference recognised in the income statement, to the extent that an impairment loss has not already been recorded. The newly recognised financial asset is classified as stage 1 for ECL measurement purposes. ABN AMRO assesses, in both qualitative and quantitative terms, whether such modifications are substantial. Generally, a 10% change in the net present value of the cash flows between the initial and new contract results in a derecognition. With regard to substantial modifications, e.g. due to forbearance measures, the derecognition gains or losses are recognised in net gains/(losses) on derecognition of financial assets measured at amortised cost and disclosed separately, if material.

If the modification of the financial asset does not result in derecognition, the gross carrying amount of the financial asset is recalculated, based on the net present value of the new contractual cash flows, and discounted at the financial asset's original effective interest rate. The effect is recognised and disclosed as a modification loss in the income statement. Credit related modification gains or losses (i.e. due to forbearance measures) are recognised in the income statement and presented under impairment charges on financial instruments. Non-credit related modification gains or losses are recognised in the income statement and presented under interest income calculated using the effective interest method.

Financial liabilities are derecognised when the liability has been settled, has expired or has been extinguished. An exchange of an existing financial liability for a new liability with the same lender on substantially different terms, qualitatively and quantitatively (a 10% difference in the present value of the cash flows), is accounted for as an extinguishment of the original financial liability and recognition of a new financial liability. The difference between the former amortised cost and the consideration paid is recognised in the income statement.

Client clearing

As a general clearing member, ABN AMRO provides clearing and settlement services to its clients for, among other things, exchange-traded derivatives.

In its capacity as a clearing member, ABN AMRO guarantees the fulfilment of obligations towards central counterparty clearing houses (CCPs) of clients' transactions. ABN AMRO is not liable to clients for the non-performance of the CCP. In the event of a client defaulting, ABN AMRO has the legal obligation to settle all the client's positions with the relevant CCPs, possibly at a loss. Possible losses arising from this guarantee might relate not only to a client's current positions, but also to the client's future trades. ABN AMRO receives and collects (cash) margins from clients, and remits these margins to the relevant CCP in whole or in part. Given the stringent margin requirements set by the CCPs, possible future outflows of resources for new clearing transactions are considered close to zero.

ABN AMRO does not reflect the exchange-traded derivatives cleared on behalf of clients in its financial statements. Under normal circumstances, the guarantee has no fair value and is not recognised in the financial statements. Any loss recognised in the event of non-performance of a client is in line with our contingent liabilities policy.

Offsetting

The bank offsets financial assets and liabilities and the net amount reported in the statement of financial position if it is legally entitled to set off the recognised amounts and intends to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Statement of cash flows

For the purposes of the statement of cash flows, cash and cash equivalents comprise cash on hand, freely available balances with central banks and other banks, and net balances on current accounts with other banks with a maturity of less than three months from the date of acquisition. The statement of cash flows, based on the indirect method of calculating operating cash flows, gives details of the source of cash and cash equivalents which became available during the year and the application of these cash and cash equivalents over the course of the year. The cash flows are analysed into cash flows from operations, including banking activities, investment activities and financing activities. Movements in loans and advances and interbank deposits are included in the cash flow from operating activities. Investment activities are comprised of acquisitions, sales and redemptions in respect of financial investments, as well as investments in, and sales of, subsidiaries and associates, property and equipment. The issuing of shares and the borrowing and repayment of long-term funds are treated as financing activities. Cash flows arising from foreign currency transactions are translated into euros using the exchange rates at the date of the cash flows.

Government grants
Government grants are recognised in the income statement on a systematic basis over the periods that the related expenses, which the grants are intended to compensate, are recognised. In the case of an income-related grant, the grant is deducted from the related expense.

Levies and other regulatory charges
ABN AMRO recognises a liability arising from levies and similar charges when it becomes legally enforceable (i.e. when the obligating event arises).

2 Segment reporting

Accounting policy for segment reporting
The segment reporting is in accordance with IFRS 8 Operating Segments. The segments are reported in a manner consistent with internal reporting provided to the Executive Board, which is responsible for allocating resources and assessing performance and has been identified as the chief operating decision-maker. All transactions between segments are eliminated as intersegment revenues and expenses in Group Functions. Geographical data are presented according to the management view.

Segment assets, liabilities, income and results are measured based on our accounting policies and include items directly attributable to a segment, as well as those that can be allocated on a reasonable basis. Transactions between segments are conducted on an arm's length basis. Interest income is reported as net interest income because management primarily relies on net interest income as a performance measure, not gross income and expense.

Change in reportable segments
Effective from the start of 2022, ABN AMRO has simplified and centralised its operating model. The organisational structure has also been strengthened and simplified by replacing the four business lines with three units structured around client segments (the 'client units'). ABN AMRO has realigned the new organisational structure with internal reporting to the Executive Board (CODM):
- Retail Banking and part of Commercial Banking have been combined to form Personal & Business Banking;
- Private Banking has been replaced by Wealth Management;
- Corporate & Institutional Banking and part of Commercial Banking have been combined to form Corporate Banking.

The prior-period figures in the financial information for these segments, as included in the Performance (and Segment Reporting Note) section of this report, have been restated accordingly.

Personal & Business Banking
This client unit serves consumer and business clients with banking and partner offerings, providing the convenience of digital interactions and access to expertise when it matters most.

Wealth Management
The Wealth Management client unit delivers outstanding expertise with tailored value propositions for wealthy clients, focusing on investment advice, financial planning and real estate financing.

Corporate Banking
This expertise-driven client unit delivers tailored financing, capital structuring and transaction banking solutions for medium-sized and large corporate clients and financial institutions. Corporate Banking also offers Entrepreneur & Enterprise as a bank-wide service concept for business and wealthy clients, in close collaboration with Wealth Management.

Group Functions
Group Functions consists of the following support function departments: Finance, Risk Management, Innovation & Technology, Human Resources, Group Audit, Legal & Corporate Office, Brand Marketing & Communications, Strategy & Innovation and a Sustainability Centre of Excellence. Group Functions is not a client unit, but part of the reconciliation. The majority of Group Functions' costs are allocated to the client units.

Segment income statement for the year 2022

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	Total 2022
Income					
Net interest income	2,707	764	2,112	-161	5,422
Net fee and commission income	526	595	682	-25	1,778
Net income from other operating activities	78	99	117	-44	249
Net trading income	10		272		282
Share of result in equity-accounted investments	13	19	75	1	107
Net gains/(losses) on derecognition of financial assets measured at amortised cost			-12	14	1
Operating income	**3,334**	**1,477**	**3,246**	**-216**	**7,841**
Expenses					
Personnel expenses	463	390	600	1,004	2,458
General and administrative expenses	660	208	461	1,466	2,796
Depreciation, amortisation and impairment losses of tangible and intangible assets	6	28	10	128	172
Intersegment revenues/expenses	1,529	381	679	-2,588	
Operating expenses	**2,658**	**1,007**	**1,750**	**11**	**5,425**
Impairment charges on financial instruments	73	29	-68	5	39
Total expenses	**2,731**	**1,036**	**1,682**	**15**	**5,464**
Profit/(loss) before taxation	**603**	**440**	**1,564**	**-231**	**2,376**
Income tax expense	144	93	365	-93	509
Profit/(loss)	**459**	**347**	**1,199**	**-138**	**1,867**
Attributable to:					
Owners of the parent company	459	347	1,199	-138	1,868

Segment income statement for the year 2021

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	2021 Total
Income					
Net interest income	2,502	634	1,875	198	5,210
Net fee and commission income	438	601	645	-21	1,664
Net income from other operating activities	23	33	101	507	663
Net trading income	-2		197	-50	145
Share of result in equity-accounted investments	12	14	-3		23
Net gains/ (losses) on derecognition of financial assets measured at amortised cost			-106	-2	-108
Operating income	**2,974**	**1,283**	**2,709**	**632**	**7,597**
Expenses					
Personnel expenses	462	387	602	873	2,324
General and administrative expenses	769	198	447	1,874	3,287
Depreciation, amortisation and impairment losses of tangible and intangible assets	5	28	18	143	194
Intersegment revenues/expenses	1,440	343	679	-2,462	
Operating expenses	**2,677**	**956**	**1,746**	**427**	**5,806**
Impairment charges on financial instruments	-23	-6	-15	-3	-46
Total expenses	**2,654**	**950**	**1,731**	**425**	**5,759**
Profit/(loss) before taxation	**320**	**333**	**978**	**207**	**1,838**
Income tax expense	92	95	247	169	604
Profit/(loss)	**228**	**238**	**730**	**38**	**1,234**
Attributable to:					
Owners of the parent company	228	238	730	35	1,231
Non-controlling interests				3	3

Total bank

Net interest income increased by EUR 213 million to EUR 5,422 million in 2022, compared with EUR 5,210 million in 2021. Excluding large incidentals, net interest income decreased by EUR 70 million, mainly due to a significant decrease in mortgage prepayment penalties, lower Treasury results and asset margin pressure (in residential mortgages and consumer loans), partly offset by higher interest margins on deposits in the final quarter of 2022, recorded in all client units.

Net fee and commission income increased by EUR 114 million to EUR 1,778 million in 2022. This increase related mainly to higher transaction volumes and pricing from personal clients, improved credit card usage in ICS and higher transaction volumes at Clearing due to increased market volatility throughout 2022.

Net income from other operating activities amounted to EUR 249 million in 2022 (2021: EUR 663 million), mainly due to large incidentals in 2022 (loss due to the change in the TLTRO III terms and conditions) and 2021 (gain on the sale and leaseback of the Amsterdam head office).

Net trading income increased by EUR 137 million to EUR 282 million, mainly due to positive trading results at Global Markets (impacted by the significant increase in interest rates and FX developments throughout 2022) and higher CVA/DVA/FVA results (EUR 60 million in 2022 versus EUR 46 million in 2021).

Share of result in equity-accounted investments increased by EUR 84 million in 2022, mainly due to the transaction gain on the divestment of the MP Solar stake in Q3.

Derecognition of financial assets was nil for the year. Last year there was a significant discount to book value on a loan disposal as part of the wind-down of the CIB non-core portfolio, booked in Q2 2021.

Personnel expenses increased by EUR 134 million to EUR 2,458 million in 2022 (2021: EUR 2,324 million). Excluding large incidentals, these expenses increased by EUR 100 million, mainly due to the 4% salary increase agreed under the new CLA and higher FTE for AML-related activities, IT and strategy execution throughout 2022.

General and administrative expenses decreased by EUR 491 million to EUR 2,796 million in 2022 (EUR 3,287 million in 2021). Excluding large incidentals, general and administrative expenses decreased by EUR 57 million, mainly due to lower regulatory levies and lower expenses from external staffing, partly related to our AML activities.

Depreciation and amortisation decreased by EUR 22 million in 2022, mainly due to a decrease in building and equipment depreciation.

Impairment charges recorded an addition of EUR 39 million for 2022 (2021: release of EUR 46 million), resulting in a cost of risk of 3bps in 2022, compared to -7bps in 2021. Charges were attributable to a more unfavourable economic scenario during the year, partly offset by releases from management overlays and releases in the existing stage 3 portfolio. The releases in stage 3 can be largely attributed to better performance of the existing defaulted portfolio, repayments of stage 3 loans, outflow to the performing portfolio and recoveries.

There was no revenue from transactions with a single external client or counterparty exceeding 10% of the bank's total revenue in 2022 or 2021.

Personal & Business Banking

Net interest income increased to EUR 2,707 million (2021: EUR 2,502 million). Excluding large incidentals, net interest income increased mainly due to improved deposit interest margins.

Net fee and commission income rose to EUR 526 million (2021: EUR 438 million), reflecting recovery in credit card usage (ICS) and higher payment service income (due to higher pricing and transaction volume).

Net income from other operating activities was EUR 78 million in 2022 (2021: EUR 23 million), mainly reflecting results from divestments.

Personnel expenses amounted to EUR 463 million in 2022 (2021: EUR 462 million). The impact of the new CLA was fully mitigated by a decrease in employee FTEs.

General and administrative expenses decreased by EUR 109 million, totalling EUR 660 million, in 2022. Excluding incidentals, the decrease was mainly due to lower regulatory levies and lower expenses for external staff.

Impairment charges recorded a charge of EUR 73 million in 2022 (2021: release of EUR 23 million), mainly due to model-based additions because macroeconomic variables deteriorated throughout the year.

Wealth Management

Net interest income increased by EUR 130 million and amounted to EUR 764 million in 2022. This increase was mainly attributable to improved margins on deposits due to rising interest rates.

Net fee and commission income remained nearly flat, amounting to EUR 595 million (2021: EUR 601 million) as stock markets opened to a strong start in 2022 but then declined throughout the year.

Net income from other operating activities totalled EUR 99 million in 2022, an increase of EUR 66 million. This was mainly due to the results from the sale of ABN AMRO Pensioeninstelling.

Personnel expenses remained nearly flat at EUR 390 million in 2022 (2021: EUR 387 million).The impact of the new CLA in the last quarter of 2022 was partly mitigated by staff-related provision releases.

General and administrative expenses slightly increased by EUR 10 million to EUR 208 million in 2022, mainly due to higher IT expenses and provision amounts, which were offset by lower regulatory levies and lower expenses for external staff.

Impairment charges recorded a charge of EUR 29 million in 2022 (2021: a release of EUR 6 million), reflecting both model-based increases and stage 3 additions.

Corporate Banking

Net interest income increased to EUR 2,112 million in 2022 (2021: EUR 1,875 million), mainly due to a EUR 289 million increase in CB core, reflecting business growth (increased lending volume) and improved deposit margins. This was partially offset by a EUR 52 million decrease in CB non-core due to the successful wind-down.

Net fee and commission income recorded an increase of EUR 37 million, mainly at Clearing and due to increased market volatility throughout 2022.

Net income from other operating activities was EUR 117 million (2021: EUR 101 million), mainly reflecting positive equity stake revaluations, partly offset by a decrease in the result from private equity investments.

Share of result in equity-accounted investments increased by EUR 78 million in 2022, mainly due to the gain on the divestment of the MP Solar stake in Q3.

Net trading income increased by EUR 75 million to EUR 272 million, mainly due to positive trading results at Global Markets (impacted by the significant increase in interest rates and FX developments throughout 2022) and higher CVA/DVA/FVA results (EUR 60 million in 2022 versus EUR 46 million in 2021).

Derecognition of financial assets came out at EUR 12 million negative in 2022 (2021: EUR 106 million negative). The figure for 2021 includes a significant discount to book value, booked in Q2 2021, on a loan disposal as part of the wind-down of the CIB non-core portfolio.

Personnel expenses remained flat at EUR 600 million in 2022, compared to EUR 602 million in 2021. The impact of the new CLA was fully mitigated by releases on staff-related provisions and a decrease in employee FTEs.

General and administrative expenses increased by EUR 14 million to EUR 461 million in 2022, mainly due to an increase in staff-related costs and expenses for external staff.

Impairment charges recorded a net release of EUR 68 million in 2022 (2021: EUR 15 million release), mainly due to Stage 3 releases throughout 2022.

Group Functions

Net interest income decreased by EUR 359 million to EUR 161 million negative in 2022 (2021: EUR 198 million), mainly due to lower treasury results and lower mortgage prepayment penalties.

Net income from other operating activities decreased by EUR 551 to EUR 44 million negative in 2022 (2021: EUR 507 million) mainly due to large incidentals and volatile items in both years.

Personnel expenses increased by EUR 131 million to EUR 1,004 million in 2022, mainly due to the upscaling of AML activities reflected in the increase in employee FTEs and the impact of the new CLA.

General and administrative expenses decreased by EUR 408 million to EUR 1,466 million in 2022 (2021: EUR 1,874 million). This was due to the AML settlement in 2021 (EUR 480 million), partly offset by additional provisions for AML remediation activities in 2022.

Selected assets and liabilities per segment

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	Total
					31 December 2022
Assets					
Financial assets held for trading		1	907		907
Derivatives		1	4,836	375	5,212
Securities financing			6,545	13,487	20,032
Residential mortgages	144,537	6,072		-9,489	141,121
Consumer loans	4,588	4,725	642		9,955
Corporate loans	8,617	6,172	69,751	820	85,360
Other loans and advances customers	40	11	7,316	124	7,491
Other	1,687	1,873	11,071	94,872	109,503
Total assets	**159,469**	**18,856**	**101,068**	**100,189**	**379,581**
Liabilities					
Financial liabilities held for trading			641		641
Derivatives	8	15	3,664	461	4,148
Securities financing			47	9,605	9,652
Current accounts	47,828	25,534	48,104	565	122,030
Demand deposits	69,065	28,549	2,782		100,397
Time deposits	5,902	10,473	7,310	6,411	30,096
Other due to customers	123		2,367	2	2,491
Other	36,543	-45,715	36,153	60,330	87,311
Total liabilities	**159,469**	**18,856**	**101,068**	**77,375**	**356,767**

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	Total
					31 December 2021
Assets					
Financial assets held for trading			1,155		1,155
Derivatives		15	3,002	768	3,785
Securities financing			5,624	10,514	16,138
Residential mortgages	141,098	5,171		1,442	147,711
Consumer loans	5,318	4,937	263		10,518
Corporate loans	9,376	5,739	68,706	1,193	85,014
Other loans and advances customers	31	6	14,858	113	15,008
Other	1,673	2,538	11,247	104,327	119,784
Total assets	**157,495**	**18,405**	**104,856**	**118,357**	**399,113**
Liabilities					
Financial liabilities held for trading			687		687
Derivatives		4	3,542	798	4,344
Securities financing			2	9,493	9,494
Current accounts	42,898	29,457	59,875	753	132,983
Demand deposits	68,155	30,428	207		98,790
Time deposits	6,057	3,449	3,867	5,408	18,780
Other due to customers	166		478	21	665
Other	40,219	-44,932	36,199	79,886	111,371
Total liabilities	**157,495**	**18,405**	**104,856**	**96,358**	**377,114**

Geographical segments

(in millions)	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						2022
Income						
Net interest income	4,943	335	75	38	31	5,422
Net fee and commission income	1,223	349	108	92	7	1,778
Net income from other operating activities	177	38	10	6	19	249
Net trading income	312		-2		-28	282
Share of result in equity-accounted investments	88	19				107
Net gains/ (losses) on derecognition of financial assets measured at amortised cost	-10		-4	14	1	1
Operating income	**6,732**	**741**	**187**	**151**	**30**	**7,841**
Expenses						
Personnel expenses	1,967	333	95	45	17	2,458
General and administrative expenses	2,554	182	33	17	10	2,796
Depreciation and amortisation of tangible and intangible assets	144	31	-2	-2	1	172
Intersegment revenues/expenses	35	-30	1	8	-14	
Operating expenses	**4,700**	**516**	**127**	**69**	**14**	**5,425**
Impairment charges on financial instruments	76	12	-42	-7	-1	39
Total expenses	**4,776**	**528**	**85**	**62**	**14**	**5,464**
Profit/(loss) before taxation	**1,957**	**213**	**102**	**89**	**16**	**2,376**
Income tax expense	424	40	29	12	4	509
Profit/(loss)	**1,533**	**173**	**73**	**77**	**12**	**1,867**
Attributable to:						
Owners of the parent company	1,533	173	73	77	12	1,868
Non-controlling interests						

(in millions)	The Netherlands	Rest of Europe	USA	Asia	Rest of the world	Total
						2021
Income						
Net interest income	4,796	259	93	47	14	5,210
Net fee and commission income	1,137	346	92	80	9	1,664
Net income from other operating activities	629	35	5	4	-9	663
Net trading income	227	-90	-1		9	145
Share of result in equity-accounted investments	9	14				23
Net gains/ (losses) on derecognition of financial assets measured at amortised cost	7	-12	-119	7	8	-108
Operating income	**6,806**	**552**	**70**	**138**	**31**	**7,597**
Expenses						
Personnel expenses	1,827	320	99	59	20	2,324
General and administrative expenses	3,043	182	34	19	9	3,287
Depreciation and amortisation of tangible and intangible assets	160	31		3		194
Intersegment revenues/expenses		6	1	5	-12	
Operating expenses	**5,030**	**540**	**134**	**85**	**17**	**5,806**
Impairment charges on financial instruments	-107	17	45	-3	2	-46
Total expenses	**4,923**	**557**	**179**	**82**	**18**	**5,759**
Profit/(loss) before taxation	**1,884**	**-6**	**-109**	**55**	**13**	**1,838**
Income tax expense	566	11	16	12	-2	604
Profit/(loss)	**1,317**	**-17**	**-125**	**43**	**15**	**1,234**
Attributable to:						
Owners of the parent company	1,315	-17	-125	43	15	1,231
Non-controlling interests	3					3

3 Overview of financial assets and liabilities by measurement base

(in millions)	Amortised cost	Fair value through profit or loss - trading	Fair value through profit or loss - other	Fair value through other comprehensive income	Total
					31 December 2022
Financial assets					
Cash and balances at central banks	60,865				60,865
Financial assets held for trading		907			907
Derivatives		4,831	381		5,212
Financial investments			626	38,408	39,034
Securities financing	20,032				20,032
Loans and advances banks	2,982				2,982
Loans and advances customers	243,861		66		243,927
Other financial assets	3,457				3,457
Total financial assets	**331,198**	**5,739**	**1,072**	**38,408**	**376,417**
Financial liabilities					
Financial liabilities held for trading		641			641
Derivatives		3,671	477		4,148
Securities financing	9,652				9,652
Due to banks	17,509				17,509
Due to customers	255,015				255,015
Issued debt	56,036		223		56,259
Subordinated liabilities	7,290				7,290
Other financial liabilities	3,127				3,127
Total financial liabilities	**348,629**	**4,312**	**700**		**353,641**

(in millions)	Amortised cost	Fair value through profit or loss - trading	Fair value through profit or loss - other	Fair value through other comprehensive income	Total
					31 December 2021
Financial assets					
Cash and balances at central banks	66,865				66,865
Financial assets held for trading		1,155			1,155
Derivatives		2,975	810		3,785
Financial investments			580	42,585	43,165
Securities financing	16,138				16,138
Loans and advances banks	2,801				2,801
Loans and advances customers	258,146		104		258,251
Assets held for sale			86		86
Other financial assets	3,257				3,257
Total financial assets	**347,207**	**4,130**	**1,581**	**42,585**	**395,502**
Financial liabilities					
Financial liabilities held for trading		687			687
Derivatives		3,545	799		4,344
Securities financing	9,494				9,494
Due to banks	38,076				38,076
Due to customers	251,218				251,218
Issued debt	58,796		892		59,688
Subordinated liabilities	7,549				7,549
Other financial liabilities	2,844				2,844
Total financial liabilities	**367,977**	**4,231**	**1,691**		**373,899**

4 Net interest income

Accounting policy for net interest income

Interest income and expense on financial instruments is recognised in the income statement on an accrual basis using the effective interest rate method, except for those financial instruments measured at fair value through profit or loss. The effective interest rate method allocates interest, amortisation of any discount or premium or other differences, including transaction costs and qualifying fees and commissions, over the expected lives of the assets and liabilities. The effective interest rate is the rate that exactly discounts estimated future cash flows to the net carrying amount of the asset. As a result, this method requires ABN AMRO to estimate future cash flows, in some cases based on its experience of client behaviour, considering all contractual terms of the financial instrument, as well as the expected lives of the assets and liabilities. Interest on loans and advances measured at fair value through profit or loss is also included in net interest income and recognised using the contractual interest rate. Interest income and expense on trading balances is included in net trading income. Interest paid on assets with a negative interest yield is classified as interest expense. Interest received from liabilities with a negative interest yield is classified as interest income.

(in millions)		2022		2021
Interest income calculated using the effective interest method	7,698		6,760	
Other interest and similar income	236		258	
Interest income		**7,934**		**7,017**
Interest expense calculated using the effective interest method	2,455		1,397	
Other interest and similar expense	57		411	
Interest expense		**2,512**		**1,808**
Net interest income		**5,422**		**5,210**

Interest income

(in millions)	2022	2021
Interest income from:		
Financial investments at fair value through other comprehensive income	525	515
Securities financing	454	145
Loans and advances banks	388	58
Loans and advances customers	6,308	6,238
Non-trading derivatives - hedge accounting - Cash flow hedges	322	375
Non-trading derivatives - hedge accounting - Fair value hedges	-897	-1,291
Other	598	720
Interest income calculated using the effective interest method	**7,698**	**6,760**
Financial assets at fair value through profit or loss	2	4
Non-trading derivatives - no hedge accounting	78	53
Other	156	201
Other interest and similar income	**236**	**258**
Total interest income	**7,934**	**7,017**

Interest expense

(in millions)	2022	2021
Interest expenses from:		
Securities financing	262	69
Due to banks	119	67
Due to customers	833	320
Issued debt	932	864
Subordinated liabilities	337	352
Non-trading derivatives - hedge accounting - Cash flow hedges	472	411
Non-trading derivatives - hedge accounting - Fair value hedges	-498	-909
Other	-2	223
Interest expense calculated using the effective interest method	**2,455**	**1,397**
Financial liabilities at fair value through profit or loss	13	35
Non-trading derivatives - no hedge accounting	22	43
Other	22	333
Other interest and similar expense	**57**	**411**
Total interest expense	**2,512**	**1,808**

5 Net fee and commission income

Accounting policy for net fee and commission income

ABN AMRO applies IFRS 15 when recognising revenue from contracts with clients, all of which is included in net fee and commission income. After identifying contracts and their performance obligations, revenue is recognised as an amount that reflects the consideration to which the bank expects to be entitled in exchange for transferring promised services to clients. The transaction price is allocated to each performance obligation. Revenue is measured at the fair value of the consideration received, taking into account discounts and rebates. The amount of revenue recognised is discounted to the present value of consideration due, if payment extends beyond normal credit terms.

Revenue is recognised when a promised service is transferred to the client. Fees and commissions are recognised either:

- At a point in time: the fee is a reward for a service provided at a moment in time; or
- Over time (amortised): the fee relates to services on an ongoing basis.

ABN AMRO engages in transactions where more than one party is involved in providing services to a client. In the case of these transactions, ABN AMRO assesses whether it is a principal or an agent in the transaction by evaluating the nature of its promise to the client.

The bank is a principal if it controls the promised goods or services before they are transferred to a client. The bank is acting as an agent, of another party, if it provides a service of arranging for another party to transfer goods or services to a client and, as a result, does not control the specified goods or services. Control of goods and services refers to the ability to direct the use of, and obtain substantially all the remaining benefits from, the goods and services.

If the bank is assessed to be a principal in the transaction, it recognises revenue in the gross amount of the consideration to which it expects to be entitled in exchange for the specified goods or services transferred. If, however, the bank acts as an agent, it recognises revenue in the amount of the fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party. The fee or commission may be the net amount of consideration that the bank retains after paying the other party the consideration received in exchange for the goods or services to be provided by that party.

(in millions)	2022	2021
Fee and commission income	2,271	2,213
Fee and commission expense	493	550
Net fee and commission income	**1,778**	**1,664**

Fee and commission income

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	Total
					2022
Fee and commission income from:					
Securities and custodian services	15	58	541	2	617
Payment services	545	33	160		738
Portfolio management and trust fees	47	531	4		581
Guarantees and commitment fees	35	6	67	1	109
Insurance and investment fees	36	41			77
Other service fees	34	17	99		150
Total fee and commission income	**711**	**686**	**871**	**3**	**2,271**
Timing fee and commission income					
Recognised at a point in time	343	375	835	3	1,555
Recognised over time	369	311	36	1	716
Total fee and commission income	**711**	**686**	**871**	**3**	**2,271**

(in millions)	Personal & Business Banking	Wealth Management	Corporate Banking	Group Functions	Total
					2021
Fee and commission income from:					
Securities and custodian services	19	62	570	2	653
Payment services	444	29	159		632
Portfolio management and trust fees	51	548	4		603
Guarantees and commitment fees	39	6	69		114
Insurance and investment fees	49	39			87
Other service fees	20	15	89		123
Total fee and commission income	**621**	**699**	**891**	**3**	**2,213**
Timing fee and commission income					
Recognised at a point in time	304	369	821	2	1,497
Recognised over time	318	330	69		717
Total fee and commission income	**621**	**699**	**891**	**3**	**2,213**

Fee and commission expense

(in millions)	2022	2021
Fee and commission expenses from:		
Securities and custodian services	156	210
Payment services	200	191
Portfolio management and trust fees	67	73
Guarantees and commitment fees	28	28
Insurance and investment fees	24	31
Other service fees	18	16
Total fee and commission expense	**493**	**550**

6 Net income from other operating activities

Accounting policy for other operating income

Other operating income includes all other banking activities such as operating lease activities as lessor and results on the disposal of assets. It also includes the change in fair value of derivatives used for risk management purposes that do not meet the requirements for hedge accounting, ineffectiveness of hedging programmes, fair value changes relating to assets and liabilities measured at fair value through profit or loss, and changes in the value of derivatives related to such instruments. Dividend income from non-trading equity investments is recognised when entitlement is established. Income from operating lease activities is presented separately from the depreciation expense of the related assets.

(in millions)	2022	2021
Income from lease activities	152	163
Disposal of operating activities and equity-accounted investments	147	3
Result from financial transactions	7	245
Other	69	395
Income from other operating activities	**375**	**805**

(in millions)	2022	2021
Expenses from lease activities	125	142
Expenses from other operating activities	**125**	**142**

In October 2022, the ECB announced a change in interest terms and conditions of its targeted longer-term refinancing operations programme (TLTRO III). Since 24 June 2022, the interest rate sensitivity of the TLTRO III funding was designated in a hedge relationship. As a result of the change in conditions, the hedge relationship was no longer effective and therefore had to be terminated. The negative mark-to-market of the hedging instrument at the date of termination was EUR 300 million and is recognised in Results from Financial Transactions.

7 Net trading income

Accounting policy for net trading income

In accordance with IFRS 9, trading positions are held at fair value, and net trading income includes gains and losses arising from changes in the fair value of such financial assets and liabilities. The latter comprises gains and losses from trading financial assets and liabilities, interest income and expenses related to trading financial assets and liabilities, and dividends received from trading instruments. Dividend income and dividends from trading instruments are recognised at the dividend announcement date. Net trading income also includes changes in fair value arising from changes in counterparty credit spreads (CVA) and changes in own credit spreads (DVA) where these impact on the value of our trading assets and liabilities. The funding valuation adjustment (FVA) incorporates the incremental cost of funding into the valuation of uncollateralised and partly collateralised derivatives.

(in millions)	2022	2021
Interest instruments trading	155	28
Equity and commodity trading		7
Foreign exchange transaction results	127	110
Total net trading income	**282**	**145**

8 Net gains/(losses) on derecognition of financial assets measured at amortised cost

Accounting policy derecognition of financial assets

The net gains/(losses) on derecognition of financial assets measured at amortised cost includes gains and losses recognised on the sale or derecognition of these financial assets, calculated as the difference between the carrying amount (which is the amortised cost adjusted for the loss allowance) and the proceeds received.

The net gains on derecognition of financial assets measured at amortised cost comprise EUR 33 million gains and EUR 32 million losses due to haircuts on loan disposals as part of the non-core wind-down.

9 Personnel expenses

Accounting policy for personnel expenses

Salaries and wages, social security charges and other salary-related costs are recognised over the period in which the employees provide the services to which the payments relate. The accounting policies for pensions and other post-employment benefits are included in Note 31 Pension and other employee benefits.

(in millions)	2022	2021
Salaries and wages	1,810	1,726
Social security charges	242	220
Expenses relating to Defined post employment benefit plans	14	3
Defined contribution plan expenses	321	291
Other	72	84
Total personnel expenses	**2,458**	**2,324**

10 General and administrative expenses

Accounting policy for general and administrative expenses

Costs are recognised in the period in which services have been provided and to which the payment relates.

(in millions)	2022	2021
Agency staff, contractors and consultancy costs	810	875
Staff-related costs	52	38
Information technology costs	974	980
Housing	99	88
Post, telephone and transport	28	32
Marketing and public relations costs	92	84
Regulatory charges	426	463
Other	314	728
Total general and administrative expenses	**2,796**	**3,287**

(in millions)	2022	2021
Bank tax	97	150
Deposit Guarantee Scheme	93	127
Single Resolution Fund	207	159
Other regulatory levies	30	27
Total regulatory charges	**426**	**463**

Auditor’s fees to EY are included under agency staff, contractors and consultancy costs. The fees stated for the audit of the financial statements are based on the total fees for the audit of the financial statements, regardless of whether the procedures were performed before the year-end. These are specified in the following table.

(in millions)	2022	2021
Financial statements audit fees	15	15
Audit-related fees	2	2
Total auditor's fee	**17**	**17**

Financial statement audit fees relating to the audit of activities in the Netherlands amounted to EUR 13 million in 2022 (2021: EUR 13 million). Audit-related fees for activities in the Netherlands amounted to EUR 2 million in 2022 (2021: EUR 2 million).

Audit-related fees comprise services for regulatory reporting purposes, comfort letters and consent letters, assurance engagements on segregation of assets, assurance on service organisation reports and procedures agreed for supervisory purposes.

11 Income tax expense, tax assets and tax liabilities

Accounting policy for income tax expense, tax assets and tax liabilities

Income tax expense consists of current and deferred tax. Income tax is recognised in the income statement and in the statement of other comprehensive income in the period in which profits arise. Withholding taxes are included in income tax when these taxes become payable by a subsidiary, associate or joint arrangement on distributions to ABN AMRO. Income tax recoverable on tax-allowable losses is recognised as a current tax asset only to the extent that it is regarded as recoverable by offsetting against taxable profits arising in the current or prior period. Current tax is measured using tax rates enacted at the balance sheet date.

Deferred tax is recognised for qualifying temporary differences. Temporary differences represent the difference between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted at the balance sheet date. A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are offset only when there is both a legal right to offset and an intention to settle on a net basis.

(in millions)	2022	2021
Recognised in income statement:		
Current tax expenses for the current period	530	675
Adjustments recognised in the period for current tax of prior periods	-7	1
Total current tax expense	**522**	**676**
Deferred tax arising from the current period	2	-41
Impact of changes in tax rates on deferred taxes	1	-1
Deferred tax arising from the write-down or reversal of a write-down of a deferred tax asset	-13	-24
Deferred tax prior period	-2	-9
Previously unrecognised tax losses, tax credits and temporary differences reducing deferred tax expense	-1	3
Total deferred tax expense	**-13**	**-72**
Total income tax expense	**509**	**604**

Reconciliation of the total tax charge

The effective tax rate based on the consolidated income statement differs from the theoretical tax rate that would arise using the statutory tax rate of the Netherlands. This difference is explained in the following table.

(in millions)	2022	Effective tax rate	2021	Effective tax rate
Profit/(loss) before taxation	**2,376**		1,838	
Applicable tax rate	25.8%		25.0%	
Expected income tax expense	**613**		**459**	
International tax rate difference	-10	-0.4%	-5	-0.3%
Adjustment previous years	-9	-0.4%	-8	-0.4%
Change in tax rates	1	0.0%	-1	-0.1%
Bank tax	24	1.0%	36	2.0%
Non-taxable income	-3	-0.1%	-1	-0.1%
Non-deductible expenses	-6	-0.3%	152	8.3%
Tax exempted result (participation exemption)	-87	-3.7%	-45	-2.4%
Losses not benefited	-1	-0.1%	40	2.2%
Change recognition of deferred tax assets	-13	-0.5%	-24	-1.3%
Other tax effects	1	0.0%		0.0%
Actual income tax expense	**509**	**21.4%**	**604**	**32.9%**

The effective tax rate in 2022 (21.4%) is lower than in 2021 (32.9%). This decrease was mainly driven by the AML settlement recorded in 2021, which was not tax deductible. The effective tax rate of 21.4%, compared to the standard Dutch rate of 25.8%, was mainly driven by proceeds and revaluations exempted under the Dutch participation exemption, offset by the non-deductible Dutch bank tax.

Tax assets and liabilities

The most significant temporary differences arise from the revaluation of certain financial assets and liabilities, including derivative contracts, allowances for loan impairment and investments. The following table summarises the tax position.

	31 December 2022		31 December 2021	
(in millions)	Assets	Liabilities	Assets	Liabilities
Current tax	68	22	119	101
Deferred tax	497		620	
Total tax assets and liabilities	**565**	**22**	**739**	**101**

The significant components and annual movements in deferred tax assets and deferred tax liabilities are shown in the following tables.

(in millions)	As at 31 December 2021	Income statement	OCI	Equity	Other	As at 31 December 2022	Of which: deferred tax asset	Of which: deferred tax liability
Assets and liabilities held for trading, derivatives and financial investments	448	-1	-131			315	341	25
Property and equipment (excluding leases) and intangible assets	18	6				23	25	3
Loans	7	6				12	13	
Equity-accounted investments								
Leases	37	1				38	96	58
Pensions and other (post-)employment benefits	11	-1	-1			9	9	
Provisions	24	-2	-2			20	21	
Tax losses carried forward	51	-12			1	40	40	
Other	24	17	-2			39	49	10
Deferred tax assets (+) and liabilities (-)	**620**	**13**	**-137**			**497**	**593**	**97**
Offsetting deferred tax assets and liabilities							97	97
Net deferred tax assets (+) and liabilities (-)							**497**	

(in millions)	As at 31 December 2020	Income statement	OCI	Equity	Other	As at 31 December 2021	Of which: deferred tax asset	Of which: deferred tax liability
Assets and liabilities held for trading, derivatives and financial investments	560	1	-113			448	538	90
Property and equipment (excluding leases) and intangible assets	15	3				18	22	4
Loans	6	1				7	7	1
Equity-accounted investments	3	-3						
Leases	5	32				37	110	72
Pensions and other (post-)employment benefits	20	-6	-3			11	11	
Provisions	17	9	-2			24	24	
Tax losses carried forward	25	25				51	51	
Other	19	9	-5			24	47	23
Deferred tax assets (+) and liabilities (-)	**671**	**72**	**-123**		**1**	**620**	**811**	**191**
Offsetting deferred tax assets and liabilities							191	191
Net deferred tax assets (+) and liabilities (-)							**620**	

Deferred tax assets

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will allow the deferred tax asset to be recovered. Recognition is based on estimates of taxable income by jurisdiction in which ABN AMRO operates and the period over which deferred tax assets are recoverable. In the event that actual results differ from these estimates in future periods, changes to the recognition of deferred tax assets could be required and these could impact our financial position and net profit. No deferred income taxes have been recognised on undistributed earnings of ABN AMRO's subsidiaries, branches and interests in joint ventures.

Tax losses

The total accumulated losses available for carry-forward at 31 December 2022 amounted to EUR 1,428 million (31 December 2021: EUR 2,550 million), of which EUR 194 million (31 December 2021: EUR 202 million) was recognised for future tax benefits. The recorded deferred tax asset for tax losses carried forward amounted to EUR 40 million (31 December 2021: EUR 51 million).

Unrecognised tax assets

Certain amounts of deferred tax assets are not recognised because future taxable profits are not considered probable. Deferred tax assets for an amount of EUR 58 million (31 December 2021: EUR 83 million) have not been recognised in respect of deductible temporary differences of EUR 242 million (31 December 2021: EUR 342 million). In addition, deferred tax assets for an amount of EUR 239 million (31 December 2021: EUR 429 million) have not been recognised in respect of tax losses of EUR 1,234 million (31 December 2021: EUR 2,348 million).

In 2022, an amount of EUR 1,190 million of unrecognised tax losses was finally written off, due to liquidation of the company and branch holding these losses. No use for these losses could be identified.

Tax credits and unrecognised tax credits

ABN AMRO did not have any carry-forward tax credits at 31 December 2022.

Loss carry-forward by year of expiration

(in millions)	2022	2023	2024	2025	2026	2027	After 5 years	No expiration	Total
2022									
Loss carry-forward recognised							60	135	194
Loss carry-forward not recognised								1,234	1,234
Total tax losses carry-forward (gross)							**60**	**1,369**	**1,428**
2021									
Loss carry-forward recognised							24	177	202
Loss carry-forward not recognised	11	2	3	39	3			2,290	2,348
Total tax losses carry-forward (gross)	**11**	**2**	**3**	**39**	**3**		**24**	**2,468**	**2,550**

Of the total amount of recognised net deferred tax assets, EUR 20 million (31 December 2021: EUR 57 million) was related to entities that suffered a loss in either the current or preceding year. The recognition of these deferred tax assets is based on a projection of future taxable income.

Tax related to equity

Tax related to components of other comprehensive income and tax related to equity and movements in equity can be found in the Consolidated statement of comprehensive income and the Consolidated statement of changes in equity.

Income tax consequences of dividend

Dividends are, in principle, subject to a 15% withholding tax in the Netherlands. In 2022, ABN AMRO Bank N.V. withheld EUR 128 million of dividend withholding tax on dividends paid to its shareholders.

Country-by-country reporting

31 December 2022

	Principal subsidiary	Main activity	Total assets	Total operating income (in millions)	Average number of FTEs	Operating profit/(loss) before taxation (in millions)	Income tax expense (in millions)	Income tax paid (in millions)
Netherlands	ABN AMRO Bank N.V.	Personal & Business Banking	346,618	6,732	17,101	1,957	424	522
France	Banque Neuflize OBC S.A.	Wealth Management	4,935	320	848	80	13	7
Germany	ABN AMRO Bank N.V. Frankfurt Branch	Wealth Management	3,231	201	734	24	10	-4
Belgium	ABN AMRO Bank N.V. Branch Belgium	Wealth Management	1,105	91	373	10		
United Kingdom	ABN AMRO Asset based Finance N.V., UK branche	Corporate Banking	1,829	62	326	53	8	5
Norway	ABN AMRO Bank N.V. Oslo Branch	Corporate Banking	2,043	60	16	43	9	1
United States	ABN AMRO Clearing Chicago LLC	Corporate Banking	16,732	187	337	102	29	-4
Brazil	Banco ABN AMRO S.A.	Corporate Banking	210	14	33	12	4	
Singapore	ABN AMRO Clearing Singapore Pte. Ltd.	Corporate Banking	2,053	78	155	47	4	4
Hong Kong	ABN AMRO Clearing Hong Kong Ltd.	Corporate Banking	295	52	61	34	5	5
Japan	ABN AMRO Clearing Tokyo Co. Ltd.	Corporate Banking	262	20	23	8	2	4
Australia	ABN AMRO Clearing Sydney Pty Ltd.	Corporate Banking	337	15	68	3		2
Other			-69	8	5	4		
Total			**379,581**	**7,841**	**20,080**	**2,376**	**509**	**544**

31 December 2021

	Principal subsidiary	Main activity	Total assets	Total operating income (in millions)	Average number of FTEs	Operating profit/(loss) before taxation (in millions)	Income tax expense (in millions)	Income tax paid (in millions)
Netherlands	ABN AMRO Bank N.V.	Personal & Business Banking	364,653	6,806	16,491	1,884	566	421
France	Banque Neuflize OBC S.A.	Wealth Management	5,061	310	822	85	25	54
Germany	Bethmann Bank AG	Wealth Management	3,711	63	689	-118	2	8
Belgium	ABN AMRO Bank N.V. Branch Belgium	Wealth Management	1,268	87	381	10	5	
United Kingdom	ABN AMRO Asset based Finance N.V., UK branche	Corporate Banking	2,169	58	318	-18	-3	3
Norway	ABN AMRO Bank N.V. Oslo Branch	Corporate Banking	2,011	31	17	33	-18	
United States	ABN AMRO Clearing Chicago LLC	Corporate Banking	16,131	70	395	-109	16	32
Brazil	Banco ABN AMRO S.A.	Corporate Banking	224	11	55	7	-4	2
Singapore	ABN AMRO Bank N.V. Branch Singapore	Corporate Banking	3,037	83	214	35	5	6
Hong Kong	ABN AMRO Bank N.V. Branch Hong Kong	Corporate Banking	553	35	88	15	4	6
Japan	ABN AMRO Clearing Tokyo Co. Ltd.	Corporate Banking	57	20	18	9	3	3
United Arab Emirates	ABN AMRO Bank N.V. Branch UAE/DIFC	Wealth Management			2			
Australia	ABN AMRO Clearing Sydney Pty Ltd.	Corporate Banking	380	20	68	5	3	
Other			-143	5	25	-1		
Total			**399,113**	**7,597**	**19,583**	**1,838**	**604**	**534**

ABN AMRO received government grants for its participation in the TLTRO programmes in 2022 and 2021. For more information, please refer to the Note 27 Due to banks.

12 Earnings per share

The following table shows the composition of basic earnings per share at 31 December.

			2022			2021
(in millions)	Profit/(loss) for the period[1]	Number of shares	Earnings per share (in EUR)	Profit/(loss) for the period[1]	Number of shares	Earnings per share (in EUR)
Basic earnings	1,776	908	1.96	1,140	940	1.21

[1] Earnings consist of profit excluding results attributable to non-controlling interests and payments to holders of AT1 instruments.

ABN AMRO Bank N.V. does not have any dilutive potential ordinary shares. Therefore only basic earnings per ordinary share is disclosed. Basic earnings per ordinary share is calculated by dividing the profit attributable to the owners of the parent company by the weighted average number of ordinary shares outstanding. During 2022, a final dividend was distributed for 2021 of EUR 0.61 per share for a total of EUR 553 million and an interim dividend was distributed for 2022 of EUR 0.32 per share for a total of EUR 287 million. For the year 2022, a final dividend has been proposed of EUR 0.67 per share.

During the first half of 2022, ABN AMRO Bank N.V. conducted a EUR 500 million buyback programme. The buyback programme resulted in the purchase of 42 million ordinary shares throughout the first half year. As a result, the weighted average number of ordinary shares was 908 million.

13 Cash and balances at central banks

Accounting policy for cash and balances at central banks

Cash and balances at central banks are held at amortised cost. This item includes cash on hand and available demand deposits with central banks in countries in which the bank has a presence. Mandatory reserve deposits are disclosed in Note 20 Loans and advances banks.

(in millions)	31 December 2022	31 December 2021
Assets		
Cash on hand and other cash equivalents	342	12
Balances with central banks readily convertible in cash other than mandatory reserve deposits	60,523	66,853
Total cash and balances at central banks	**60,865**	**66,865**

14 Financial assets and liabilities held for trading

Accounting policy for financial assets and liabilities held for trading

In accordance with IFRS 9, all assets and liabilities held for trading are measured at fair value through profit or loss, with gains and losses in the changes of the fair value taken to net trading income in the income statement.

Financial assets held for trading

(in millions)	31 December 2022	31 December 2021
Trading securities		
Government bonds	214	480
Corporate debt securities	681	670
Equity securities	10	3
Total trading securities	**906**	**1,153**
Other trading assets	1	2
Total financial assets held for trading	**907**	**1,155**

These portfolios consist of primary dealership positions of ABN AMRO Bank N.V. in the respective countries and positions for the purpose of client facilitation.

Financial liabilities held for trading

(in millions)	31 December 2022	31 December 2021
Bonds	609	654
Equity securities	1	
Total short security positions	**610**	**654**
Other liabilities held for trading	32	33
Total financial liabilities held for trading	**641**	**687**

15 Derivatives

Accounting policy for derivatives

Derivatives comprise derivatives held for trading and derivatives held for risk management purposes. Derivatives held for trading are closely related to facilitating the needs of our clients. A significant part of the derivatives in the trading portfolio is related to serving clients in their risk management to hedge, for example, currency or interest rate exposures. ABN AMRO also offers products that are traded on the financial markets to institutional and individual clients and governments.

Derivatives held for risk management purposes include derivatives qualifying for hedge accounting and those used for economic hedges. A hedging instrument, for hedge accounting purposes, is a designated derivative whose fair value or cash flows are expected to offset changes in the fair value or cash flows of a designated hedged item.

Derivative assets and liabilities subject to master netting arrangements are presented net only when they satisfy the eligibility requirements for netting under IAS 32. ABN AMRO did not have any netted derivative positions in the statement of financial position in either 2022 or 2021.

As derivative transactions and the related cash collateral held at a CCP are settled on a daily basis, the carrying amount of these positions in the statement of financial position is nil.

From a risk perspective, the gross amount of trading assets must be associated with the gross amount of trading liabilities, which are presented separately in the statement of financial position.

								31 December 2022
	Derivatives held for trading			Economic hedges			Hedge accounting	Total derivatives
(in millions)	Interest rate	Currency	Other	Interest rate	Currency	Other	Interest rate	
Exchange traded								
Fair value assets	51							51
Fair value liabilities	10							10
Notionals	15,853	5						15,858
Over-the-counter								
Central counterparties								
Fair value assets								
Fair value liabilities								
Notionals	1,331,761			886			101,439	1,434,086
Other bilateral								
Fair value assets	4,035	742	3	46	312		23	5,161
Fair value liabilities	2,841	817	3	95	48		334	4,138
Notionals	206,343	54,289	241	661	17,468		89,813	368,814
Total								
Fair value assets	4,086	742	3	46	312		23	5,212
Fair value liabilities	2,851	817	3	95	48		334	4,148
Notionals	1,553,957	54,294	241	1,547	17,468		191,252	1,818,758

(in millions)	Derivatives held for trading			Economic hedges			Hedge accounting	Total derivatives
								31 December 2021
	Interest rate	Currency	Other	Interest rate	Currency	Other	Interest rate	
Exchange traded								
Fair value assets	4							4
Fair value liabilities		3						3
Notionals	4,217	9	1					4,226
Over-the-counter								
Central counterparties								
Fair value assets								
Fair value liabilities								
Notionals	1,026,420			1,195			106,305	1,133,920
Other bilateral								
Fair value assets	2,385	509	78	68	177	13	552	3,781
Fair value liabilities	2,865	563	113	143	118	3	535	4,341
Notionals	148,764	48,213	1,498	1,048	10,621	74	59,651	269,869
Total								
Fair value assets	2,388	509	78	68	177	13	552	3,785
Fair value liabilities	2,866	567	113	143	118	3	535	4,344
Notionals	1,179,401	48,222	1,499	2,243	10,621	74	165,956	1,408,016

16 Hedge accounting

Accounting policy for hedge accounting

ABN AMRO enters into various derivative and non-derivative instrument transactions with external parties to hedge risks on assets, liabilities and net investments. The accounting treatment of the hedged item and the hedging instrument depends on whether the hedge relationship qualifies for hedge accounting.

Qualifying hedges may be designated as fair value hedges, cash flow hedges or hedges of net investments. A non-derivative financial asset or liability may be designated as a hedging instrument for hedge accounting purposes only if it hedges the risk of changes in foreign currency exchange rates. The hedged item can be an asset, liability, or net investment in a foreign operation that (a) exposes the entity to the risk of changes in fair value or future cash flows, and (b) is designated as being hedged.

The hedged risks are typically changes in interest rates or foreign currency rates. ABN AMRO's market risk management strategy, which includes interest rate risk and foreign currency risk in the banking book, is described in more detail in the Risk, funding & capital management section.

Both at the inception of the hedge and on an ongoing basis, ABN AMRO assesses whether the derivatives designated in each hedging relationship are expected to be and have been highly effective in offsetting changes in the fair value or cash flows of the hedged item. These prospective and retrospective effectiveness tests are performed by using a regression analysis. ABN AMRO applies the following criteria to assess whether the hedging relationship is effective:

- A regression co-efficient (R squared), which measures the correlation between the variables in the regression; and
- A slope of the regression line is within a range of 0.80-1.25.

Hedge ineffectiveness and gains and losses on components of a derivative that are excluded from the assessment of hedge effectiveness are recorded directly in the result from financial transactions as part of other operating income. ABN AMRO discontinues hedge accounting when the hedge relationship has ceased to be effective or is no longer expected to be effective, or when the derivative or hedged item is sold or otherwise terminated.

Application of IAS 39 as endorsed by the European Union

As permitted by IFRS 9 paragraph 7.2.21, ABN AMRO has elected to continue applying the requirements of IAS 39 as endorsed by the European Union instead of applying the hedge accounting requirements of IFRS 9. The EU-endorsed version of IAS 39 provides relief from certain hedge accounting requirements when compared to the full hedge accounting text of IAS 39. One of these reliefs is that negative credit spreads can be excluded from hedge relationships. ABN AMRO applies this to several micro fair value hedge relationships. Another relief is that the impact of changes in the estimates of the repricing dates is considered ineffective only if it leads to over-hedging. This relief is applied in the macro fair value hedge.

Fair value hedges

ABN AMRO applies fair value hedge accounting on individual hedged items (micro fair value hedging), as well as on a portfolio of hedged items (macro fair value hedging). Where a derivative financial instrument hedges the exposure to changes in the fair value of the hedged item, the hedged item is adjusted in relation to the risk being hedged. Gains or losses on remeasurement of both the hedging instrument and the hedged item are recognised in the income statement as result from financial transactions, which is part of the line item Other operating income.
Hedge effectiveness for fair value hedges is measured as the amount by which the changes in the fair value of the hedging instrument are different from the changes in the fair value of the hedged item. When a fair value hedge of interest rate risk is terminated, any value adjustment to the carrying amount of the hedged item is amortised to profit or loss over the original designated hedging period, or taken directly to income if the hedged item is derecognised.

Micro fair value hedge accounting

Hedging instruments designated in individual fair value hedge relationships principally consist of interest rate swaps, interest rate options and cross-currency interest rate swaps that are used to protect against changes in the fair value of fixed-rate assets and fixed-rate liabilities due to changes in market interest rates.

The main sources of hedge ineffectiveness in micro fair value hedges are:
- The effect of the counterparty and the bank's own credit risk on the fair value of the interest rate swap that is not reflected in the fair value of the hedged item, which is only attributable to the change in the interest rate;
- The difference in discounting between the hedged item and the hedging instrument; and
- Potential differences in maturities of the interest rate swap and the loans or notes.

Macro fair value hedge accounting

ABN AMRO manages the interest rate risk arising from fixed-rate mortgages by entering into interest rate swaps. The exposure from this portfolio frequently changes due to new loans originated, contractual repayments and prepayments made by clients in each period. More than one group (or portfolio) of mortgages can be identified as the hedged item within the fixed-rate mortgage portfolio. To ensure an effective matching of hedged items and hedging instruments, ABN AMRO applies a dynamic strategy in which hedged items are de-designated and re-designated on a monthly basis. The hedge accounting relationship is reviewed and re-designated on a monthly basis.

Hedged mortgages are fixed-rate mortgages with the following features:
- denominated in local currency (euros);
- fixed term to maturity or repricing;
- pre-payable amortising or fixed principal amounts;
- fixed interest payment dates;
- no interest rate options;
- accounted for on an amortised cost basis.

At each designation, the mortgage cash flows are allocated to monthly time buckets, based on the expected maturity dates. ABN AMRO models the maturity dates of mortgages, taking into account the modelled prepayments applied to the contractual cash flows and the maturity dates of the mortgage portfolio. If the interest rate swap notional exceeds the expected mortgage notional in any given month, taking into account the uncertainty of the expected mortgage notional by applying a haircut, mortgages that mature in adjacent buckets are designated to the interest rate swaps.

Changes in the fair value of the mortgages that are attributable to the hedged interest rate risk are recognised as fair value adjustments from hedge accounting in the income statement and adjust the carrying amount of the mortgages. The recognised fair value changes in the mortgages partially offset the changes in fair value of the interest rate swaps and therefore reduce the profit or loss volatility that would otherwise arise from changes in the fair value of the interest rate swaps alone.

At the start of the hedge relationships and at each monthly de-designation, the difference between the fair value attributable to the hedged interest rate risk and the carrying amount of the hedged mortgages is amortised over the remaining life of the hedged item.

In addition to the sources of ineffectiveness described for micro fair value hedges, the sources of ineffectiveness specifically for macro hedges are:
- The difference between the expected and actual volume of prepayments for the mortgage portfolio to the extent the difference would lead to over-hedging; and
- The difference in payment frequency between the fixed leg of the hedging instrument and the payment frequency of the hedged item (mortgages).

Cash flow hedges

ABN AMRO applies cash flow hedge accounting to a portfolio of future cash flows on banking book assets and liabilities – the hedged items – and a portfolio of interest rate swaps – the hedging instruments. The hedge relationship is reviewed on a monthly basis and the hedging instruments and hedged items are de-designated or re-designated, if necessary, to maintain an effective hedge accounting relationship.

When a derivative financial instrument hedges the exposure to variability in the cash flows from a hedged item, the effective part of any gain or loss on remeasurement of the hedging instrument is recognised directly in other comprehensive income. Hedge effectiveness for the macro cash flow hedge is measured as the amount by which the changes in the fair value of the interest rate swaps are in excess of changes in the fair value of the expected cash flows in the hedge relationship. Any ineffective part of the cash flow hedge is recognised in other operating income immediately. When a cash flow hedging instrument or hedge relationship is terminated but the hedged transaction is still expected to occur, the accumulated gains or losses continue to be recognised in other comprehensive income and are transferred to the income statement when the hedged transaction affects profit or loss.

The gains or losses are included in the same line item as the hedged transaction. In the exceptional case that the hedged transaction is no longer expected to occur, the accumulated gains or losses recognised in other comprehensive income are recognised in the income statement immediately.

The main sources of hedge ineffectiveness for cash flow hedges are:
- The effect of the counterparty and the bank's own credit risk on the fair value of the interest rate swap that is not reflected in the fair value of the hedged item, which is only attributable to the change in the interest rate; and
- Potential differences in maturities of the interest rate swap and the loans or notes.

The hedged items in the macro cash flow hedge are future cash flows, which are derived from the projected balance sheet. This projected balance sheet takes the contractual terms and conditions of financial assets and liabilities and combines these with estimated prepayments, volume growth rates and interest scenarios.

Within the projected balance sheet, assets and liabilities are grouped on the basis of the specific interest rate index on which they reprice (e.g. one month, three months, six months, twelve months). For each repricing index, all assets and liabilities are allocated on a gross basis to monthly buckets in which they reprice up until their maturity.

The notional amounts of the interest rate swaps, which can be either pay or receive floating interest, are also grouped per interest rate index and allocated to monthly repricing buckets until their maturity. The hedge relationship is established by designating the interest rate swap cash flows per bucket to the corresponding bucket of projected cash flows of the hedged items. The hedged risk identified is the benchmark rate that applies to the buckets. If there are no projected cash flows available in the corresponding bucket for the applicable benchmark rate, the interest rate swap cash flows are designated to projected cash flows in a bucket with a different benchmark. The availability of projected cash flows in the buckets is not constant over time and is therefore evaluated on a monthly basis. Changes in cash flow projections may lead to a revision of the designation. Back-testing is performed on the interest rate risk models. Historical data are used to review the assumptions applied.

Hedges of net investments in foreign operations

ABN AMRO may enter into foreign currency derivatives and currency borrowings to hedge various net investments in foreign operations. For such hedges, currency translation differences arising on translation of the currency of these instruments to euros are recognised directly in the currency translation reserve in other comprehensive income, insofar as they are effective. The accumulated gains or losses recognised in other comprehensive income are transferred to the income statement on the disposal of the foreign operation.

In previous years, ABN AMRO hedged its currency exposure to certain investments in foreign operations by hedging its net investment in these foreign operations with forward contracts. ABN AMRO currently still holds some currency translation reserve for these respective positions, but no longer applies net investment hedge accounting.

Hedges not qualifying for hedge accounting

The fair value changes of derivative transactions used to hedge against economic risk exposures that do not qualify for hedge accounting, or for which it is not cost-beneficial to apply hedge accounting, are recognised directly in profit or loss.

Effect on financial position and performance - hedging instruments

	Notional amount	Carrying amount		Line item in the statement of financial position	Changes in fair value used for calculation hedge ineffectiveness for the year
(in millions)		Assets	Liabilities		
31 December 2022					
Cash flow hedges - macro					
Interest rate	50,106			Derivatives	777
Fair value hedges - macro					
Interest rate	47,759			Derivatives	11,020
Fair value hedges - micro					
Interest rate	93,387	23	334	Derivatives	-4,007
Economic hedges					
Total economic hedges	19,014	358	143	Derivatives	n/a
31 December 2021					
Cash flow hedges - macro					
Interest rate	25,269			Derivatives	443
Fair value hedges - macro					
Interest rate	46,278			Derivatives	1,610
Fair value hedges - micro					
Interest rate	94,409	552	535	Derivatives	-1,063
Economic hedges					
Total economic hedges	12,938	258	264	Derivatives	n/a

The deltas in the hedge accounting numbers are largely caused by interest rate developments in 2022. Starting Q2 2022 a hedge relationship was in place for the TLTRO programme. After the change in conditions by ECB in Q4 2022 the hedge relationship had to be terminated. All hedge adjustments have been reverted and the result on the hedges are reported under other income. Please refer to Note 6, Net income from other operating activities, for further details.

Effect on financial position and performance - hedged item

	Carrying amount of the hedged item		Accumulated amount of fair value hedge adjustments on the hedged item		Line item in the statement of financial position	Change in value used for calculating hedge ineffectiveness for the year	Cash flow hedge reserve/Foreign currency translation reserve	
	Assets	Liabilities	Assets	Liabilities			Continuing hedges	Discontin-ued hedges
(in millions)	active and discontinued	active and discontinued	active and discontinued	active and discontinued				
31 December 2022								
Cash flow hedges - macro								
Interest rate						-763	113	-1,388
Fair value hedges - macro								
Interest rate - Financial assets at AC	38,270		-9,489		Residential mortgages	-10,873		
Fair value hedges - micro								
Interest rate - Financial assets at FVOCI	34,276		-3,119		Financial investments	-4,778		
Interest rate - Financial assets at AC	762		154		Corporate & Other loans	-357		
Interest rate - Financial liabilities at AC		48,473		-6,700	Issued debt & Subordinated liabilities	9,025		
Net investment hedges								
Currency								-42
31 December 2021								
Cash flow hedges - macro								
Interest rate						-449	-690	-1,386
Fair value hedges - macro								
Interest rate - Financial assets at AC	46,278		1,442		Residential mortgages	-1,603		
Fair value hedges - micro								
Interest rate - Financial assets at FVOCI	37,547		1,636		Financial investments	-1,389		
Interest rate - Financial assets at AC	1,088		509		Corporate & Other loans	-142		
Interest rate - Financial liabilities at AC		59,336		2,230	Issued debt & Subordinated liabilities	2,548		
Net investment hedges								
Currency								-42

The accumulated amount of fair value hedge adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses amounted to EUR -0.9 billion at 31 December 2022 (31 December 2021: EUR 0.2 billion).

Effect on financial position and performance - hedge ineffectiveness and hedging gains or losses

(in millions)	Changes in fair value used for calculation hedge ineffectiveness for the year - hedged item	Change in value used for calculating hedge ineffectiveness for the year - hedging instrument	Hedge ineffectivenes recognised in profit or loss	Line item in profit or loss (that includes hedge ineffec-tiveness)	Change in the value of the hedging instrument recognised in OCI[1]	Amount re-classified from the cash flow hedge reserve to profit or loss - hedges item affected profit or loss[2]	Amount reclassified from the foreign currency translation reserve to profit or loss	Line item affected in profit or loss because of the reclassification
31 December 2022								
Cash flow hedges - macro								
Interest rate	-763	777	14	Other operating income	762	39		Net interest income
Fair value hedges - macro								
Interest rate	-10,873	11,020	147	Other operating income				
Fair value hedges - micro								
Interest rate	3,891	-4,007	-116	Other operating income				
Net investment hedges								
Currency								Other operating income
31 December 2021								
Cash flow hedges - macro								
Interest rate	-449	443	-6	Other operating income	451	-54		Net interest income
Fair value hedges - macro								
Interest rate	-1,603	1,610	7	Other operating income				
Fair value hedges - micro								
Interest rate	1,018	-1,063	-45	Other operating income				
Net investment hedges								
Currency								Other operating income

1 The amount reconciles to 'Net gains/(losses) arising during the period' in the specification of 'Accumulated other comprehensive income' in the consolidated statement of equity.
2 The amount reconciles to 'Less: Net realised gains/(losses) included in income statement' in the specification of 'Accumulated other comprehensive income' in the consolidated

Amount, timing and uncertainty of future cash flows - hedging instruments

(in millions, nominal amounts)	Within 3 months	More than 3 months but within 1 year	More than 1 year but within 5 years	More than 5 years but within 10 years	More than 10 years	Total
31 December 2022						
Fair value hedges - micro						
Payers - Interest rate	1,613	4,368	18,106	8,437	5,388	37,913
Receivers - Interest rate	2,658	4,258	17,772	13,041	17,746	55,475
31 December 2021						
Fair value hedges - micro						
Payers - Interest rate	1,195	4,508	19,213	7,372	4,399	36,687
Receivers - Interest rate	4,818	5,508	20,114	10,945	16,337	57,721

The weighted average fixed rate of the interest rate swaps included in micro hedge relationships varied between 1.4% and 2.0% as at 31 December 2022 (1.4% and 2.1% as at 31 December 2021), depending on the origination date, currency, product type and original maturity.

Interest rate benchmark reform

ABN AMRO has analysed its significant hedging relationships directly affected by the benchmark reform. Most of ABN AMRO's financial instruments are linked to euro area benchmarks and, as a result, so are its hedging relationships. Of the non-euro area benchmarks relevant for ABN AMRO, all benchmarks other than USD LIBOR already reformed before 2022. As a consequence, ABN AMRO's hedging relationships affected by the IBOR reform comprise only a small percentage of its total hedging relationships.

A total of EUR 191.3 billion of notional derivatives were part of hedging relationships at 31 December 2022, of which EUR 175.5 billion was linked to EURIBOR and EUR 15.7 billion to other benchmarks. Of the derivative contracts linked to a non-EURIBOR benchmark, a notional amount of EUR 9.9 billion will mature before cessation of the reference benchmark. These contracts are therefore not affected by the IBOR reform. A remaining total of EUR 5.8 billion notional is exposed to benchmarks under reform. The contracts exposed to benchmarks under reform have an average maturity of 2.6 years and are all referencing 3-months USD LIBOR.

At the year-end, an exposure remained to IBOR rates subject to reform that still have to transition. Trades that refer to an IBOR rate, but mature before a transition is required are excluded from the overview.

For non-derivative asset contracts, contracts referring to USD LIBOR amounted to EUR 3.7 billion.
For non-derivative liability contracts, there were no contracts referring to a USD LIBOR at year-end 2022.

For derivative contracts, contracts referring to USD LIBOR amounted to EUR 53.9 billion notional (gross value, hence no offsetting effects shown), of which EUR 19.9 billion has no exposure to USD LIBOR after cessation date. The exposure after cessation date is EUR 34.0 billion, of which EUR 8.4 billion relates to bilateral contracts.

17 Financial investments

Accounting policy for financial investments

Financial investments include financial instruments measured at fair value through other comprehensive income (FVOCI) and financial instruments measured at fair value through profit or loss (FVTPL).

Accounting policy for financial instruments measured at fair value through other comprehensive income

Unrealised gains and losses on FVOCI assets are recognised directly in other comprehensive income, net of applicable taxes. Interest earned, premiums, discounts and qualifying transaction costs of interest-earning FVOCI assets are amortised to income on an effective interest rate basis. When FVOCI debt instruments are sold, the cumulative gain or loss recognised in other comprehensive income is transferred to other operating income in the income statement. The impairment loss resulting from the ECL on FVOCI debt instruments is recognised in the impairment charges on financial instruments in the income statement. The related loss allowance is recognised in other comprehensive income and does not reduce the carrying amount of the FVOCI debt instruments. ABN AMRO's impairment assessment and measurement approach for FVOCI debt instruments is set out in Credit risk management in the Risk, funding & capital management chapter. Fair value changes in equity instruments that are irrevocably designated as FVOCI upon initial recognition are recognised in other comprehensive income and not subsequently reclassified to the income statement.

Accounting policy for financial instruments measured at fair value through profit and loss

Financial investments can be designated at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency (an accounting mismatch). ABN AMRO also has financial instruments that are mandatorily measured at fair value because they do not meet the SPPI test.

(in millions)	31 December 2022	31 December 2021
Financial investments		
Debt securities held at fair value through other comprehensive income	38,408	42,585
Held at fair value through profit or loss	626	580
Total financial investments	**39,034**	**43,165**

Financial investments measured at fair value through other comprehensive income

The fair value of financial investments measured at FVOCI is specified in the following table.

(in millions)	31 December 2022	31 December 2021
Interest-earning securities		
Dutch government	2,465	4,028
US Treasury and US government	7,238	6,628
Other OECD government	18,158	20,550
Non-OECD government	142	996
International bonds issued by the European Union	2,415	2,262
European Stability Mechanism	1,704	1,964
Mortgage- and other asset-backed securities	3,274	3,168
Financial institutions	2,998	2,989
Non-financial institutions	15	1
Total investments held at fair value through other comprehensive income	**38,408**	**42,585**

Most of these instruments are part of the liquidity buffer and are held for liquidity contingency purposes.

Government bonds by country of origin

	31 December 2022			31 December 2021		
(in millions)	Accumulated unrealised gains/ (losses) and fair value hedges gains/(losses)	Impairments	Fair value	Accumulated unrealised gains/ (losses) and fair value hedges gains/(losses)	Impairments	Fair value
Dutch national government	-148		2,465	402		4,028
USA national government	-317		7,238	109		6,628
German national government	-310		5,145	444		6,589
French national government	-190		1,855	63		3,097
Belgian national government	-268	-1	2,567	112	-1	2,953
Austrian national government	-75		1,481	176		1,873
Finnish national government	-61		1,116	66		1,414
Luxembourg national government	-101		1,238	40		1,256
Canadian national government	-104		1,126	27		1,164
Japanese national government	-1		2,464			959
Polish national government	25		320	145		439
Spanish national government			63			300
United Kingdom national government	10		180	110		290
Danish national government	-19		260	1		211
Swedish national government			4			4
Hong Kong						170
Brazilian national government			72			61
Singapore national government			70			765
European Union bonds (excl. European Stability Mechanism)	-695		2,415	42		2,262
Italian national government	-91		340			
Total government bonds	**-2,345**	**-1**	**30,418**	**1,737**	**-1**	**34,463**

Critical accounting estimates and judgements

Interest-bearing debt securities classified as FVOCI investments are assessed at each reporting date to establish whether there are any expected credit losses. ABN AMRO has developed models to determine such credit losses. Impairment charges on FVOCI instruments are recorded in (un)realised gains/(losses) fair value through OCI in the statement of comprehensive income.

Financial investments measured at fair value through profit or loss

(in millions)	31 December 2022	31 December 2021
Private equities and venture capital	418	369
Equity securities	207	211
Total investments held at fair value through profit or loss	**626**	**580**

18 Securities financing

Accounting policy for securities financing

Securities financing is measured at amortised cost. Securities financing consists of securities borrowing and lending and sale and repurchase transactions. Securities borrowing and securities lending transactions are generally entered into on a collateralised basis, with securities usually advanced or received as collateral. The transfer of the securities themselves is not reflected in the statement of financial position unless the risks and rewards of ownership are also transferred. If cash is advanced or received, securities borrowing and lending activities are recorded at the amount of cash advanced (included in loans and advances) or received (due to banks or customers). The market value of the securities borrowed or lent is monitored on a daily basis, and the collateral levels are adjusted in accordance with the underlying transactions. Fees and interest received or paid are recognised on an effective interest rate basis and recorded as interest income or interest expense.

Sale and repurchase transactions involve purchases (or sales) of investments with agreements to resell (or repurchase) substantially identical investments at a certain date in the future at a fixed price. Investments purchased subject to commitments to resell them at future dates are not recognised. The amounts paid are recognised in loans and advances to either banks or customers and are shown as collateralised by the underlying security.

Investments sold under repurchase agreements continue to be recognised in the statement of financial position. Proceeds from the sale of the investments are reported as liabilities to either banks or customers. The difference between the sale and repurchase price is recognised over the period of the transaction and recorded as interest income or interest expense, using the effective interest rate method. If borrowed securities are sold to third parties, the proceeds from the sale and a liability for the obligation to return the collateral are recorded at fair value.

	31 December 2022			31 December 2021		
(in millions)	Banks	Customers	Total	Banks	Customers	Total
Assets						
Reverse repurchase agreements	2,649	11,591	14,239	3,181	6,733	9,914
Securities borrowing transactions	2,900	2,893	5,793	2,973	3,251	6,225
Total	**5,548**	**14,484**	**20,032**	**6,154**	**9,984**	**16,138**
Liabilities						
Repurchase agreements	219	8,359	8,578	115	8,372	8,488
Securities lending transactions	474	600	1,074	4	1,003	1,007
Total	**692**	**8,960**	**9,652**	**119**	**9,375**	**9,494**

Securities financing transactions include balances relating to reverse repurchase activities and cash collateral on securities borrowed. ABN AMRO controls the credit risk associated with these activities by monitoring counterparty credit exposure and collateral values on a daily basis and requiring additional collateral to be deposited with ABN AMRO when deemed necessary.

The total reverse repurchase agreements increased during the year by EUR 4.3 billion due to agreements with several large clients. Items of securities financing transactions that ABN AMRO can repledge or resell are included in Note 34 Transferred, pledged, encumbered and restricted assets.

19 Fair value of financial instruments carried at fair value

Accounting policy for fair value of financial instruments

The fair value is defined as the price that would be received when selling an asset or paid when transferring a liability in an orderly transaction between market participants at the measurement date.

For financial instruments that are actively traded and for which quoted market prices or market parameters are readily available, the fair value is determined in a highly objective manner. However, when observable market prices and parameters do not exist, management judgement is necessary to estimate fair value.

For financial instruments where no active liquid market exists, or quoted prices are unobtainable, recent market transactions are used or the fair value is estimated using a variety of valuation techniques – including reference to similar instruments for which market prices do exist, or to valuation techniques such as discounted cash flow models or option pricing models (e.g. Black Scholes).

When portfolios of financial assets and liabilities are measured on the basis of the net exposure to the credit risk of a particular counterparty, any existing arrangements that mitigate the credit risk exposure (e.g. master netting agreements with the counterparty) are taken into account.

Unobservable inputs are estimated using a combination of management judgement, historical data, market practice and benchmarking to other relevant observable market data. The difference between the transaction price and the internal valuation at inception, calculated using a model, is reserved and amortised to profit or loss at appropriate points over the life of the instrument, typically taking account of the ability to obtain reliable external data, the passage of time and the use of offsetting transactions. Where inputs to the valuation of a new transaction cannot be reliably determined, the transaction is initially recognised at its transaction price. Subsequent changes in fair value as calculated by the valuation model are reported as profit or loss or in equity.

- In order to determine a reliable fair value, where appropriate, management applies valuation adjustments to the pricing information derived from the above sources. These adjustments reflect management's assessment of factors that market participants would consider in setting a price, to the extent that these factors have not already been included in the information from the above sources. The main valuation adjustments required to arrive at a fair value are as follows:
- Credit and debit valuation adjustments. In addition to credit valuation for loans measured at fair value through profit or loss, credit valuation adjustments and debit valuation adjustments are incorporated into derivative valuations to reflect the impact on fair value of counterparty credit risk and how counterparties consider ABN AMRO's creditworthiness respectively;
- Funding valuation adjustment. The funding valuation adjustment incorporates the incremental cost of funding into the valuation of uncollateralised and partially collateralised derivatives;
- Own credit adjustment. An own credit risk adjustment is applied to financial liabilities where it is believed that counterparties will consider ABN AMRO's creditworthiness when pricing such instruments;
- Model valuation adjustments for any known limitations. Management assesses the appropriateness of any model used on an ongoing basis. To the extent that the price provided by internal models does not represent the fair value of the instrument, for instance in highly stressed market conditions, management makes adjustments to the model valuation to calibrate to other available pricing sources.

We believe our estimates of the fair value are adequate. However, the use of different models or assumptions could result in changes to our reported results.

Valuation control framework

ABN AMRO has designated controls and processes in place for determining the fair value of financial instruments. A process has been designed to ensure there are formalised review protocols for independent review and validation of fair values separate from those businesses entering into the transactions. This includes specific controls to ensure consistent pricing policies and procedures, incorporating disciplined price verification for both market and counterparty risk trades.

The business entering into the transaction is responsible for the initial determination and recording of the fair value of the transaction. There are daily controls of the profit or loss recorded by trading and treasury front-office staff. A key element of the control environment, segregated from the recording of the transaction's valuation, is the independent price-verification process. Valuations are first calculated by the business. Such valuations may be current bid or offer prices in an active market, or may be derived using a model and variable model inputs. These valuations are reviewed and, if necessary, amended by the independent price-verification process. This process involves a team, independent of those trading the financial instruments, performing a review of valuations in the light of available pricing evidence. Independent price verification is frequently performed by matching the business valuations with independent data sources. The minimum frequency of review is monthly, both for trading positions and non-trading positions. The independent price-verification control includes formalised reporting and escalation to management of any valuation differences in breach of defined thresholds. When models are used to value products, those models are subject to a model review process. This process requires different levels of model documentation, testing and review, depending on the complexity of the model and the size of our exposure to the model.

Valuation techniques

A number of methodologies are used to determine the fair value of financial instruments for which observable prices in active markets for identical instruments are not available. Values between and beyond available data points are obtained by interpolation and/or extrapolation. When valuation techniques are used, the fair value can be significantly impacted by the choice of valuation model and underlying assumptions made concerning factors such as the amount and timing of cash flows, discount rates and credit risk.

Interest rate derivatives

This category includes interest rate swaps, cross-currency swaps, options and forward rate agreements. These products are valued by estimating future cash flows and discounting those cash flows, using appropriate interest rate curves. The exception is interest option contracts, which are valued using market standard option pricing models. The inputs for the discounting cash flow models are principally observable benchmark interest rates in active markets such as the interbank rates and quoted interest rates in the swap, bond and futures markets. The inputs for credit spreads – where available – are derived from prices of credit default swaps or other credit-based instruments, such as debt securities. In other cases, credit spreads are obtained from pricing services. The additional inputs for the option pricing models are price volatilities and correlations, which are obtained from broker quotations or pricing services or derived from option prices. Because of the observability of the inputs used in the valuation models, the majority of the interest rate derivative contracts are classified as level 2. If adjustments to interest rate curves, credit spreads, correlations or volatilities are based on significant unobservable inputs, the contracts are classified as level 3. Exchange traded options and futures are valued using quoted market prices and are hence classified as level 1.

Foreign exchange contracts

Foreign exchange contracts include foreign exchange forward contracts, foreign exchange options and foreign exchange swaps. The majority of the foreign exchange contracts at ABN AMRO are traded as over-the-counter derivatives. These instruments are valued using foreign currency exchange rates. There are observable markets both for spot and forward contracts and for futures in the world's major currencies. The over-the-counter foreign exchange contracts are therefore classified as level 2.

Government debt securities

Government debt securities consist of government bonds and bills with fixed or floating rate interest payments issued by sovereign governments. These instruments are generally traded in active markets and prices can be derived directly from those markets. Therefore the instruments are classified as level 1. Highly liquid bonds are valued using exchange traded prices. Less liquid bonds are valued using observable market prices, which are sourced from broker quotes, interdealer prices or other reliable pricing services. For a minority of the government debt securities, active market prices are not available. In these cases ABN AMRO uses discounted cash flow valuation techniques that incorporate observable market data for similar government instruments. The main inputs are interest rate curves, liquidity spreads and credit spreads. The instruments for which this method applies are classified as level 2. If adjustments to any of the main inputs are made based on significant unobservable inputs, the instrument is classified as level 3.

Corporate debt securities

Corporate debt securities primarily consist of corporate bonds and other debt securities issued by corporate entities. Most of these instruments are standard fixed or floating rate securities. Corporate debt securities are generally valued using observable market prices, which are sourced from broker quotes, inter-dealer prices or other reliable pricing services. These instruments are classified as level 1. If observable market prices are not available, ABN AMRO uses discounted cash flow valuation techniques, based on inputs derived from comparable instruments and credit default swap data of the issuer, to estimate credit spreads. These instruments are classified as level 2. If adjustments to any of the main inputs are made based on significant unobservable inputs, the instrument is classified as level 3

Equity instruments
Equity instruments that are actively traded on public stock exchanges are valued using the readily available quoted prices and are therefore classified as level 1. Investments in private equity funds are initially recognised at their transaction price and remeasured to the extent reliable information is available on a case-by-case basis and are classified as level 3.

Loans and advances at fair value through profit or loss
Loans and advances at fair value through profit or loss primarily consist of contracts with corporate clients where the contractual cash flows do not meet the SPPI requirements or are held in a business model with the objective to generate cash flows from sales. The return on the contracts with embedded derivatives is based on the price of underlying commodity contracts or loans with a floating interest rate. Discounted cash flow models are used to value these contracts. The main inputs are interest rate curves, quoted commodity prices, liquidity spreads and credit spreads. The instruments are classified as level 2. If adjustments to interest rate curves, liquidity spreads and credit spreads are based on significant unobservable inputs, the instruments are classified as level 3.

Issued debt
Issued debt securities are valued using discounted cash flow models, based on current interest rate curves that incorporate observable inputs. These instruments are classified as level 2. When there are no, or only limited, publicly quoted prices available for these instruments and unobservable inputs have a significant effect on the fair value calculation, these instruments are classified as level 3.

ABN AMRO refines and modifies its valuation techniques as markets and products develop and as the pricing for individual products becomes more or less readily available. While ABN AMRO believes its valuation techniques are appropriate and consistent with other market participants, the use of different methodologies or assumptions could result in different estimates of the fair value at the reporting date.

Fair value hierarchy
ABN AMRO analyses financial instruments held at fair value in the three categories described below.

Level 1 financial instruments are those that are valued using unadjusted quoted prices in active markets for identical financial instruments.

Level 2 financial instruments are those valued using techniques based primarily on observable market data. Instruments in this category are valued using quoted prices for similar instruments or identical instruments in markets that are not considered to be active, or using valuation techniques where all the inputs that have a significant effect on the valuation are directly or indirectly based on observable market data.

Level 3 financial instruments are those valued using a valuation technique where at least one input with a significant effect on the instrument’s valuation is not based on observable market data. The effect of fair value adjustments on the instrument’s valuation is included in the assessment.

ABN AMRO recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change occurred.

(in millions)	31 December 2022 Quoted market prices in active markets	Valuation techniques - observable inputs	Valuation techniques - significant unobservable inputs	Total fair value	31 December 2021 Quoted market prices in active markets	Valuation techniques - observable inputs	Valuation techniques - significant unobservable inputs	Total fair value
Assets								
Government debt securities	212	3		214	480			480
Corporate debt securities	495	186		681	472	198		670
Equity securities	10			10	3			3
Other financial assets held for trading		1		1		2		2
Financial assets held for trading	**718**	**190**		**907**	**955**	**199**		**1,155**
Interest rate derivatives	51	4,067	36	4,155	4	2,927	78	3,009
Foreign exchange contracts		1,045	9	1,054		676	10	686
Other derivatives		3		3		90		90
Derivatives	**51**	**5,115**	**46**	**5,212**	**4**	**3,694**	**88**	**3,785**
Equity instruments	79	65	481	626	90	57	433	580
Financial investments at fair value through profit or loss	**79**	**65**	**481**	**626**	**90**	**57**	**433**	**580**
Government debt securities	31,801		320	32,121	35,988		439	36,427
Corporate debt securities	2,973	1	38	3,013	2,947	1	42	2,990
Other debt securities	3,274			3,274	3,168			3,168
Financial assets held at fair value through other comprehensive income	**38,049**	**1**	**358**	**38,408**	**42,102**	**1**	**481**	**42,585**
Loans and advances at fair value through profit or loss		36	30	66		104		104
Total financial assets	**38,897**	**5,407**	**915**	**45,219**	**43,151**	**4,056**	**1,002**	**48,209**
Liabilities								
Short positions in government debt securities	341			341	255			255
Corporate debt securities	205	62		267	320	79		399
Equity securities	1			1				
Other financial liabilities held for trading		32		32		33		33
Financial liabilities held for trading	**548**	**93**		**641**	**575**	**112**		**687**
Interest rate derivatives	10	3,270		3,280		3,543		3,544
Foreign exchange contracts		865		865	3	681		684
Other derivatives		3		3		116		116
Derivatives	**10**	**4,138**		**4,148**	**3**	**4,341**		**4,344**
Issued debt		223		223		892		892
Total financial liabilities	**557**	**4,455**		**5,012**	**578**	**5,344**		**5,922**

Transfers between levels 1 and 2

There were no material transfers between levels 1 and 2.

Transfers from levels 1 and 2 to 3

There were no material transfers from levels 1 and 2 to 3.

Other transfers

There were no other material transfers between the fair value hierarchies.

Movements in level 3 financial instruments measured at fair value

The following table shows a reconciliation of the opening and closing amounts of level 3 financial assets that are recorded at fair value.

	Assets				Liabilities
(in millions)	Derivatives	Financial investments at fair value through profit or loss	Financial assets held at fair value through other comprehensive income	Loans and advances at fair value through profit or loss	Issued debt
Balance at 1 January 2021	**140**	**569**	**517**		
Purchases		44			
Redemptions		-68			
Gains/(losses) recorded in profit and loss[1]		1	1		
Unrealised gains/(losses)[2]	-67	151	-36		
Transfer between levels	14				
Other movements		-75			
Balance at 31 December 2021	**88**	**433**	**481**		
Purchases		55			
Sales		-45			
Redemptions		-3			
Gains/(losses) recorded in profit and loss[1]		13	1		
Unrealised gains/(losses)[2]	-49	31	-124		
Transfer between levels	7				
Other movements		-2		30	
Balance at 31 December 2022	**46**	**481**	**358**	**30**	

1 Included in other operating income.
2 Unrealised gains/(losses) on derivatives held for trading are included in net trading income, on instruments measured at FVTPL in other operating income and on instruments measured at FVOCI in other comprehensive income.

Level 3 sensitivity information

Interest-earning securities - government bonds

ABN AMRO has a position in a Polish bond, denominated in euros (in Note 17 Financial investments, and part of Other OECD governments), for which the market is relatively illiquid. This bond is valued using a discounted cash flow model. The main inputs are the interest rate curve, liquidity spread and credit spread. The valuation spread is determined using an internal model. The sensitivity analysis is performed using a range of reasonable valuation spreads.

Interest-earning securities - other

Preference shares are shares for which the dividend is fixed for a period of ten years, after which the dividend is redetermined and the shares can be redeemed. The position is valued using a discounted cash flow model for which the relevant inputs are the interest curve, liquidity spread and credit spread. The liquidity spread and credit spread are unobservable inputs and are derived from similar securities. The sensitivity of the preference shares is determined by using a range of reasonable spreads and by considering the call option that is held by the issuer.

Equity shares - preferred shares

Equities measured at fair value through profit and loss and classified as level 3 mainly comprise private equity investments. Private equity shares are measured at fair value, applying two calculation techniques:

- Using comparable pricing in accordance with the European Private Equity and Venture Capitalist Association (EVCA) guidelines. This valuation technique is based on earnings multiples of comparable listed and unlisted companies. The fair value calculation of an investment is strongly linked with movements on public equity markets;
- Net Asset Value (NAV) for fund investments and asset-backed investments. This is determined by using audited and unaudited company financial statements and any other information available, publicly or otherwise. As a consequence, the NAV calculation of an investment is strongly linked to movements in the quarterly performance of the company and can be used as an indicator of fair value.

New investments are initially valued at fair value. Subsequently, the fair value technique – either the EVCA technique or NAV calculation – is applied for direct investments.

The sensitivity for using comparable pricing is determined by stressing the earnings multiples in a positive and negative market scenario, whereas sensitivity testing for the NAV calculation based on the quarterly performance cannot be applied.

Derivatives

ABN AMRO applies a credit valuation adjustment (CVA) that reflects counterparty credit risk in the fair value measurement of uncollateralised and partially collateralised OTC derivatives. For counterparties that do not have an observable credit spread, ABN AMRO applies a proxied credit spread extracted from counterparties of comparable credit quality that do have an observable credit spread. ABN AMRO performs a probability of default assessment for each counterparty and allocates an appropriate internal credit risk measure known as a Uniform Counterparty Rating (UCR).This UCR, which is significant to the entire fair value measurement of the derivative contracts included in the following table of level 3 sensitivity information, is generated internally and is therefore an unobservable input.

	Valuation technique	Unobservable data	Carrying value	Possible alternative assumptions		Unobservable data range		Unobservable data base
(in millions)				Applying minimum	Applying maximum	Applying minimum	Applying maximum	
31 December 2022								
Equity shares	Private equity valuation	EBITDA multiples	140	-14	14			
Equity shares	Private equity valuation	Net asset value	342	-34	34			
Interest-earning securities - government bonds	Discounted cash flow	Liquidity and credit spread	320	-9	18	14bps	102bps	73bps
Interest-earning securities - other	Discounted cash flow	Liquidity and credit spread	38	-1		214bps	546bps	313bps
Derivatives held for trading	Discounted cash flow	Probability of default	46	-2	4	0.0%	100.0%	15.0%
31 December 2021								
Equity shares	Private equity valuation	EBITDA multiples	159	-16	16			
Equity shares	Private equity valuation	Net asset value	274	-27	27			
Interest-earning securities - government bonds	Discounted cash flow	Liquidity and credit spread	439	-8	13	19bps	74bps	53bps
Interest-earning securities - other	Discounted cash flow	Liquidity and credit spread	42	-2		90bps	381bps	118bps
Derivatives held for trading	Discounted cash flow	Probability of default	88	-5	8	0.4%	100.0%	33.7%

20 Loans and advances banks

Accounting policy for loans and advances banks and customers

Loans and advances banks, and loans and advances customers, are held in a 'hold to collect' business model. Loans and advances for which the contractual cash flows are solely payments of principal and interest (SPPI) are measured at amortised cost, i.e. fair value at initial recognition, adjusted for repayment and amortisation of coupon, fees and expenses to represent the effective interest rate of the asset. Loans and advances that do not pass the SPPI test are measured at fair value through profit or loss. Please refer to Note 1 Accounting policies in the Consolidated Annual Financial Statements and to Credit risk management in the Risk, funding & capital chapter (Accounting policy for measuring allowances for credit losses).

(in millions)	31 December 2022	31 December 2021
Interest-bearing deposits	1,771	1,189
Loans and advances	934	1,355
Mandatory reserve deposits with central banks	200	199
Other loans and advances banks	85	68
Subtotal	**2,990**	**2,811**
Less: loan impairment allowances	8	10
Total loans and advances banks	**2,982**	**2,801**

Mandatory reserve deposits are held with local central banks in accordance with statutory requirements. Most relevant for the bank are the minimum reserve requirements determined by the ECB. The ECB prescribes how the minimum reserve amount should be calculated during pre-defined reserve periods. During such a period, the balances are available for use by ABN AMRO. The bank manages and monitors deposits to ensure that the minimum reserve requirements for the period are met.

21 Loans and advances customers

Accounting policy for loans and advances customers

The accounting policy for loans and advances customers is included in Note 20 Loans and advances banks. Please refer to Note 1 Accounting policies in the Consolidated Annual Financial Statements and to the Credit risk management section of the Risk, funding & capital chapter (Accounting policy for measuring allowances for credit losses).

(in millions)	31 December 2022	31 December 2021
Residential mortgages (excluding fair value adjustment)	150,762	146,351
Fair value adjustment from hedge accounting on residential mortgages	-9,489	1,442
Residential mortgages, gross	**141,274**	**147,793**
Less: loan impairment allowances - residential mortgage loans	153	82
Residential mortgages	**141,121**	**147,711**
Consumer loans, gross	10,232	10,794
Less: loan impairment allowances - consumer loans	277	276
Consumer loans	**9,955**	**10,518**
Corporate loans (excluding fair value adjustment)	78,178	78,173
Fair value adjustment from hedge accounting on corporate loans	154	509
Financial lease receivables	4,396	4,972
Factoring	4,157	3,312
Corporate loans, gross[1]	**86,885**	**86,968**
Less: loan impairment allowances - corporate loans	1,590	2,053
Corporate loans at amortised cost	**85,295**	**84,915**
Corporate loans at fair value through P&L	**66**	**99**
Government and official institutions	629	401
Other loans1)	6,868	14,606
Other loans and advances customers, gross[1]	**7,497**	**15,007**
Less: loan impairment allowances - other	5	4
Other loans at amortised cost	**7,491**	**15,003**
Other loans at fair value through P&L		5
Other loans and advances customers	**7,491**	**15,008**
Total loans and advances customers	**243,927**	**258,251**

1 Excluding loans at fair value through P&L.

For information on loan impairment allowances, please refer to the Credit risk review section in the Risk, funding & capital chapter.

22 Fair value of financial instruments not carried at fair value

Accounting policy for fair value of financial instruments not carried at fair value

The categorisation and valuation of financial instruments not carried at fair value is determined in accordance with the accounting policies set out in Note 19 Fair value of financial instruments carried at fair value.

Valuation methodologies

The methods and assumptions described below have been applied to estimate the fair value of financial instruments not carried at fair value. These fair values were calculated for disclosure purposes only. Note that the fair value can be significantly impacted by the choice of valuation model and underlying assumptions concerning factors such as the amount and timing of cash flows, discount rates, credit risk and liquidity risk.

Short-term financial instruments

The carrying amounts (net of impairment allowances) of financial instruments maturing within a period of less than three months or that have no contractual maturity are assumed to be a reasonable approximation of their fair value. For certain instruments, behavioural maturities are applied.

Short-term financial instruments are classified as level 2 as unobservable inputs (such as inputs to determine credit risk, prepayment risk and liquidity risk) do not have a significant influence in determining the fair value.

Cash and balances at central banks

Cash and balances at central banks are classified as level 1 as these instruments have a short-term nature, prices from an active market are available and no fair value adjustments are made to the carrying amounts.

Securities financing

Securities financing includes repurchase and reverse repurchase agreements and securities borrowing and lending transactions. Due to the short-term characteristics of these instruments and the value and liquidity of available collateral, the carrying amounts (net of impairment allowances) are considered to approximate the fair value. Securities financing amounts are classified as level 2.

Loans and advances banks and customers

The fair value of loans and advances banks and customers is estimated by a discounted cash flow model based on contractual cash flows, using actual yields and discounting by risk-free interest rates. Adjustments to reflect changes in liquidity spreads are applied and prepayment options are included in the estimated fair value. The calculations are adjusted for credit risk by incorporating the expected credit losses over the estimated lifetime of the loan, based on parameters including probability of default, loss given default and exposure at default. The loans and advances are classified as level 3 on the basis that unobservable inputs significantly influence the approximated fair values. The loans and advances for which unobservable inputs do not significantly influence the approximated fair values are classified as level 2. Behavioural maturities instead of contractual maturities are used to determine the level classification of a small part of the portfolio.

Cash collateral paid to counterparties in relation to Credit Support Annexes (CSA) is included in loans and advances banks and customers. Due to the short-term characteristics of these instruments, fair value is considered to approximate the carrying amounts. The related amounts are classified as level 2.

Due to banks and customers

The fair value of instruments such as deposits and borrowings included in due to banks and customers is estimated by a discounted cash flow model based on risk-free interest rates. Adjustments to reflect changes in liquidity spreads are applied. Amounts due to banks and customers are classified as level 3 on the basis that unobservable inputs significantly influence the approximated fair values. The financial instruments for which unobservable inputs do not significantly influence the approximated fair values are classified as level 2. For the majority of the portfolio, behavioural maturities are used to determine the level classification.

Cash collateral liabilities in relation to Credit Support Annexes (CSA) are included in due to banks and customers. Due to the short-term characteristics of these instruments, fair value is considered to approximate the carrying amounts. The related amounts are classified as level 2.

Issued debt and subordinated liabilities

The fair value of issued debt securities and subordinated liabilities is based on quoted prices. If these are not available, the fair value is based on a market approach in which independent quotes from market participants are used for the debt issuance spreads above the average interbank offered rates (over a range of tenors) that the market would demand when purchasing new senior or subordinated debt from ABN AMRO. Where necessary, these quotes are interpolated, using a curve shape derived from CDS prices.

(in millions)	Carrying value	Quoted market prices in active markets	Valuation techniques -observable inputs	Valuation techniques -significant unobservable inputs	Total fair value	Difference
						31 December 2022
Assets						
Cash and balances at central banks	60,865	60,865			60,865	
Securities financing	20,032		20,032		20,032	
Loans and advances banks	2,982		2,645	340	2,986	3
Loans and advances customers	243,861		30,373	195,900	226,273	-17,588
Total	**327,741**	**60,865**	**53,051**	**196,240**	**310,156**	**-17,585**
Liabilities						
Securities financing	9,652		9,652		9,652	
Due to banks	17,509		3,788	13,608	17,396	-113
Due to customers	255,015		78,925	155,878	234,803	-20,212
Issued debt	56,036	29,556	20,682		50,238	-5,799
Subordinated liabilities	7,290	3,906	3,058		6,964	-326
Total	**345,502**	**33,462**	**116,105**	**169,486**	**319,053**	**-26,449**

(in millions)	Carrying value	Quoted market prices in active markets	Valuation techniques -observable inputs	Valuation techniques -significant unobservable inputs	Total fair value	Difference
						31 December 2021
Assets						
Cash and balances at central banks	66,865	66,865			66,865	
Securities financing	16,138		16,138		16,138	
Loans and advances banks	2,801		2,461	336	2,797	-3
Loans and advances customers	258,146		30,175	240,273	270,448	12,302
Total	**343,950**	**66,865**	**48,775**	**240,609**	**356,249**	**12,299**
Liabilities						
Securities financing	9,494		9,494		9,494	
Due to banks	38,076		4,309	33,773	38,082	6
Due to customers	251,218		85,654	163,021	248,676	-2,542
Issued debt	58,796	43,608	18,914		62,522	3,726
Subordinated liabilities	7,549	5,959	1,979		7,938	389
Total	**365,132**	**49,567**	**120,350**	**196,794**	**366,712**	**1,579**

23 Group structure

Accounting policy for business combinations

ABN AMRO accounts for business combinations using the acquisition method when control is transferred to the bank. All items of consideration, including contingent consideration, transferred by ABN AMRO are measured and recognised at fair value at the acquisition date. Transaction costs incurred by ABN AMRO in connection with the business combination, other than those associated with the issuance of debt and equity securities, do not form part of the cost of the business combination transaction but are expensed as incurred. The excess of the purchase consideration over ABN AMRO's share of the fair value of the identifiable net assets acquired (including certain contingent liabilities) is recorded as goodwill.

ABN AMRO measures the identifiable assets acquired and the liabilities assumed at the fair value at the acquisition date. In a step acquisition, where a business combination occurs in stages and control of the business is obtained in stages, the identifiable assets and liabilities of the acquiree are recognised at fair value when control is obtained. A gain or loss is recognised in profit or loss as the difference between the fair value of the previously held equity interest in the acquiree and its carrying amount. Changes in interests in subsidiaries that do not result in a change of control are treated as transactions between equity holders and are reported in equity.

Accounting policy for subsidiaries

ABN AMRO's subsidiaries are those entities which it directly or indirectly controls. Control over an entity is evidenced by ABN AMRO's ability to exercise its power in order to affect the variable returns that it is exposed to through its involvement in the entity. The existence and effect of potential voting rights that are currently exercisable are taken into account when assessing whether control exists.

The assessment of control is based on consideration of all facts and circumstances. The bank reassesses whether it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control (power, exposure to variability in returns, and a link between the two).

ABN AMRO sponsors entities, including certain special purpose entities, which may or may not be directly owned, for the purpose of asset securitisation transactions and other specific and well-defined objectives. Particularly in the case of securitisations, these entities may acquire assets from ABN AMRO companies. Some of these entities hold assets that are not available to meet the claims of creditors of ABN AMRO or its subsidiaries. These entities are consolidated in ABN AMRO's financial statements when the substance of the relationship between ABN AMRO and the entity indicates that control is held by ABN AMRO.

ABN AMRO is mainly involved in securitisations of own originated assets, such as various consumer and commercial financial assets. This process generally necessitates a sale of these assets to a special purpose entity (SPE), which in turn issues securities to investors. ABN AMRO's interests in securitised assets may be retained in the form of senior or subordinated tranches, issued guarantees, interest-only strips or other residual interests, together referred to as retained interests. In many cases, these retained interests convey control, such that the SPE is consolidated and the securitised assets continue to be recognised in the consolidated statement of financial position.

The financial statements of subsidiaries and special purpose entities are included in the Consolidated Annual Financial Statements from the date on which control commences until the date on which control ceases.

Accounting policy for associates and joint ventures

Associates are those entities in which ABN AMRO has significant influence on, but no control or joint control over, the operating and financial policies. Significant influence is generally presumed when ABN AMRO holds between 20% and 50% of the voting rights. Potential voting rights that are currently exercisable are considered in assessing whether ABN AMRO has significant influence. Among other factors, representation on the board of directors, participation in the policy-making process and material transactions between the entity and the investee are considered to determine significant influence.

A joint venture is an investment in which two or more parties have contractually agreed to share control over the investment. Joint control exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. The activities conducted through joint ventures include cash transfers, insurance, finance and leasing.

Investments in associates and joint ventures, including strategic investments, are accounted for using the equity method. Under this method, the investment is initially recorded at cost and subsequently increased (or decreased) for post-acquisition net income (or loss), other movements impacting on the equity of the investee and any adjustments required for impairment. ABN AMRO's share of the profit or loss of the investee is recognised in Share of result in equity accounted investements. If ABN AMRO's share of losses exceeds the carrying amount of the investment, the carrying amount is reduced to zero, including any other unsecured receivables, and recognition of further losses is discontinued except if ABN AMRO has incurred obligations or made payments on behalf of the investee.

Assets and liabilities of acquisitions and divestments

The following table provides details of the assets and liabilities resulting from the acquisition or disposal of subsidiaries and equity accounted investments at the date of acquisition or disposal.

(in millions)	31 December 2022 Acquisitions	31 December 2022 Divestments	31 December 2021 Acquisitions	31 December 2021 Divestments
Assets and liabilities of acquisitions and divestments				
Loans and advances banks		-9		
Equity-accounted investments	13	-51	14	-1
Other assets		-75		-193
Net assets acquired/Net assets divested	**13**	**-135**	**14**	**-194**
Result on divestments, gross		147		
Net disposal result		**147**		
Cash used for acquisitions/received from divestments				
Total purchase consideration/Proceeds from sale	-13	281	-14	194
Cash and cash equivalents acquired/divested		-9		
Cash used for acquisitions/received from divestments	**-13**	**272**	**-14**	**194**

Acquisitions and Divestments

No significant acquisitions were performed in 2022.

The change in divestments in 2022 was impacted by the sale of ABN AMRO Levensverzekeringen, ABN AMRO Pensioeninstellingen and MP Solar.

No significant acquisitions were performed in 2021.

The change in divestments in 2021 was impacted by the sale of the Maas Capital Shipping portfolio.

Equity accounted investments

The following table provides an overview of the most significant investments in associates and joint ventures at equity method.

(in millions)	Principal place of business	Business line	31 December 2022 Carrying amount	31 December 2022 Equity interest	31 December 2021 Carrying amount	31 December 2021 Equity interest
Joint ventures						
Neuflize Vie S.A.	France	Wealth Management	219	60%	240	60%
Other joint ventures			25		25	
Associates						
Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	The Netherlands	Personal & Business Banking	54	49%	128	49%
Other equity associates			176		170	
Total equity associates and joint ventures			**474**		**564**	

Neuflize Vie is a joint venture where the power to govern the financial and operating policies of the economic activity is subject to joint control.

Other investments in equity associates and joint ventures at equity method comprise a large number of equity associates and joint ventures with individual carrying amounts of less than EUR 75 million.

The following tables provide an overview of the summarised financial information of the most significant investments in associates and joint ventures at equity method.

	31 December 2022		31 December 2021	
	Joint venture	Associate	Joint venture	Associate
(in millions)	Neuflize Vie S.A.	Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	Neuflize Vie S.A.	Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.
Assets				
Financial assets held for trading		1,322		1,899
Financial investments	10,874	1,079	13,378	493
Loans and advances banks and customers	260	1,929	262	2,074
Property and equipment	380		350	5
Accrued income and prepaid expenses	36	26	36	33
Other assets	41	102	37	105
Total assets	**11,590**	**4,457**	**14,062**	**4,609**
Liabilities				
Due to banks and customers	35		47	
Provisions	4,495	4,100	6,122	4,180
Other liabilities	6,696	100	7,492	164
Total liabilities	**11,225**	**4,201**	**13,662**	**4,345**
Equity				
Total equity	**365**	**257**	**401**	**264**
Total liabilities and equity	**11,590**	**4,457**	**14,062**	**4,609**
Bank's share of equity	219	54	240	128
Carrying amount	**219**	**54**	**240**	**128**

Assets related to equity associates are mainly held by Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V. (EUR 4.5 billion at 31 December 2022, compared with EUR 4.6 billion at 31 December 2021).

Neuflize Vie holds the majority of assets under joint ventures (EUR 11.6 billion at 31 December 2022, compared with EUR 14.1 billion at 31 December 2021).

	2022		2021	
	Joint venture	Associate	Joint venture	Associate
(in millions)	Neuflize Vie S.A.	Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	Neuflize Vie S.A.	Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.
Other income	92	519	73	610
Operating income	**92**	**519**	**73**	**610**
Other operating expenses	51	464	47	544
Operating expenses	**51**	**464**	**47**	**544**
Profit/(loss) before taxation	**41**	**55**	**26**	**66**
Income tax expense	9	12	7	12
Profit/(loss) for the period	**32**	**42**	**19**	**55**
Other comprehensive income	-2		43	
Total comprehensive income	**30**	**42**	**62**	**55**

	2022		2021	
(in millions)	Joint ventures	Associates:	Joint ventures	Associates:
Operating income	92	1,493	73	1,145
Operating expenses	51	892	47	939
Profit/(loss) before taxation	**41**	**601**	**26**	**206**
Income tax expense	9	52	7	19
Profit/(loss) for the period	**32**	**549**	**19**	**187**

The joint ventures and associates had no contingent liabilities or capital commitments other than the minimum capital requirements under the Solvency Regulation as at 31 December 2022 and 2021.

Impairments on equity accounted investments

The following table shows the changes in impairments on equity accounted investments.

(in millions)	2022	2021
Balance as at 1 January		17
Increase in impairments		6
Release of impairments		-8
Other		-14
Balance as at 31 December		

Structured entities

Structured entities are entities that have been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements.

A structured entity has some or all of the following features or attributes:

- Restricted activities;
- Narrow and well-defined objectives;
- Insufficient equity to permit the structured entity to finance its activities without subordinated financial support;
- Financing, in the form of multiple contractually linked instruments, to investors that creates concentrations of credit or other risks;
- Relevant activities are directed by contractual arrangements.

Consolidated structured entities

There were no notes sold to external parties at 31 December 2022 (31 December 2021: no notes sold). Retained notes are used for repo transactions and TLTRO, for example.

The securitisation transactions were primarily used for funding and liquidity purposes. There was no RWA (REA) relief at 31 December 2022 (31 December 2021: no relief).

During 2022, ABN AMRO terminated its last traditional securitisation programme. In such transactions, a foundation (stichting) incorporates a bankruptcy-remote, structured entity, to which the legal title of a portfolio of receivables is sold. As ABN AMRO continued, in this case, to recognise the assets after the legal title had been sold, no derecognition took place. The structured entity had issued notes to fund the purchase. ABN AMRO performed key ancillary roles in all its securitisation transactions, including as swap counterparty.

After termination of the securitisation programme, a small position of securitised assets remained.

Risks associated with the roles in the securitisation process

Credit risk

Credit risk relates to the risk of credit losses on securitised assets. ABN AMRO retains part of the credit risk by retaining notes and other securitisation positions such as liquidity facilities, swaps and first loss tranches. Regulatory capital is held for all retained securitisation positions in accordance with the applicable regulation.

Liquidity risk

Liquidity risk relates to the risk that ABN AMRO may incur additional cash outflows. Any potential future cash outflows relating to these positions, including collateral requirements, are taken into account within stress tests and are integrated into the liquidity ratios, where required. This includes the potential impact of the liquidity facilities or swap agreements that form part of certain securitisation transactions, most of which relate to transactions where ABN AMRO is the originator of the underlying assets.

Approaches to calculating risk exposure amount

ABN AMRO does not achieve significant risk transfers for any of the mortgage securitisations. Therefore, the look-through approach is used and RWA (REA) reduction is not applied.

Monitoring process

ABN AMRO periodically monitors changes in credit risk relating to securitisation exposures. The significance of the amount of credit risk transferred to third parties by securitisation of own originated assets is assessed on a monthly basis in accordance with the regulatory significant risk transfer test. For investments in third-party securitisations, the risk is monitored by reviewing the investor reports of these transactions. Additionally, third-party securitisation positions are included in the firm-wide comprehensive stress tests in which the downgrade and default risks under stressed market conditions are assessed.

Overview of securitisation positions and securitised assets

The total amount of assets securitised in securitisations decreased to EUR 2.0 billion at 31 December 2022 (31 December 2021: EUR 10.5 billion) due to the termination of Dolphin Master Issuer B.V. No securitisation transactions for the purpose of capital relief were originated in 2022.

Details of total notes outstanding per structured entity

The following table provides details of the outstanding notes issued by consolidated structured entities established by ABN AMRO for securitisation purposes and which were terminated during 2022.

	31 December 2022		31 December 2021	
(in millions)	Total notes issued	% of total assets	Total notes issued	% of total assets
Category				
Dolphin Master Issuer B.V.			9,533	2.4%
Total			**9,533**	

Support to consolidated structured entities

ABN AMRO did not provide support, financial or otherwise, to a consolidated structured entity, including when ABN AMRO was not contractually obliged to do so, and nor does ABN AMRO intend to do so in the future.

Unconsolidated structured entities

Unconsolidated structured entities are entities over which ABN AMRO has no control or significant influence. ABN AMRO is involved with structured entities through securitisation of financial assets and investments in structured entities. Structured entities generally finance the purchase of assets by issuing debt and equity securities that are collateralised by the assets held by the structured entities. The debt and equity securities issued by the structured entities may include tranches with varying levels of subordination. The interest in unconsolidated structured entities increased by EUR 1.1 billion to EUR 5.3 billion at year-end 2022 (2021: EUR 4.2 billion). The interests consist mainly of debt securities in corporate loans of EUR 681 million (2021: EUR 677 million) and mortgage and other asset-backed securities recognised under financial investments of EUR 3.3 billion (2021: EUR 3.2 billion). The maximum exposure to losses from these interests is equal to the total carrying amount.

Sponsoring of unconsolidated structured entities

An entity is considered a sponsor of an unconsolidated structured entity if it had a key role in establishing that entity so that the transaction that is the purpose of the entity could occur. No sponsoring occurred during 2022.

24 Property and equipment, leases, goodwill and other intangible assets

Accounting policy for property and equipment
Property and equipment is stated at cost less accumulated depreciation and any impairment amount. At each balance sheet date, an assessment is performed to determine whether there is any indication of impairment. Subsequent costs are capitalised if these result in an enhancement to the asset. Depreciation is charged to the income statement on a straight-line basis over the estimated useful lives of items of property and equipment, and of major components that are accounted for separately. ABN AMRO generally uses the following useful lives in calculating depreciation:
- Land: not depreciated;
- Buildings: 30 years;
- Leasehold improvements: 5 years;
- Equipment: 5 years;
- Installations (durable): 10 years;
- Computer installations: 2 to 5 years.

At each reporting date, ABN AMRO reviews the carrying amounts of its non-financial assets (i.e. ROU assets, equipment, goodwill and other intangible assets) to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated. Goodwill is tested annually for impairment.
For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that is largely independent of the cash inflows of other assets or cash-generating units. Goodwill arising from a business combination is allocated to cash-generating units or groups of cash-generating units that are expected to benefit from the synergies of the combination.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash-generating unit.

An impairment loss is recognised if the carrying amount of an asset or cash-generating unit exceeds its recoverable amount. In general, ABN AMRO's corporate assets do not generate separate cash inflows and are used by more than one cash-generating unit. Corporate assets are allocated to cash-generating units on a reasonable and consistent basis and tested for impairment as part of the testing of the cash-generating unit to which the corporate assets are allocated.

Impairment losses are recognised in profit or loss under depreciation and amortisation expenses. They are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit, and then to reduce the carrying amounts of the other assets in the cash-generating unit on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Impairment losses are recognised in the income statement as a component of depreciation and amortisation expense. Impairment losses are reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised.

Depreciation rates and residual values are reviewed at least periodically to take into account any change in circumstances. Capitalised leasehold improvements are depreciated in a manner that takes into account the term and renewal conditions of the related lease.

Assets for which the bank acts as a lessor in an operational lease contract are included in property and equipment. The asset is depreciated on a straight-line basis, over its useful life, to its estimated residual value.

Accounting policy for leases
Lessor accounting
Where ABN AMRO acts as lessor, a distinction is made between operating and finance leases. Leases where the bank transfers substantially all risks and rewards incidental to ownership of the asset to the lessee are classified as finance leases. Leases that do not transfer these risks and rewards are classified as operating leases. Finance leases are recognised as a

receivable in loans and advances at an amount equal to the net investment in the lease, less credit loss allowances. Assets subject to operating leases are recognised at cost in property and equipment. Operating income from finance leases is recognised in a pattern reflecting a constant periodic rate of return on the net investment in the lease.

Lessee accounting

All leases, except for low-value leases and leases with a duration of less than one year, are recognised on the balance sheet as a right of use (ROU) asset and lease liability. As a lessee, ABN AMRO enters into various lease contracts, mainly for office buildings and cars that the bank leases for its own use. When accounting for the contracts as a lessee, ABN AMRO separates non-lease components from lease components. Payments such as variable lease payments that do not depend on an index or a rate and non-lease components are not included in the lease liability. The ROU asset is initially measured at cost, which reflects the initial lease liability, adjusted for upfront lease payments, received incentives and initial direct costs. The initial lease liability is equal to the sum of the fixed lease payments, discounted by the incremental borrowing rate.

The ROU asset is depreciated over the period of the lease, using the straight-line method.

Adjustments to the ROU asset and corresponding lease liability result from remeasurement and/or modification. Remeasurement occurs when there is a change in the lease term or discount rate, or when ABN AMRO changes its assessment regarding purchase, extension or termination options. A lease modification is a change in the scope of the lease, or the consideration of a part of a lease that was not in the original terms and conditions of the lease. A lease modification results in either a separate additional lease or a change in the accounting for the existing lease. In the case of a lease modification not resulting in an additional lease, the lease liability is remeasured by adjusting the carrying amount of the ROU asset and, to reflect the partial or full termination of the lease, recognising any gain or loss in the statement of profit and loss.

Expenses related to short-term leases with a term of less than 12 months and leases of low-value are recognised in the income statement. ROU assets are included in the line item Property and equipment, while the lease liabilities are included in Other liabilities. Depreciation of the ROU assets is included in the line item for depreciation and amortisation of tangible and intangible assets in the income statement, and interest expense on lease liabilities is included in the line item Other interest and similar expense.

Sale and leaseback transactions

In a sale and leaseback transaction, the seller-lessee transfers an underlying asset to the buyer-lessor and leases that asset back from the buyer-lessor.

Seller-lessee accounting

If the bank is involved in a sale and leaseback transaction as a seller-lessee, the accounting policy described below is from the perspective of a seller-lessee. To determine how to account for a sale and leaseback transaction, the bank first considers whether the initial transfer of the underlying asset from the seller-lessee to the buyer-lessor is a sale in accordance with IFRS 15.

If a sale and leaseback transaction results in a sale in accordance with IFRS 15, the underlying asset is derecognised and the lessee accounting model is applied to the leaseback. The ROU asset arising from the leaseback is measured based on the proportion of the previous carrying amount of the asset that relates to the rights of use retained by the seller-lessee. Accordingly, any gain or loss that relates to the rights transferred to the buyer-lessor is recognised.

The proportion of the rights of use retained is the ratio between the present value of lease payments at market rates (excluding any future index changes) and the fair value of the consideration for the sale proceeds. The residual proportion is the proportion of the rights transferred.

The fair value of the consideration for the sale proceeds is equal to the fair value of the underlying asset in the sale-and-leaseback transaction. If this does not equal the fair value of the underlying asset, or if the payments for the lease are not at market rates, the bank makes adjustments to recognise the sale proceeds at the fair value. Any below-market terms are recognised as a prepayment of lease payments and any above-market terms are recognised as additional financing provided by the buyer-lessor to the seller-lessee.

Accounting policy for intangible assets

Goodwill

Goodwill is capitalised and stated at cost, being the excess of the consideration paid over the fair value of ABN AMRO's share of the acquired entity's net identifiable assets at the acquisition date, less any accumulated impairment losses. For the purpose of calculating goodwill, the fair values of acquired assets, liabilities and contingent liabilities are determined by reference to market values or by discounting expected future cash flows to present value. Goodwill is not amortised, but is reviewed annually for impairment, or more frequently if there are indications that impairment may have occurred. In the test, the carrying amount of goodwill is compared with the higher of the fair value less costs to sell and the value in use, being the present value of the cash flows discounted at a pre-tax discount rate that reflects the risk of the cash-generating unit to which the goodwill relates. Impairment losses are recognised in the income statement as depreciation and amortisation expense and are irreversible.

Software and other intangible assets

The accounting policy for software and other intangible assets is determined by IAS 38 Intangible assets. Software is amortised over a period of three years, unless it is classified as core application software, which is depreciated over its estimated useful life, set at a maximum of seven years. Only the development phase is capitalised for own-developed software.

Other intangible assets include separately identifiable items arising from acquisitions of subsidiaries, such as customer relationships, and certain purchased trademarks and similar items. In general, the estimated useful life does not exceed ten years. Amortisation rates and residual values are reviewed at least annually to take into account any change in circumstances.

(in millions)	31 December 2022	31 December 2021
Land and buildings held for own use	191	211
Leasehold improvements	39	43
Plant & equipment under operating lease	427	533
Equipment	81	84
Right of use assets	241	299
Other	10	
Total property and equipment	**988**	**1,172**

The right of use assets consist primarily of real estate.

(in millions)	31 December 2022	31 December 2021
Goodwill	79	79
Purchased software	12	20
Internally developed software	6	9
Other	12	19
Total goodwill and other intangible assets	**108**	**127**

										2022
(in millions)	Land and buildings held for own use	Leasehold improvements	Plant & equipment under oper. lease	Equipment	Right of use assets	Other property and equipment	Total property and equipment	Goodwill	Other intangible assets	Total goodwill and other intangible assets
Acquisition costs as at 1 January	815	244	931	795	547		3,333	147	884	1,031
Acquisitions/divestments of subsidiaries								-2		-2
Additions	33	8	96	38	93	11	278		3	3
Reversal of cost due to disposals	-72	-47	-214	-202	-78		-613	-3	-448	-450
Foreign exchange differences		2	-12	1	3		-7		1	1
Other	-50	3		6	-68		-109		-1	-2
Acquisition costs as at 31 December	**726**	**209**	**801**	**638**	**497**	**11**	**2,883**	**142**	**438**	**580**
Accumulated depreciation/ amortisation as at 1 January	-596	-195	-389	-707	-190		-2,078		-825	-825
Depreciation/amortisation	-24	-13		-42	-78		-156		-19	-19
Depreciation of assets subject to operating lease			-127				-127			
Reversal of depreciation/amortisation due to disposals	54	46	142	201	68		511		446	446
Foreign exchange differences		-1	6	-1			4		-1	-1
Other	36	-3		-4	-5		24			
Accumulated depreciation/ amortisation as at 31 December	**-530**	**-165**	**-369**	**-554**	**-205**		**-1,824**		**-398**	**-398**
Impairments as at 1 January	-8	-6	-8	-4	-57		-83	-68	-10	-78
Acquisitions/divestments of subsidiaries								2		2
Increase of impairments charged to the income statement	-1				-4	-1	-6			
Impairments on assets subject to operating lease			2				2			
Reversal of impairments credited to the income statement					10		10			
Reversal of impairments due to disposals	4	1			4		10	3		3
Foreign exchange differences					-2		-3			
Other					-1					
Impairments as at 31 December	**-5**	**-5**	**-5**	**-4**	**-51**	**-1**	**-70**	**-64**	**-10**	**-74**
Total as at 31 December	**191**	**39**	**427**	**81**	**241**	**10**	**988**	**79**	**30**	**108**

The fair value of land and buildings held for own use is estimated at EUR 234 million at 31 December 2022 (31 December 2021: EUR 283 million). Of this fair value, 100% is based on external valuations performed in 2017 to 2022. Some properties have a lower fair value than the recorded carrying value. No impairment is recorded because these properties are considered corporate assets. The value in use for the cash-generating units within ABN AMRO Group is sufficient to cover the total value of these assets.

(in millions)	Land and buildings held for own use	Leasehold improve-ments	Plant & equipment under oper. lease	Equip-ment	Right of use assets	Other property and equip-ment	Total property and equipment	Goodwill	Other intangible assets	Total goodwill and other intangible assets
										2021
Acquisition costs as at 1 January	842	242	978	863	436		3,360	146	880	1,027
Additions	23	10	118	31	255		437		21	21
Reversal of cost due to disposals	-724	-11	-184	-97	-13		-1,029		-18	-18
Foreign exchange differences		2	19	3	7		31		1	1
Other	675	1		-4	-138		533	1	-1	
Acquisition costs as at 31 December	**815**	**244**	**931**	**795**	**547**		**3,333**	**147**	**884**	**1,031**
Accumulated depreciation/ amortisation as at 1 January	-591	-189	-369	-743	-134		-2,026		-816	-816
Depreciation/amortisation	-33	-15		-55	-72		-175		-20	-20
Depreciation of assets subject to operating lease			-138				-138			
Reversal of depreciation/amortisation due to disposals	455	11	125	88	9		687		12	12
Foreign exchange differences		-2	-8	-3	-2		-13		-1	-1
Other	-426			5	8		-413		1	1
Accumulated depreciation/ amortisation as at 31 December	**-596**	**-195**	**-389**	**-707**	**-190**		**-2,078**		**-825**	**-825**
Impairments as at 1 January	-8	-5	-7	-3	-55		-79	-68	-15	-82
Increase of impairments charged to the income statement	-1				-2		-3		-1	-1
Impairments on assets subject to operating lease			-4				-4			
Reversal of impairments credited to the income statement					5		5			
Reversal of impairments due to disposals	1		4				5		6	6
Foreign exchange differences			-1		-3		-4			
Other					-3		-3			
Impairments as at 31 December	**-8**	**-6**	**-8**	**-4**	**-57**		**-83**	**-68**	**-10**	**-78**
Total as at 31 December	**211**	**43**	**533**	**84**	**299**		**1,172**	**79**	**48**	**127**

Leases

ABN AMRO enters into leases both as lessor and as lessee. In its capacity as lessee, ABN AMRO leases various assets, mainly office properties, cars and equipment that serve to support the bank's operations. The leases have various terms and termination and renewal options. The majority of termination and renewal options are exercisable only by the bank and not by the respective lessor. There are no variable lease payments in lease contracts where ABN AMRO acts as lessee. No covenants are present in the lease agreements and ABN AMRO is not allowed to use leased assets as security for financing purposes. The total cash outflow relating to leases in 2022 amounted to EUR 110 million (2021: EUR 91 million).

Sale and leaseback of head office at Gustav Mahlerlaan

In 2021, ABN AMRO completed the sale and leaseback of its head office at Gustav Mahlerlaan in Amsterdam. ABN AMRO is the seller-lessee in this transaction. The buyer-lessor of the office paid a total consideration of EUR 765 million. As part of the sale, ABN AMRO recognised a pre-tax gain of EUR 327 million (EUR 245 million net of tax) in other operating income (Note 6 Net income from other operating activities). As part of the lease, ABN AMRO recognised a ROU asset of EUR 78 million and a corresponding lease liability of EUR 203 million (Note 32 Other liabilities). ABN AMRO will lease back the Gustav Mahlerlaan office for a period of four years before moving to the redeveloped office building at Foppingadreef in Amsterdam Zuidoost. ABN AMRO has an option, which is only exercisable by ABN AMRO, to extend the lease by a further period of one year. As at 31 December 2022, ABN AMRO had not exercised the option to extend the lease.

In Q3 2022, ABN AMRO has exercised the option to early terminate part of the lease of the Gustav Mahler building in June 2023. The closure is the result of progress being made both on the new owners' redevelopment plans for the site as well as continued progress on the circular repurposing of the materials at another location. As a result of exercising this early exit option, an additional gain of EUR 15.6 million has been recognised in in other operating income (Note 6 Net income from other operating activities).

In the first four years of the lease contract, the lease is based on 'triple net' conditions, which means that the share of the owner's maintenance costs normally incurred by the lessor will be paid by the lessee. The contractual lease amounts are paid quarterly in advance. The office building at Foppingadreef is currently being redeveloped and work is expected to be completed by the end of 2025. After 2025, ABN AMRO will continue to lease a small part of the Gustav Mahlerlaan office, which will remain the bank's head office for an additional fifteen years, with the option to extend this period by five years. ABN AMRO is also financing part of the sale and leaseback transaction for the first four years of the lease contract.

The following table shows the maturity of lease liabilities for leases in which the bank acts as lessee, as well as the future undiscounted minimum lease receipts under operating and financial leases where the bank acts as lessor. It also reconciles the total future minimum lease receipts under financial leases and the net investment in the leases.

(in millions)	Within 3 months	More than 3 months but within 1 year	More than 1 year but within 5 years	More than 5 years	Total	Unearned finance income	Net investment in the lease
							31 December 2022
Lease liabilities	22	66	224	52	364	n/a	n/a
Future minimum lease receipts under financial leases	689	1,055	2,531	402	4,678	-281	4,396
Future minimum lease receipts under operating leases	36	126	272	36	469	n/a	n/a
							31 December 2021
Lease liabilities	15	44	174	88	320	n/a	n/a
Future minimum lease receipts under financial leases	771	1,124	2,882	446	5,222	-250	4,972
Future minimum lease receipts under operating leases	42	135	369	37	583	n/a	n/a

The net investment in the leases amounted to EUR 4,396 million (31 December 2021: EUR 4,972 million). The decrease was mainly due to interest rate developments as this leads to less demand for new leasing contracts and more opportunities for early termination and prepayment by clients. ABN AMRO retains risk with respect to its declining portfolio. However, it has been actively de-risking the lease portfolio, mainly in the UK. Furthermore, Asset Based Finance decreased its exposure to certain lease products and client segments by selling these exposures to other market participants, requesting clients to search for alternative funding or demanding prepayments on lease facilities.

In its capacity as lessor, ABN AMRO leases out various assets. Operating leases in which the bank acts as lessor are included in Property and equipment – equipment. Financial leases in which the bank acts as lessor are included in corporate loans under loans and advances customers. Income from leases in which ABN AMRO acts as lessor is presented in the following table.

(in millions)	2022	2021
Income from financial leases	133	147
Income from operating leases	152	163
Total income from leases	**285**	**309**

Income related to variable lease payments on financial leases amounted to EUR 3 million in 2022. There was no income relating to variable lease payments on operating leases.

ABN AMRO also acts as an intermediate lessor in subleases where it subleases ROU assets to a third party. During 2022, the total income from subleasing ROU assets amounted to EUR 5 million.

Valuation of goodwill

						31 December 2022	31 December 2021
(in millions)	Segment	Method used for recoverable amount	Discount rate	Long-term growth rate	Impairment charges	Goodwill	Goodwill
Entity							
Bethmann	Wealth Management	Value in use	10.0%	0.0%		63	63
ABN AMRO Asset Based Finance N.V., (UK) Branch	Corporate Banking	Value in use	10.0%	0.0%		9	10
Banque Neuflize OBC S.A.	Wealth Management	Value in use	10.0%	0.0%		6	6
Total goodwill and impairment charges						**79**	**79**

The outcome of several impairment tests entails an impairment of nil. Total goodwill and impairment charges remained the same compared to the prior period.

(in millions)	2022	2022
Depreciation on tangible assets		
Land and buildings held for own use	24	33
Leasehold improvements	13	15
Equipment	42	55
Right of use assets	78	72
Amortisation on intangible assets		
Purchased software	10	11
Internally developed software	2	3
Other intangible assets	7	6
Impairment losses on tangible assets		
Land and buildings held for own use (incl. held for sale)	1	1
Right of use assets	-5	-3
Other	1	
Impairment losses on intangible assets		
Purchased software		1
Total depreciation, amortisation and impairment losses	**172**	**194**

25 Non-current assets and disposal groups held for sale

Accounting policy for non-current assets and disposal groups held for sale

Non-current assets and/or businesses are classified as held for sale if their carrying amount is to be recovered principally by selling them within 12 months, rather than through ongoing use. Assets held for sale (other than financial instruments) are not depreciated and are measured at the lower of their carrying amount and fair value, less costs to sell. Assets and liabilities of a business held for sale are presented separately in the consolidated statement of financial position.

(in millions)	31 December 2022	31 December 2021
Financial investments		86
Property and equipment	13	3
Assets of businesses held for sale	**13**	**89**
Liabilities of businesses held for sale		

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The 2022 held for sale position of EUR 13 million relates mainly to the office building held for own use in Rotterdam, currently presented in Group Functions, and which will be sold in Q3 2023. The sale will be part of a sale and leaseback transaction with the buyer-lessor of the office building. The property is shown at the carrying amount, which is significantly lower than the current fair value less cost to sell.

26 Other assets

(in millions)	31 December 2022	31 December 2021
Accrued other income	496	564
Prepaid expenses	20	25
Unsettled securities transactions	1,313	1,046
Trade and other receivables	2,218	2,284
Other	425	345
Total other assets	**4,473**	**4,263**

Unsettled securities transactions relate to reversed repurchase and securities borrowing transactions that have been delivered but not settled.

At 31 December 2022, other assets included a net receivable of EUR 0.1 billion related to the bankruptcy of DSB Bank (31 December 2021: EUR 0.1 billion).

27 Due to banks

Accounting policy for due to banks and due to customers

Amounts due to banks and customers are held at amortised cost. That is, at fair value upon initial recognition, adjusted for repayment and amortisation of coupon, fees and expenses to represent the effective interest rate of the instrument.

(in millions)	31 December 2022	31 December 2021
Current accounts	1,977	1,525
Demand deposits	1	3
Time deposits	14,895	36,070
Cash collateral on securities lent	625	467
Other	10	10
Total due to banks	**17,509**	**38,076**

On 23 November and 21 December 2022, ABN AMRO partly repaid the TLTRO III funding in the amounts of EUR 8.0 billion and EUR 13.0 billion, respectively. On 31 December 2022, an amount of EUR 14.0 billion remained outstanding, of which EUR 11.0 billion matures in June 2023 and EUR 3.0 billion matures in June 2024. The repayments followed the change made by the ECB in the TLTRO III interest rate terms and conditions.

28 Due to customers

Accounting policy for due to customers

The accounting policy for amounts due to customers is included in Note 27 Due to banks.

(in millions)	31 December 2022	31 December 2021
Current accounts	122,030	132,983
Demand deposits	100,397	98,790
Time deposits	30,096	18,780
Other	2,491	665
Total due to customers	**255,015**	**251,218**

29 Issued debt and subordinated liabilities

Accounting policy for issued debt and subordinated liabilities

Issued debt securities and subordinated liabilities are recorded at amortised cost using the effective interest rate method. Hybrid or structured financial liabilities are irrevocably designated upon initial recognition to be measured at fair value through profit or loss. The latter is applied when the instruments are held to reduce an accounting mismatch, are managed on the basis of their fair value or include terms that qualify as an embedded derivative that cannot be separated.

ABN AMRO applies IAS 32 Financial Instruments: Presentation to determine whether funding is a financial liability or equity. Issued financial instruments or their components are classified as financial liabilities where the substance of the contractual arrangement results in ABN AMRO having a present obligation to deliver either cash or another financial asset or to satisfy the obligation other than by the exchange of a fixed number of equity shares.

Issued liabilities qualify as subordinated debt if claims by the holders are subordinated to all other current and future liabilities of ABN AMRO and its subsidiaries.

The valuation of liabilities measured at fair value includes the effect of changes in the bank's own credit spreads. The change in fair value applies to those financial liabilities designated at fair value where own value credit risk would be considered by market participants. The cumulative amount of changes in fair value attributable to credit risk of issued debt is presented as liability own credit risk reserve in equity. Exchange-traded own debt measured at fair value through profit or loss is valued at market prices.

Fair value changes are calculated based on a yield curve generated from observed external pricing for funding and quoted CDS spreads

The following table shows the types of debt certificates issued by ABN AMRO and the amounts outstanding at 31 December 2022. Movements in these debt instruments involve a continual process of redemption and issuance of long-term and short-term funding.

Issued debt

(in millions)	31 December 2022	31 December 2021
Bonds and notes issued	41,313	49,619
Certificates of deposit and commercial paper	14,723	9,177
Total at amortised cost	**56,036**	**58,796**
Designated at fair value through profit or loss	223	892
Total issued debt	**56,259**	**59,688**
- of which matures within one year	*19,053*	*16,734*

	2022	2021
(in millions)	Carrying amount	Carrying amount
Balance as at 1 January	**59,688**	**66,949**
Cash flows		
Issuance	35,231	30,226
Redemption	-30,668	-36,180
Non-cash changes		
Foreign exchange differences	118	1,130
Fair value changes own credit risk	-8	-20
Unrealised gains/(losses)	-8,451	-2,335
Other	350	-83
Balance as at 31 December	**56,259**	**59,688**

The amounts of debt issued and redeemed during the period are shown in the Consolidated statement of cash flows. Non-cash changes consist mainly of unrealised gains and losses and foreign exchange differences. Further details of the funding programmes are provided in Funding in the Risk, funding & capital chapter.

Financial liabilities designated at fair value through profit or loss

(in millions)	31 December 2022	31 December 2021
Cumulative change in fair value of the structured notes attributable to changes in credit risk	4	12
Change during the year in fair value of the structured notes attributable to changes in credit risk	-8	-20
Difference between amount contractually required to pay at maturity and the carrying amount	6	-63

The change in fair value of the structured notes attributable to changes in credit risk is determined using the credit spread implicit in the fair value of similar bonds traded in active markets and issued by ABN AMRO.

Subordinated liabilities

The following table shows the types of debt certificates issued by ABN AMRO and the amounts outstanding at 31 December. Movements in these debt instruments involve a continual process of redemption and issuance of long-term and short-term funding.

(in millions)	31 December 2022	31 December 2021
Subordinated liabilities	7,290	7,549

	2022	2021
(in millions)	Carrying amount	Carrying amount
Balance as at 1 January	**7,549**	**8,069**
Cash flows		
Issuance	1,540	910
Redemption	-1,602	-1,514
Non-cash changes		
Foreign exchange differences	360	367
Other	-556	-283
Balance as at 31 December	**7,290**	**7,549**

No perpetual loans were recorded at the reporting date. The issued and outstanding loans qualifying as subordinated liabilities are subordinated to all other current and future liabilities.

30 Provisions

Accounting policy for provisions

A provision is recognised in the balance sheet when ABN AMRO has a legal or constructive obligation as a result of a past event, and it is more likely than not that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made. If the effect of time value is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market rates and, where appropriate, the risks specific to the liability.

A provision for restructuring is recognised when an obligation exists. An obligation exists when ABN AMRO has approved a detailed plan and has raised a valid expectation in those affected by the plan by starting to implement the plan or by announcing its main features. Future operating costs are not provided for. Provisions for insurance risks are determined by actuarial methods, which include the use of statistics, interest rate data and settlement cost expectations.

Provisions are established for certain guarantee contracts for which ABN AMRO is liable to pay upon default of payment. Expected credit loss allowances of loan commitments and financial guarantees are recognised as provisions under IFRS 9.

(in millions)	31 December 2022	31 December 2021
Legal provisions	447	398
Credit commitments provisions	154	222
Restructuring provision	105	178
Other staff provision	128	137
Provision for pension commitments	75	79
Insurance fund liabilities	8	5
Other provisions	128	181
Total provisions	**1,044**	**1,201**

Legal provisions

Interest rate derivatives for SME clients

In 2015, ABN AMRO started a review, at the request of the Netherlands Authority for the Financial Markets (AFM) and the Dutch Ministry of Finance, to determine whether the bank had acted in accordance with its duty of care obligations in respect of the sale of interest rate derivatives to SME clients. In the second quarter of 2015, ABN AMRO first recognised a provision for compensating clients who had been disadvantaged in this respect and suffered loss or damage.

ABN AMRO has set up its own client reassessment process and the related checks and balances with respect to the Uniform Recovery Framework devised by a committee of independent experts ('the Committee') appointed by the Dutch Minister of Finance. Except for a limited number of proceedings relating to the Uniform Recovery Framework before the Dutch courts, ABN AMRO has completed the execution of the Uniform Recovery Framework. The total provision for SME derivatives-related issues consisted of client compensation (EUR 0.6 billion) and project costs (EUR 0.3 billion). The remaining provision amounted to EUR 3 million at 31 December 2022.

EURIBOR-based mortgages

ABN AMRO has sold mortgage loans with floating, often Euribor-based, interest rates to consumers. These rates include a margin charge. Under the applicable terms and conditions, ABN AMRO has the right to unilaterally adjust the margin charge. ABN AMRO's decision to increase the margin charge in 2012 resulted in two class actions, on top of multiple individual cases, being instigated. The central question in these cases was whether ABN AMRO's right in the terms and conditions to unilaterally adjust the margin charge was an unfair contractual clause. On 22 November 2019, the Supreme Court quashed the ruling of the Amsterdam Court of Appeal in the Euribor collective cases. The case was referred to another Court of Appeal (The Hague) in order to be dealt with further.

In the meantime ABN AMRO and the foundation Stichting Euribar reached agreement on a settlement for clients with Euribor-Woninghypotheek mortgages. All clients who were eligible for the settlement received a personal offer from ABN AMRO and 81% of this group accepted the proposed settlement. Meanwhile, the other foundation, Stichting Stop de Banken, broke off the negotiations aimed at reaching agreement and proceeded with the class action. The hearing at the Court of Appeal in The Hague took place on 9 November 2021.

On 11 October 2022, the Court of Appeal in The Hague ruled that the amendment clauses were valid and that ABN AMRO was entitled to exercise its power of amendment. The Court of Appeal also deemed the manner in which ABN AMRO exercised its power of amendment to be within the law. This means that ABN AMRO was within its rights to amend the charge and that the increase in the charge was not excessive. The Court of Appeal also rejected all the other complaints made by Stichting Stop de Banken. The ruling applies to clients who did not accept the personal settlement offer made to them by the bank in 2020 or 2021.

Stichting Stop de Banken subsequently announced that it would appeal against the ruling and, on 22 December 2022, filed the documents for the Supreme Court appeal. ABN AMRO is currently studying the arguments raised and will respond to this action by the end of Q2 2023.

Variable interest rates for consumer loans

On 3 March 2021, the Kifid Appeals Committee confirmed a ruling of the Kifid Disputes Committee about recalculating the variable interest charged to a specific client on a revolving credit. In short, Kifid ruled that ABN AMRO should have followed the market rate when establishing the variable interest rate for certain revolving consumer credits.

In light of the Kifid ruling, ABN AMRO reached agreement with the Dutch Consumers' Association (Consumentenbond Claimservice) on 5 September 2021 regarding a compensation scheme for affected clients. In Q3 2022, following a ruling in August 2022 by the Kifid Appeals Committee, ABN AMRO amended the compensation scheme to include interest on interest. ABN AMRO has provisioned around EUR 481 million for the interest to be compensated and the costs incurred in carrying out the scheme. To date, EUR 70 million of this provision has been used, with a remaining provision as at 31 December 2022 of EUR 411 million.

It is unclear what the exact scope and application of the Kifid ruling is and whether it will have any knock-on effect on other products with variable interest rates, beyond the range of products covered by the compensation scheme. ABN AMRO cannot give a reliable estimate of the (potentially substantial) financial risk of these contingent liabilities not provided for.

Other provisions

AML remediation programme

To address shortcomings, as well as increasingly strict regulations and continuously evolving forms of financial crime, ABN AMRO had already started an extensive, bank-wide AML remediation programme. In 2022, remediation of client files progressed at full speed. The AML remediation programme is expected to be finalised in 2023. The total provision for the AML programme amounted to EUR 50 million at 31 December 2022.

(in millions)	Legal provisions	Credit commitments	Restructuring provision	Other staff provision	Provision for pension commitments	Insurance fund liabilities	Other	Total
At 1 January 2021	98	92	226	136	106	11	258	926
Increase of provisions	340	173	35				49	597
Reversal of unused provisions	-23	-51	-22				-61	-157
Utilised during the year	-16	-3	-67				-66	-152
Transfer between stages		6						6
Foreign exchange differences		6	6				1	12
Other		-1	-1	2	-27	-6	1	-32
At 31 December 2021	**398**	**222**	**178**	**137**	**79**	**5**	**181**	**1,201**
Increase of provisions	156	151	26				107	440
Reversal of unused provisions	-37	-189	-35				-13	-274
Utilised during the year	-70	-49	-70				-149	-338
Transfer between stages		2						2
Foreign exchange differences		8	5					14
Other		9		-10	-4	3	2	-1
At 31 December 2022	**447**	**154**	**105**	**128**	**75**	**8**	**128**	**1,044**

31 Pension and other employee benefits

Accounting policy for pension and other employee benefits

ABN AMRO sponsors a number of pension schemes in the Netherlands and abroad. These schemes are mainly defined contribution plans. The majority of the beneficiaries of the plans are located in the Netherlands.

Defined contribution plans

For defined contribution plans, ABN AMRO pays annual contributions determined by a fixed method and has no legal or constructive obligation to pay any further contributions. Contributions are recognised directly in the income statement in the year to which they relate. Actuarial and investment risk are for the account of the participants in the plan.

Defined benefit plans

For defined benefit plans, the net obligation of each plan is the difference between the present value of the defined benefit obligations and the fair value of the plan's assets.
The actuarial assumptions used for calculating the present value of the defined benefit obligations include discount rates based on high-quality corporate bonds, the inflation rate, future salary increases, employee contributions, mortality assumptions and rates of employee turnover. The assumptions are based on available market data and management expectations at the end of the reporting period.

Plan assets are measured at fair value at balance sheet date and are netted against the defined benefit obligations. Pension costs recognised in the income statement for defined benefit plans consist of:

- service costs;
- net interest costs determined by multiplying the net defined benefit liability (asset) by the discount rate, both as at the start of the annual reporting period, taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments; and
- curtailments or plan amendments.

Differences between pension costs and pension contributions payable are accounted for as provisions or prepayments.

Remeasurement

Remeasurements of the net defined benefit liability (asset) are actuarial gains and losses resulting from changes in actuarial assumptions and experience adjustments (i.e. unexpectedly high or low rates of employee turnover). They are recognised in other comprehensive income and are not recycled to profit or loss in later periods. The actual return on the pension plan's assets is determined after deduction of the costs of managing the assets and any tax payable by the pension plan itself.

Other employee benefits

Some group companies provide post-retirement benefits to their retirees, such as long-term service benefits and discounts on banking products. Entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period.

The expected costs of these benefits are accrued over the period of employment, using the same accounting methodology as used for defined benefit pension plans. These obligations are calculated annually.

Plans in all countries comply with applicable local regulations concerning investments and minimum funding levels.

Pension and other employee benefits

Amounts recognised in the income statement for pensions and other employee benefits

			2022			2021
(in millions)	Defined post employment benefit	Other employee benefits	Total	Defined post employment benefit	Other employee benefits	Total
Current service cost	5	3	8	7	11	18
Interest cost	2		2	1		2
Interest income	-1		-1	-1		-1
Other	12	-4	8		-3	-3
Total defined benefit expenses in actuarial report	**18**	**-1**	**17**	**7**	**8**	**15**
Other expenses	-4		-4	-4		-4
Total defined benefit expenses	**14**	**-1**	**12**	**3**	**8**	**11**
Defined contribution plans	321		321	291		291
Total pension expenses and other post retirement employee benefits	**334**	**-1**	**333**	**294**	**8**	**302**

Pension expenses for defined contribution plans consist mainly of the cash contributions to the Dutch collective defined contribution plan.

Dutch defined contribution plan

The Dutch defined contribution plan is a collective defined contribution plan, based on an average salary plan. The target retirement age is set at 68 years. The contribution payable by pension fund participants is 5.5% (2021: 5.5%).

Participants' contributions to the defined contribution plan in 2022 amounted to EUR 50 million (2021: EUR 47 million) and are included in the pension expenses.

Reconciliation to the statement of financial position and other comprehensive income

	2022			2021		
(in millions)	Defined post employment benefit	Other employee benefits	Total	Defined post employment benefit	Other employee benefits	Total
Present value of defined benefit obligations - funded with plan assets	197	3	200	242	3	246
Fair value of plan assets	157		157	189		189
	40	**3**	**43**	**54**	**3**	**57**
Present value of defined benefit obligations - unfunded	30	125	155	24	134	158
Net liabilities/(assets) balance sheet at 31 December	**70**	**128**	**198**	**78**	**137**	**215**
- of which assets	*5*		*5*	*1*		*1*
- of which liabilities	*75*	*128*	*202*	*79*	*137*	*216*
Experience adjustments	-4	-1	-4	14		13
Remeasurements arising from changes in demographic assumptions DBO	1		1	1		1
Remeasurements arising from changes in financial assumptions DBO	36	4	40	6	1	7
Remeasurements arising from changes in financial assumptions plan assets	-20		-20	3		3
Remeasurements in other comprehensive income	**13**	**3**	**16**	**23**		**24**

Change in defined benefit obligation (DBO)

	2022			2021		
(in millions)	Defined post employment benefit	Other employee benefits	Total	Defined post employment benefit	Other employee benefits	Total
Defined benefit obligation as at 1 January	**266**	**137**	**404**	300	136	435
Current service cost	5	3	8	7	11	18
Interest cost	2		2	1		2
Benefits paid in from employer	-9	-4	-13	-9	-3	-12
Remeasurements arising from changes in demographic assumptions	-1		-1	-1		-1
Experience adjustments	4	1	4	-14		-13
Remeasurements arising from changes in financial assumptions	-36	-4	-40	-6	-1	-7
Other	-5	-5	-10	-12	-6	-18
Defined benefit obligation as at 31 December	**227**	**128**	**355**	**266**	**137**	**404**

The net defined benefit liabilities/(assets) balance as at 31 December 2022 consisted of pensioners with a profit share, the indexation of benefits insured with an insurance company and several small defined benefit plans outside the Netherlands.

Change in fair value of plan assets

	2022			2021		
(in millions)	Defined post employment benefit	Other employee benefits	Total	Defined post employment benefit	Other employee benefits	Total
Fair value of plan assets as at 1 January	**189**		**189**	194		194
Interest income	1		1	1		1
Return on plan assets excluding interest	-20		-20	3		3
Employer's contributions				1		1
Other	-12		-12	-10		-10
Fair value of plan assets as at 31 December	**157**		**157**	**189**		**189**

Principal actuarial assumptions

	2022	2021
Discount rate	3.4%	0.8%
Indexation rate	2.0%	1.7%
Future salary increases	2.2%	2.2%

The above assumptions are weighted by defined benefit obligations. The discount rate consists of a risk-free rate and a credit spread on AA-rated corporate bonds.

32 Other liabilities

The following table shows the components of accrued expenses and other liabilities.

(in millions)	31 December 2022	31 December 2021
Accrued other expenses	939	876
Lease liabilities	413	485
Unsettled securities transactions	2,019	1,575
Sundry liabilities and other payables	1,816	1,821
Total other liabilities	**5,187**	**4,757**

33 Equity

Share capital and other components of equity

Ordinary shares

As at 31 December 2022, all shares in the capital of ABN AMRO Bank were held by two foundations: NLFI and STAK AAB.

Compound financial instruments

Components of compound financial instruments (liability and equity parts) are classified in their respective areas of the statement of financial position.

Currency translation reserve

The currency translation reserve represents the cumulative gains and losses on the translation of the net investment in foreign operations, net of the effect of hedging.

Fair value reserve

Under IFRS 9, the fair value reserve includes the gains and losses, net of tax, resulting from a change in the fair value of debt instruments measured at FVOCI. When the instruments are sold or otherwise disposed of, the related cumulative gain or loss recognised in equity is recycled to the income statement.

Cash flow hedging reserve

The cash flow hedging reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments, net of taxes, that are recycled to the income statement if the hedged transactions have an impact on profit or loss.

Net investment hedging reserve

The net investment hedging reserve comprises the currency translation differences arising when the currencies of these instruments are translated to euros, to the extent they are effective.

Liability own credit risk reserve

Under IFRS 9, the changes in fair value attributable to changes in the own credit risk of financial liabilities designated at FVTPL are presented in other comprehensive income. The cumulative amount of changes in fair value attributable to credit risk of such liabilities is presented as liability own credit risk reserve in equity.

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Other reserves

Other reserves mainly comprise retained earnings and profit for the period.

Dividends

Dividends on ordinary shares classified as equity are recognised as a distribution of equity in the period in which they are approved by shareholders.

Capital securities

Undated, deeply subordinated, resettable, callable capital securities are classified as additional tier 1 (AT1) capital, under total equity. ABN AMRO Bank has the European Central Bank's permission to carry out limited repurchases from investors and to sell back in the market

The following table shows the equity of ABN AMRO Bank N.V. and the outstanding and issued share capital.

(in millions)	31 December 2022	31 December 2021
Share capital	898	940
Share premium	12,529	12,970
Accumulated other comprehensive income	-842	-1,227
Other reserves (incl. retained earnings/profit for the period)	8,243	7,324
AT1 capital securities	1,985	1,987
Equity attributable to owners of the parent company	**22,812**	**21,994**
Equity attributable to non-controlling interests	2	5
Total equity	**22,814**	**21,999**

At 31 December 2022, the authorised share capital of ABN AMRO Bank N.V. amounted to 2,400,000,000 shares. The authorised share capital consists of 2,200,000,000 ordinary A-shares with a nominal value of EUR 1.00 and 200,000,000 ordinary B-shares with a nominal value of EUR 1.00. Every share is entitled to one vote during the General Meeting. During the financial year there were no changes in the authorised share capital. The total number of issued shares at 31 December 2022 was 897,521,916. In 2022, the final dividend for the year 2021 of EUR 0.61 per share was paid out for a total of EUR 553 million and the 2022 interim dividend of EUR 0.32 per share was paid out for a total of EUR 287 million. For the year 2022, a final dividend has been proposed of EUR 0.67 per share.

During the first half year of 2022, ABN AMRO Bank N.V. purchased treasury shares under the buyback programme for EUR 500 million, at an average price of EUR 11.77 per share. These treasury shares were cancelled during Q3, resulting in a reduction in the issued share capital of 42,478,085 shares, with a nominal value of EUR 1.00 each. The amount of the purchase value between EUR 1.00 (the nominal value of the purchased shares) and EUR 11.55 (the value of the purchased shares for tax purposes) has been deducted from the share premium reserve. The amount of the purchase value in excess of EUR 11.55 has been deducted from other reserves.

The following table shows the equity of ABN AMRO Bank N.V. and the outstanding and issued share capital.

	31 December 2022		31 December 2021	
	Class A ordinary shares	Class B ordinary shares	Class A ordinary shares	Class B ordinary shares
Number of shares				
Authorised share capital	2,200,000,000	200,000,000	2,200,000,000	200,000,000
Unissued share capital	1,302,478,084	200,000,000	1,259,999,999	200,000,000
Issued share capital	897,521,916		940,000,001	
Amount of shares (in EUR)				
Authorised share capital	2,200,000,000	200,000,000	2,200,000,000	200,000,000
Unissued share capital	1,302,478,084	200,000,000	1,259,999,999	200,000,000
Issued share capital	897,521,916		940,000,001	
Par value	1.00	1.00	1.00	1.00

Accumulated other comprehensive income is specified in the following table.

(in millions)	Remeasurements on post-retirement benefit plans	Currency translation reserve	Fair value reserve	Cash flow hedge reserve	Accumulated share of OCI of associates and joint ventures	Liability own credit risk reserve	Total
Balance at 1 January 2021	**-24**	**-29**	**162**	**-1,854**	**36**	**-24**	**-1,733**
Net gains/(losses) arising during the period	24	66	107	451	16	20	684
Less: Net realised gains/(losses) included in income statement				54			55
Net gains/(losses) in equity	**24**	**66**	**108**	**396**	**16**	**20**	**629**
Related income tax	6		30	82		5	123
Balance at 31 December 2021	**-6**	**38**	**239**	**-1,540**	**51**	**-9**	**-1,227**
Net gains/(losses) arising during the period	16	48	-287	762	-51	8	496
Less: Net realised gains/(losses) included in income statement		4	1	-39	7		-26
Net gains/(losses) in equity	**16**	**44**	**-288**	**801**	**-58**	**8**	**522**
Related income tax	3		-75	207		2	137
Balance at 31 December 2022	**7**	**81**	**26**	**-946**	**-7**	**-3**	**-842**

Accumulated other comprehensive income increased by EUR 385 million, driven mainly by the increase in the cash flow hedge reserve, which was the result of the current market interest rate environment. The decrease of the fair value reserve was attributable to the increased credit spread on financial investments.

34 Transferred, pledged, encumbered and restricted assets

Accounting policy for transferred, pledged, encumbered and restricted assets

Transferred financial assets are arrangements/transactions for which ABN AMRO has:

- Transferred the contractual rights to receive the cash flows of the financial asset to a third party, or;
- Retained the contractual rights to receive the cash flows of that financial asset, but has assumed a contractual obligation to pay the cash flows to a third party; or
- Transferred a financial asset when the counterparty has the right to repledge or to resell the asset.

Depending on the circumstances, these transfers may result in financial assets that either are or are not derecognised in their entirety. Please refer to Note 1 Accounting policies.

Pledged assets are assets pledged as collateral for liabilities or contingent liabilities and the terms and conditions relating to the pledge. Encumbered assets are those that are pledged or other assets that we believe to be restricted in order to secure, credit-enhance or collateralise a transaction.

In principle, pledged assets are encumbered assets. The following differences apply to ABN AMRO:

- Encumbered assets include mandatory reserve requirements with central banks;
- Encumbered assets exclude assets pledged for unused credit facilities with central banks at the statement of financial position date, i.e. mainly retained mortgage-backed securities.

Significant restrictions on assets may arise from statutory, contractual or regulatory requirements such as:

- Those that restrict the ability of the parent or its subsidiaries to transfer cash or other financial assets to or from other entities within the group;
- Guarantees or other requirements that may restrict dividends and other capital distributions being paid, or loans and advances being made or repaid to other entities within the group;
- Protective rights of other non-controlling interests that may restrict the ability of the bank to access and transfer assets freely to or from other entities within the group and to settle liabilities of the bank.

Transferred financial assets

This disclosure provides insight into the relationship between these transferred financial assets and associated financial liabilities in order to show the risks the bank is exposed to when the assets are transferred. If transferred financial assets continue to be recognised in the balance sheet, ABN AMRO Group is still exposed to changes in the fair value of the assets.

Transferred financial assets not derecognised in their entirety

The following table shows transferred financial assets that are not derecognised in their entirety.

	31 December 2022			31 December 2021		
(in millions)	Financial investments (at fair value through OCI)	Financial assets held for trading (at fair value through profit and loss)	Total	Financial investments (at fair value through OCI)	Financial assets held for trading (at fair value through profit and loss)	Total
Securities financing						
Carrying amount Transferred assets	6,298	126	6,423	7,911	122	8,033
Carrying amount Associated liabilities	9,605	126	9,731	8,069	125	8,194
Fair value of assets	6,298	126	6,423	7,911	122	8,033
Fair value of associated liabilities	9,605	126	9,731	8,069	125	8,194
Net position	**-3,308**		**-3,308**	**-158**	**-2**	**-161**

Securitisations

The bank uses securitisations as a source of funding, whereby the Special Purpose Entity (SPE) issues debt securities. In a securitisation transaction utilising true sale mechanics, the bank transfers the title of the assets to SPEs. When the cash flows are transferred to investors in the notes issued by consolidated securitisation vehicles, the assets (mainly residential mortgage loans) are considered to be transferred. The bank had no transferred and associated securitisations at 31 December 2022.

Securities financing

Securities financing transactions are entered into on a collateralised basis for mitigating the bank's credit risk exposure. In repurchase agreements and securities lending transactions, ABN AMRO gets the securities returned at maturity. The counterparty in the transactions holds the securities as collateral, but has no recourse to other assets of ABN AMRO.

Continuing involvement in transferred financial assets derecognised in their entirety

The bank does not have any material transferred assets that are derecognised in their entirety, but where ABN AMRO has continuing involvement.

Pledged and encumbered assets

Pledged and encumbered assets are no longer readily available to the group to secure funding or satisfy collateral needs or to be sold to reduce the funding requirement. The following activities conducted by ABN AMRO give rise to pledged assets:

- cash and securities provided as collateral to secure trading and other liabilities, mainly derivatives;
- mortgages and SME loans pledged to secure funding transactions such as covered bonds and securitisations;
- securities lent as part of repurchase and securities lending transactions.

The following table provides an overview of assets pledged as security and encumbered assets.

(in millions)	31 December 2022	31 December 2021
Assets pledged		
Cash and balances at central banks	7	431
Financial assets held for trading	17	253
Financial investments FVOCI	7,423	2,926
Loans and advances banks:		
- Interest bearing deposits	1,003	1,341
Loans and advances customers:		
- Residential mortgages	76,475	93,805
- Commercial loans	7,713	16,088
Total assets pledged as security	**92,638**	**114,845**
Differences between pledged and encumbered assets		
Loans and advances banks[1]	200	199
Loans and advances customers[2]	-32,148	-10,088
Total differences between pledged and encumbered assets	**-31,948**	**-9,888**
Total encumbered assets	**60,690**	**104,957**
Total assets	**379,581**	399,113
Total encumbered assets as percentage of total assets	16.0%	26.3%

1 Includes mandatory reserve deposits.
2 Excludes mainly mortgage-backed securities.

Off-balance sheet collateral held as security for assets

Mainly as part of professional securities transactions, ABN AMRO obtains securities on terms that permit it to repledge or resell the securities to others. These transactions are conducted under terms that are usual and customary in standard professional securities transactions.

ABN AMRO controls the credit risk associated with these activities by monitoring counterparty credit exposure and collateral value on a daily basis and, when necessary, requiring additional collateral to be deposited with or returned to the group.

(in millions)	31 December 2022	31 December 2021
Fair value of securities received which can be sold or repledged	78,428	71,372
- of which: fair value of securities repledged/sold to others	*55,614*	*52,417*

ABN AMRO is obliged to return securities accepted as collateral to its counterparties.

Significant restrictions on the ability to access or use the bank's assets

Restricted financial assets consist of assets pledged as collateral against an existing or contingent liability and encumbered assets. Other restrictions impacting on the bank's ability to use assets include:

- Assets as a result of collateralising repurchase and borrowing agreements (31 December 2022: EUR 20.0 billion; 31 December 2021: EUR 16.1 billion);
- Assets held in certain jurisdictions to comply with local liquidity requirements and that are subject to restrictions in terms of their transferability within the group (31 December 2022: EUR 0.8 billion; 31 December 2021: EUR 0.8 billion);
- ABN AMRO Bank N.V. is in general not subject to any significant restrictions that would prevent the transfer of dividends and capital within the group, except for regulated subsidiaries that are required to maintain capital in order to comply with local regulations (31 December 2022: EUR 0.5 billion; 31 December 2021: EUR 0.6 billion).

35 Commitments and contingent liabilities

Accounting policy for off-balance sheet items

Commitments

Loan commitments that allow for draw-down of a loan within the timeframe generally established by regulation or convention in the marketplace are not recognised as derivative financial instruments. Acceptances comprise undertakings by ABN AMRO to pay bills of exchange drawn on clients. ABN AMRO expects most acceptances to be settled simultaneously with the reimbursement from clients. Acceptances are not recognised in the balance sheet and are disclosed as commitments.

Financial guarantee contracts

A financial guarantee contract requires the issuer to make specified payments to reimburse the holder for a loss it incurs if a specified debtor fails to make payment when due under the original or modified terms of a debt instrument. Initial recognition of financial guarantee contracts is at their fair value. Subsequent measurement is at the higher of the amount of the expected credit loss and the amount initially recognised, less – when appropriate – the cumulative amount of income recognised in the income statement.

Contingent liabilities

Contingent liabilities are possible obligations whose existence will be confirmed only by uncertain future events, and present obligations where the transfer of economic resources is uncertain or cannot be reliably measured. Contingent liabilities are not recognised in the balance sheet, but disclosed if the likelihood of an outflow of economic resources is not more likely than not or if the likelihood of an outflow of economic resources is more likely than not, however cannot be reliably estimated.

Committed credit facilities

Commitments to provide credit take the form of approved but undrawn loans, revolving and underwriting facilities. New loan offers have a commitment period that does not extend beyond the normal underwriting and settlement period.

Guarantees and other commitments

ABN AMRO provides financial guarantees and letters of credit to guarantee the performance of customers to third parties. These transactions have fixed limits and generally extend for periods of up to 5 years. Expirations are not concentrated in any particular period. ABN AMRO also provides guarantees by acting as a settlement agent in securities borrowing and lending transactions.

Many of the contingent liabilities and commitments are expected to expire without being paid out in whole or in part. This means that the amounts stated do not represent expected future cash flows. Additionally, guarantees and letters of credit are supported by varying levels of collateral.

Furthermore, statements of liability within the meaning of Article 403, Book 2 of the Dutch Civil Code have been issued for a number of ABN AMRO's affiliated companies (see also the chapter on Other information).

The committed credit facilities, guarantees and other commitments are summarised in the following table. The amounts stated in the table for commitments assume that amounts are fully paid out. The amounts shown in the table for guarantees and letters of credit represent the maximum amount ABN AMRO is exposed to if the contract parties completely fail to perform as contracted.

(in millions)	Less than one year	Between one and three years	Between three and five years	After five years	Total
				Payments due by period	
31 December 2022					
Committed credit facilities	**29,349**	**9,585**	**8,268**	**6,671**	**53,873**
Guarantees and other commitments					
Guarantees granted	177	83	96	985	1,342
Irrevocable letters of credit	3,062	699	489	179	4,429
Recourse risks arising from discounted bills	1,566	312	1		1,880
Total guarantees and other commitments	**4,806**	**1,094**	**586**	**1,164**	**7,651**
Total	**34,155**	**10,679**	**8,854**	**7,836**	**61,524**
31 December 2021					
Committed credit facilities	**35,134**	**10,395**	**5,965**	**3,147**	**54,642**
Guarantees and other commitments					
Guarantees granted	142	83	96	1,222	1,544
Irrevocable letters of credit	3,084	1,111	336	221	4,752
Recourse risks arising from discounted bills	1,159	113	31	1	1,303
Total guarantees and other commitments	**4,385**	**1,307**	**463**	**1,443**	**7,598**
Total	**39,520**	**11,702**	**6,428**	**4,590**	**62,240**

Discussion with regulator on regulatory levies

ABN AMRO is in discussion with the Single Resolution Board (SRB) about the calculation method applied for annual Single Resolution Fund (SRF) contributions paid in the past. At this time, the outcome of these discussions are still uncertain.

The annual SRF contribution is a levy introduced by the European Union in 2016. The SRB calculates the SRF contribution based on the information annually provided by the credit institutions within the European Banking Union in scope of SRF. The SRB is of the opinion that ABN AMRO has reported variables to calculate the annual SRF contribution incorrectly over the 2016-2022 period. ABN AMRO disagrees with the SRB's point of view and, as from 2016, has repeatedly and extensively communicated its position with regard to the adjusted amount to the SRB.

The different points of view held by the SRB and ABN AMRO are due to a differing interpretation of the regulation with regard to the annual SRF contribution. If the SRB continues to disagree with ABN AMRO's position, this could result in an additional contribution of approximately EUR 110 million (before tax) being declared payable in the first half of 2023. In that event, ABN AMRO will challenge the SRB's decision. The outcome of any such challenge is uncertain because the SRF regulation is relatively new and there is little to no case law on the subject. ABN AMRO nevertheless considers it more likely than not that such challenge will be successful. Therefore no provision has been recognised.

Equity trading

German authorities are conducting investigations into the involvement of individuals from various banks and other parties in equity trading extending over dividend record dates in Germany, including several forms of tainted dividend arbitrage (i.e. tainted dividend stripping, including cum/ex and cum/cum) for the purpose of obtaining German tax credits or refunds in relation to withholding tax levied on dividend payments, including, in particular, transaction structures that resulted in more than one market participant claiming such credit or refund with respect to the same dividend payment. ABN AMRO's legal predecessor, Fortis Bank (Nederland) N.V., ABN AMRO and several former subsidiaries were directly or indirectly involved in these transactions in the past in various capacities. Criminal investigation proceedings relating to the activities of these entities and individuals involved at the time were instigated. These proceedings also resulted in search warrants being issued against ABN AMRO. ABN AMRO is cooperating with these investigations, but has no knowledge of the results of any such investigations.

ABN AMRO also frequently receives information requests from German authorities in relation to criminal and other investigations of individuals from other banks and other parties relating to equity trading extending over dividend record dates in Germany. ABN AMRO cooperates and provides the requested information to the extent possible. Although a number of subsidiaries associated with these transactions have been sold by means of a management buy-out, legal risks remain for ABN AMRO, in particular relating to administrative offences and criminal and civil law. All material tax issues with respect to ABN AMRO's tax reclaims relating to cum/ex transactions have been settled with the German tax authorities. With respect to cum/cum transactions, the German Federal Ministry of Finance released two circular rulings dated 9 July 2021 (published 15 July 2021); these contain a change in interpretation of tax legislation compared to previous circular rulings. While these circular rulings, in ABN AMRO's view, contradict case law of the German Federal Tax Court after the circulars were published, the German Federal Ministry of Finance has not withdrawn or amended the rulings, and the German local tax authorities are therefore expected to re-collect dividend withholding tax credited to taxpayers where such credits related to cum/cum strategies. ABN AMRO has received dividend withholding tax refunds that relate to transactions that could be considered to be cum/cum transactions under the new circular rulings. In anticipation of a decision by the German tax authorities, ABN AMRO has, as a precaution, repaid the relevant dividend withholding tax amounts, while retaining its rights to contest any such future decision. Some counterparties of ABN AMRO have initiated civil law claims against ABN AMRO with respect to cum/cum securities lending transactions (some of which are pending before German courts), arguing that ABN AMRO failed to deliver beneficial ownership of the loaned securities to these counterparties and that this resulted in a denial of tax credit entitlement by the relevant German tax authorities. Although ABN AMRO considers it not probable that any such claims will be successful, the possibility that they will succeed cannot be ruled out.

It cannot be excluded that ABN AMRO or subsidiaries will face financial consequences as a result of their involvement in tainted dividend stripping transactions, in particular corporate administrative fines, forfeiture orders and civil law claims. It is currently unclear, however, as to how and when the German prosecution authorities' investigations will impact on ABN AMRO and its subsidiaries and if, and to what extent, corporate administrative fines or forfeiture orders will be imposed. It is also uncertain whether tax authorities or third parties will successfully claim amounts from ABN AMRO in secondary tax liability or civil law cases. Therefore, the financial impact cannot currently be reliably estimated and no provision has been recorded in this respect.

Netherlands Public Prosecution Service investigation into Dutch tax matter

The Netherlands Public Prosecution Service (NPPS) is conducting an investigation regarding transactions that ultimately led to a set-off by a third party of dividend withholding tax credits against its corporate tax liabilities in the Netherlands during the period 2009-2013. The NPPS investigation relates to ongoing tax proceedings in the Dutch courts between the third party and the Dutch tax authority regarding the third party's set-off of dividend withholding tax credits against its corporate tax liabilities. The District Court ruled in favour of this third party in 2018. In 2020, the Court of Appeal overturned the ruling of the District Court and ruled in favour of the Netherlands tax authority. An appeal with the Supreme Court has been filed against the ruling of the Court of Appeal and is currently pending. The NPPS has informed ABN AMRO that it is a suspect in the investigation, due to its involvement in some of these transactions. The NPPS is gathering information for its investigation and ABN AMRO is cooperating with the investigation.

The timing of the completion of the investigation and the outcome are uncertain. The possibility cannot be excluded that ABN AMRO will face financial consequences as a result of the investigation. However, the potential financial impact of the investigation cannot currently be reliably estimated and no provision has been made.

Duty of care matters

A number of proceedings have been initiated against ABN AMRO for alleged breach of its duty of care in transparency-related standards. Where applicable, provisions for these matters have been made.

There can be no assurance that additional proceedings will not be instigated or that amounts demanded in claims brought to date will not rise. Current proceedings are pending and their outcome, as well as the outcome of any threatened proceedings, is uncertain, as is the timing of reaching any finality on these legal claims and proceedings. Although the consequences could be substantial for ABN AMRO and potentially affect its reputation, results of operations, financial condition and prospects, it is not possible to reliably estimate or quantify ABN AMRO's exposure at this time. These uncertainties are likely to continue for some time.

Cross-liability

On 6 February 2010, the former ABN AMRO Bank N.V. demerged into two entities: NatWest Markets N.V. (formerly known as RBS N.V.) and ABN AMRO Bank N.V. On the division of an entity by demerger, Dutch law establishes a cross-liability between surviving entities for the benefit of the creditors at the time of the demerger. ABN AMRO's cross-liability amounts to EUR 298 million[1] (31 December 2021: EUR 1.2 billion), for which NatWest Markets N.V. has posted collateral of EUR 150 million (31 December 2021: EUR 0.4 billion).

[1] The outcome of the cross liability analysis for 2022 is still to be discussed with DNB.

Other contingent liabilities

ABN AMRO is involved in a number of legal proceedings in the ordinary course of business in various jurisdictions. In presenting the Consolidated Annual Financial Statements, management estimates the outcome of legal, regulatory and arbitration matters, and takes provisions to the income statement when losses with respect to such matters are more likely than not. Provisions are not recognised for matters for which an expected cash outflow cannot be reasonably estimated or that are not more likely than not to lead to a cash outflow. Some of these matters may be regarded as a contingency. In particular, the following matters are regarded as contingent liabilities:

- ABN AMRO, some of its subsidiaries and some of their client funds had exposure to funds that suffered losses (in some cases, significant losses) as a result of the Madoff fraud. The provision of custodial services resulted in several legal claims, including by the Bernard L. Madoff Investment Securities trustee in bankruptcy (Irving Picard) and the liquidators of certain funds, who are pursuing legal action in an attempt to recover payments made as a result of the fraud and/or to compensate their alleged losses. ABN AMRO and certain ABN AMRO subsidiaries are defendants in these proceedings. Even though these proceedings have been ongoing for several years, they are still in a preliminary stage. Hence, it is not possible to estimate the total amount of ABN AMRO's potential liability, if any.
- The Imtech Group was declared bankrupt in August 2015. ABN AMRO was one of the banks that extended financing to this group and participated in the second rights offering of October 2014. By letter of 20 January 2018, Stichting Imtechclaim and Imtech Shareholders Action Group B.V. held ING, Rabobank, Commerzbank and ABN AMRO liable for alleged misstatements in the prospectuses and for alleged actio pauliana (fraudulent preference). By letter of 28 March 2018, the VEB held parties, including ABN AMRO, liable for damage allegedly suffered by the Imtech investors. On 10 August 2018, ABN AMRO received formal notification from Imtech's trustees that they were seeking to nullify a large number of transactions and claim various damages. The letter aimed to interrupt limitation periods in view of the possible claims against Imtech's lenders, bondholders and underwriting banks. It appears likely that litigation will be started by the trustees in view of this letter and subsequent communications, although the exact timing of this litigation, the amount of the claim and the parties to be summoned are unclear.
- On 18 October 2018, Eurostar Diamond Traders N.V. (EDT) filed a civil law complaint against ABN AMRO in the Antwerp Court, claiming a provisional amount of EUR 673 million. The amount claimed included an unsubstantiated claim for damages of EUR 600 million on the ground that ABN AMRO and Standard Chartered Bank (SCB) allegedly deliberately caused EDT's demise. Damages of USD 73 million were also claimed for the alleged sale of unsuitable derivatives. EDT and Eurostar Diamond Traders International N.V., EDT's parent company, were both declared bankrupt in a final decision in 2020. EDT's trustees have continued the proceedings against ABN AMRO but have dropped material parts of the original claims and have lowered the claim amount to a provisional amount of EUR 1. The former directors of Eurostar are attempting to become formally involved in these proceedings.
- First Data Holding (FDH) and some of its group companies have indicated that they believe that one of FDH's subsidiaries, European Merchant Services B.V (EMS), has a claim against International Card Services B.V. (ICS). In spring 2016, FDH claimed for the first time that EMS was entitled to 51% of the proceeds of the sale of Visa Europe in 2015. The alleged claim amounted to approximately EUR 37 million plus interest. In August 2016, ICS refuted this claim. In September 2020, FDH repeated its alleged claim. In October 2020, EMS and FDH (now Fiserv) interrupted the limitation periods relating to EMS's alleged claim. In December 2020, ICS responded by rejecting this alleged claim again. As yet, however, EMS itself has not filed any claim against ICS. As a result, it has to be awaited whether and, if so, when EMS will file such claim.
- In February 2018, ABN AMRO sold its Luxembourg subsidiary to BGL BNP Paribas (BGL). BGL is now being sued by a Luxembourg fund, LFP I SICAV SIF (LFP), which alleges that the Luxembourg subsidiary, in its capacity as custodian of a sub-fund of LFP (Columna), should have prevented an investment of USD 10 million from being made. LFP is claiming restitution of this amount from BGL in proceedings before the District Court of Luxembourg. BGL notified ABN AMRO of this claim in January 2020 and, in June 2020, summoned it to appear in these proceedings in an intervention procedure. In July 2020, LFP and its Hong Kong subsidiary issued an additional claim against BGL. This claim amounts to USD 38 million and also seems to be in respect of investments relating to Columna. Since August 2020, this additional claim has also been part of the intervention procedure between BGL and ABN AMRO. In August 2020, BGL reserved its (alleged) rights to file possible further claims against ABN AMRO, also in relation to LFP. As a result, it has to be awaited whether BGL will institute any further additional claims in this matter.
- In addition, on 2 April 2021, BGL, as the legal successor of the Luxembourg subsidiary, was sued by a fund (SIF A) and the liquidator of SIF A. In brief, it is alleged that a sub-fund of SIF A invested for a period of time in allegedly fictitious loan instruments. ABN AMRO Bank (Luxembourg) S.A. acted as the custodian bank for SIF A for a while within this time period. SIF A alleges that it did not perform its duties properly and therefore considers that BGL, as the legal successor of the Luxembourg subsidiary, should be held liable, together with three other defendants, for EUR 4 million in damages. BGL notified ABN AMRO of this claim in May 2021. In brief, BGL is claiming that any sentence that could be pronounced

against it in the proceedings against the fund and its liquidator should be borne by ABN AMRO. ABN AMRO rejects the alleged claim by BGL. Finally, on 31 May 2021, BGL, as the legal successor of the Luxembourg subsidiary, was sued by an alternative investment fund (AIF SIF). AIF SIF was originally a client of the subsidiary. AIF SIF accuses BGL, in its capacity as the former depositary bank of AIF SIF, of having caused AIF SIF's removal from the list of specialised investment funds by the Luxembourg financial regulator (CSSF). The fund claims damages from BGL in the amount of EUR 126 million. BGL notified ABN AMRO of this claim in October 2019 and July 2021. In brief, BGL is claiming that any sentence that could be pronounced against it in the proceedings against the fund should be borne by ABN AMRO. ABN AMRO rejects the alleged claim by BGL.

36 Remuneration of Executive Board and Supervisory Board

Remuneration of Executive Board

(In thousands)	Base salary	Variable remuneration[4]	Other short-term benefits[5]	Total short term benefits	Severance payments	Total pension-related contributions[6]		Total
						Post-employment pension (a)[6]	Short-term allowances (b)[6]	
2022								
R.A.J. Swaak	771			771		32	197	999
C.M. Bornfeld[1]	218		45	263		11	54	327
T.J.A.M. Cuppen	654		34	688		32	162	881
D. Dorner[2]	654		32	686		32	162	879
C. van der Hooft - Cheong[2]	654		27	682		32	162	875
L. Kramer[2]	654		133	787		32	162	981
G.R. Penning[1,2]	927			927	164	46	227	1,364
A.M. Vreugdenhil[2]	545		18	563		26	135	724
Total	**5,077**		**289**	**5,366**	**164**	**241**	**1,260**	**7,031**
2021								
R.A.J. Swaak	765			765		31	196	992
C.M. Bornfeld[1]	650		162	812		31	161	1,004
C.J. Abrahams[1]	108		20	128		5	27	159
T.J.A.M. Cuppen	650		34	684		31	161	876
D. Dorner[2]	67		4	70		3	17	90
C. van der Hooft - Cheong[2]	67		3	69		3	17	89
L. Kramer[2]	381		65	446		18	95	558
G.R. Penning[1,2]	67			67		3	17	87
A. Roest[3]	161		11	172		8	40	220
Total	**2,915**		**298**	**3,213**		**133**	**730**	**4,075**

1 The following members left ABN AMRO: C.J. Abrahams (1 March 2021) and C.M. Bornfeld (1 May 2022). G.R. Penning stepped down as Executive Board member on 1 December 2022 and will leave ABN AMRO as per 1 June 2023. For G.R. Penning, all remuneration components (including severance, which is awarded in 2022 and paid in 2023) for the period until the end of his employment contract on 1 June 2023 are included above.

2 The following members were appointed as an Executive Board member: L. Kramer (1 June 2021), D. Dorner (24 November 2021), C. van der Hooft - Cheong (24 November 2021), G.R. Penning (24 November 2021) and A.M. Vreugdenhil (1 March 2022).

3 The remuneration components for A. Roest relate to her interim Executive Board appointment from 1 March 2021 until 1 June 2021.

4 Owing to the Bonus Prohibition Act, the Executive Board members are not entitled to receive variable compensation. This prohibition has applied since the 2011 performance.

5 Other short-term benefits consists of flight tickets, a housing allowance, compensation for lease car expenses, mortgage interest rate benefit and international schooling costs for Executive Board members' children when applicable.

6 The Executive Board members participate in ABN AMRO Bank's pension plans for employees in the Netherlands. Total pension-related contributions refer to (a) the employer contribution to the pension fund (for the CDC pension scheme for pensionable income up to EUR 114.866 (2021: EUR 112,189) and (b) the arrangement in accordance with the ABN AMRO Collective Labour Agreement ('ABN AMRO CAO').

Loans from ABN AMRO to Executive Board members

(In thousands)	2022 Outstanding 31 December	2022 Redemptions	2022 Interest rate	2021 Outstanding 31 December	2021 Redemptions	2021 Interest rate
D. Dorner[1]	463	21	2.2%	484		1.4%
C. van der Hooft - Cheong[1]	1,559	32	1.5%	1,591		1.5%
G.R. Penning[1,2]	225	40	2.9%	265		0.7%
A. Roest[3]				3,158		1.8%

1 The following members were appointed: D. Dorner (24 November 2021), C. van der Hooft-Cheong (24 November 2021) and G.R. Penning (24 November 2021).
2 G.R. Penning stepped down as Executive Board member on 1 December 2022 and will leave ABN AMRO as per 1 June 2023.
3 A. Roest was an interim ExBo member from 1 March 2021 until 1 June 2021.

Remuneration of the Supervisory Board

(In thousands)	2022[4]	2021[4]
T. de Swaan	103	98
A.C. Dorland	86	82
L.J. Griffith	83	80
M.P. Lap	83	80
S.A.C. Russell[1]	60	
A.M. Storåkers	86	80
M.L. Tannemaat	83	80
J.S.T. Tiemstra[2]	26	82
J.B.J. Stegmann[3]		72
Total	**610**	**654**

1 S.A.C. Russell was appointed as a member of the Supervisory Board with effect from 20 april 2022
2 J.S.T. Tiemstra stepped down as a member of the Supervisory Board with effect from 20 april 2022.
3 J.B.J. Stegmann stepped down as a member of the Supervisory Board with effect from 14 November 2021.
4 Remuneration amounts excluding VAT.

Loans from ABN AMRO to Supervisory Board members

(In thousands)	2022 Outstanding 31 December	2022 Redemptions	2022 Interest rate	2021 Outstanding 31 December	2021 Redemptions	2021 Interest rate
T. de Swaan	1,586	5	1.0%	1,591	6	1.0%
L.J. Griffith		339	1.8%	339	89	1.8%
S.A.C. Russell	370		2.1%			
M.L. Tannemaat	715	57	1.7%	772		1.7%

37 Share-based payment

Accounting policy for share-based payment

Identified staff as defined by CRD V are entitled to receive variable compensation. The variable compensation consists of a cash element and a share-based element settled in cash. The cash element in the variable compensation plan is recognised in accordance with IAS 19 and the other element qualifies as a cash-settled share-based payment in accordance with IFRS 2.

The compensation is granted for a certain performance year for 50% in cash and for 50% in share-based compensation settled in cash. The vesting conditions include bad leaver conditions and consist of a deferral period and a retention period until the share-based compensation is settled in cash.

Up to and including the performance year 2019, the share-based compensation settled in cash (depositary receipt) vests for 30% two years after the performance year. The remaining 20% vests in three equal tranches in the third, fourth and fifth year following the performance year. At the end of the vesting period, participants receive the cash value of the five-day average of an ABN AMRO listed depositary receipt (DR).

The share-based compensation settled in cash granted for 2019 and the years before gives the option to request DRs rather than cash. This choice can be made during the quarter in which settlement takes place and is subject to Supervisory Board approval. This equity component in the plan is valued at nil until the request is approved. Participants receive the same amount of fair value, regardless of whether they choose cash or DRs. If participants choose DRs, the value of the DRs is transferred in its entirety from the liability to an equity account. The actual delivery to the participant is expected to take place in the same quarter as the choice is made. ABN AMRO will not issue additional shares for the compensation granted for 2019 and before, but will buy shares in the market when needed. As the purchase of shares is expected to take place in the quarter during which the DRs are delivered, there is no impact on (diluted) earnings per share.

As from performance year 2020, the DRs were replaced by performance certificates (PCs) as share-based compensation settled in cash. The share-based compensation settled in cash vests for 30% in the first year. The remaining 20% vests in four equal tranches in the second, third, fourth and fifth year following the performance year. At the end of the vesting period, participants receive the cash value of the five-day average of ABN AMRO's share price. Share-based compensation settled in cash granted from performance year 2020 onwards does not include the option to request DRs.

A liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is determined using an internally developed model based on the share price and market expectations of future dividends.

The carrying amount of the liability relating to share-based compensation settled in cash at 31 December 2022 was EUR 7 million (31 December 2021: EUR 9 million). The expense recognised for the DRs and PCs awards during 2022 was EUR 1 million, including retention bonus (2021: EUR 6 million).

The following table shows the total number of DRs and PCs awarded, forfeited and paid out.

(In thousands of DRs)		2022		2021
Outstanding at 1 January		**854**		**859**
Granted during the year		385		313
Forfeited during the year	11		12	
Paid out during the year cash	444		279	
Paid out during the year DRs	38		27	
Less: total paid out/forfeited		-493		-318
Outstanding at 31 December		**746**		**854**

The following table shows the total number of DRs and PCs granted, segmented by the respective vesting period after which the award will be paid out.

(In thousands of DRs)	Up to one year	Between one and two years	Between two and three years	Between three and four years	Between four and five years	Total
31 December 2022						
Number of granted DRs by vesting period	379	151	117	58	42	746
31 December 2021						
Number of granted DRs by vesting period	382	231	116	79	47	854

38 Related parties

Parties related to ABN AMRO Bank include NLFI with control, the Dutch State with significant influence, associates, pension funds, joint ventures, the Executive Board, the Supervisory Board, close family members of any person referred to above, entities controlled or significantly influenced by any person referred to above and any other related entities. ABN AMRO has applied the partial exemption for government-related entities as described in IAS 24 paragraphs 25-27.

As part of its business operations, ABN AMRO frequently enters into transactions with related parties. Transactions conducted with the Dutch State are limited to normal banking transactions, taxation and other administrative relationships, with the exception of items specifically disclosed in this note. Normal banking transactions relate to loans and deposits and are entered into on the same commercial and market terms that apply to non-related parties.

Loans and advances to the Executive Board members and close family members, where applicable, consist mainly of residential mortgages granted under standard personnel conditions. For further information, please refer to Note 36 Remuneration of Executive Board and Supervisory Board in the Consolidated Annual Financial Statements 2022.

Balances with joint ventures, associates and other

(in millions)	Joint ventures	Associates	Other	Total
31 December 2022				
Assets	14	50		63
Liabilities	24	125		149
Guarantees given		20		20
Irrevocable facilities		2		2
2022				
Income received	40	2		42
Expenses paid	8	97	332	438
31 December 2021				
Assets	15	180		195
Liabilities	88	359		447
Guarantees given		15		15
Irrevocable facilities		21		21
2021				
Income received	39	3		42
Expenses paid	8	80	317	405

The EUR 130 million decrease in assets held in associates was mainly attributable to a decline in term loans held by financial corporations as a result of the divestment of Cofiloisirs S.A. in France.

The EUR 64 million decrease in liabilities with joint ventures was mainly attributable to lower client deposits held with other financial corporations.

The EUR 234 million decrease in liabilities with associates was mainly attributable to lower customer balances held with other financial corporations as a result of the divestment of ABN AMRO Levensverzekering N.V., offset by higher balances with non-financial corporations and other financial corporations.

The EUR 17 million increase in expenses paid with associates was mainly due to higher expenses in non-financial corporations.

Expenses paid in the column Other reflects pension contributions paid to the ABN AMRO pension fund.

Balances with the Dutch State

(in millions)	31 December 2022	31 December 2021
Assets		
Financial assets held for trading	144	195
Derivatives		18
Financial investments	2,465	4,028
Loans and advances customers	189	168
Liabilities		
Financial liabilities held for trading	299	192
Derivatives	17	125
Due to customers	477	466
Other liabilities		1

	2022	2021
Income statement		
Interest income	51	64
Interest expense	23	27
Net trading income	66	110
Net fee and commission income		

On 1 April 2010, ABN AMRO signed an indemnity agreement with the Dutch State (currently represented by NLFI) for a shortfall in capital above a certain amount and related to specific assets and liabilities of RFS Holdings B.V. In 2019, Royal Bank of Scotland (RBS) acquired all shares in RFS Holdings. However, NLFI has given certain warranties related to its previously owned shares in RFS Holdings and the indemnity agreement continues to exist. RFS Holdings is sufficiently capitalised. Consequently, ABN AMRO has assessed the risk of any shortfall as remote.

Transactions conducted with the Dutch State are limited to normal banking transactions, taxation and other administrative relationships. Normal banking transactions relate to loans and deposits, financial assets held for trading and financial investments, and are entered into on the same commercial and market terms that apply to non-related parties.

Transactions and balances related to taxation, levies and fines in the Netherlands are excluded from the table above.

The EUR 1.6 billion decrease in financial investments was mainly due to lower Dutch government bonds held. This is part of the liquidity buffer and is held for liquidity contingency purposes.

The EUR 0.1 billion increase in financial liabilities held for trading is mainly related to higher amounts of Dutch government bonds as a result of primary dealership in the Netherlands and client facilitation. Most of these contracts are hedged with short positions in government bonds.

The EUR 0.1 billion decrease in derivatives related to liabilities was mainly due to lower lending positions with the Dutch State. Derivatives transactions with the Dutch State relate to the normal course of business.

Key management personnel compensation

(In thousands)	Base salary	Variable remuneration[4]	Other short-term benefits[5]	Total short term benefits	Severance payments	Total pension-related contributions[6] Post-employment pension (a)	Short-term allowances (b)	Total
2022								
Members ExBo	5,077		289	5,366	164	241	1,260	7,031
Total	**5,077**		**289**	**5,366**	**164**	**241**	**1,260**	**7,031**
2021								
Members ExBo	2,915		298	3,213		133	730	4,075
D. Dorner[1, 2]	77		7	84		4	19	107
F.M.R. van der Horst[3]	1,054		67	1,121	558	52	260	1,991
D.C. de Kluis[3]	401		32	433		21	98	552
P.H. van Mierlo[3]	1,002		63	1,065	598	53	244	1,960
R.F. van Nouhuijs[3]	693		36	729		34	171	934
G.R. Penning[2]	574		30	604		28	142	774
P. Pfaff[1]	139		8	147		7	34	188
Total	**6,855**		**541**	**7,396**	**1,156**	**332**	**1,698**	**10,581**

1 The following members were appointed as an ExCo member: P. Pfaff (interim from 1 September 2021 until 24 November 2021) and D. Dorner (interim ExCo member from 12 October 2021 until 24 November 2021).
2 The following members were appointed as an Excecutive Board member: D. Dorner (24 November 2021) and G.R. Penning (24 November 2021).
3 The following members left ABN AMRO: D.C. de Kluis (1 September 2021), R.F. van Nouhuijs (1 February 2022), P.H. van Mierlo (1 September 2022), F.M.R. van der Horst (1 December 2022),
4 Due to ABN AMRO restrictions, no variable remuneration will be paid. Therefore the fixed remuneration is 100% of total remuneration.
5 Other short-term benefits consists of flight tickets, a housing allowance, compensation for lease car expenses, mortgage interest rate benefit and international schooling costs for Executive Board members' children when applicable.
6 The Executive Committee members participate in ABN AMRO Bank's pension plans as applicable to the employees in the Netherlands. Total pension-related contributions as of 2021 refer to (a) the employer contribution to the pension fund (for the CDC pension scheme for pensionable income up to EUR 112,189 (2020: EUR 110,111) and (b) the arrangement in accordance with the ABN AMRO Collective Labour Agreement ('ABN AMRO CAO').

Key management loans and advances

	2022			2021		
(In thousands)	Outstanding 31 December	Redemptions	Average interest rate	Outstanding 31 December	Redemptions	Average interest rate
Executive Board	2,247	93	1.8%	5,498		1.6%
Other ExCo members				2,539	1,174	2.5%

39 Post balance sheet events

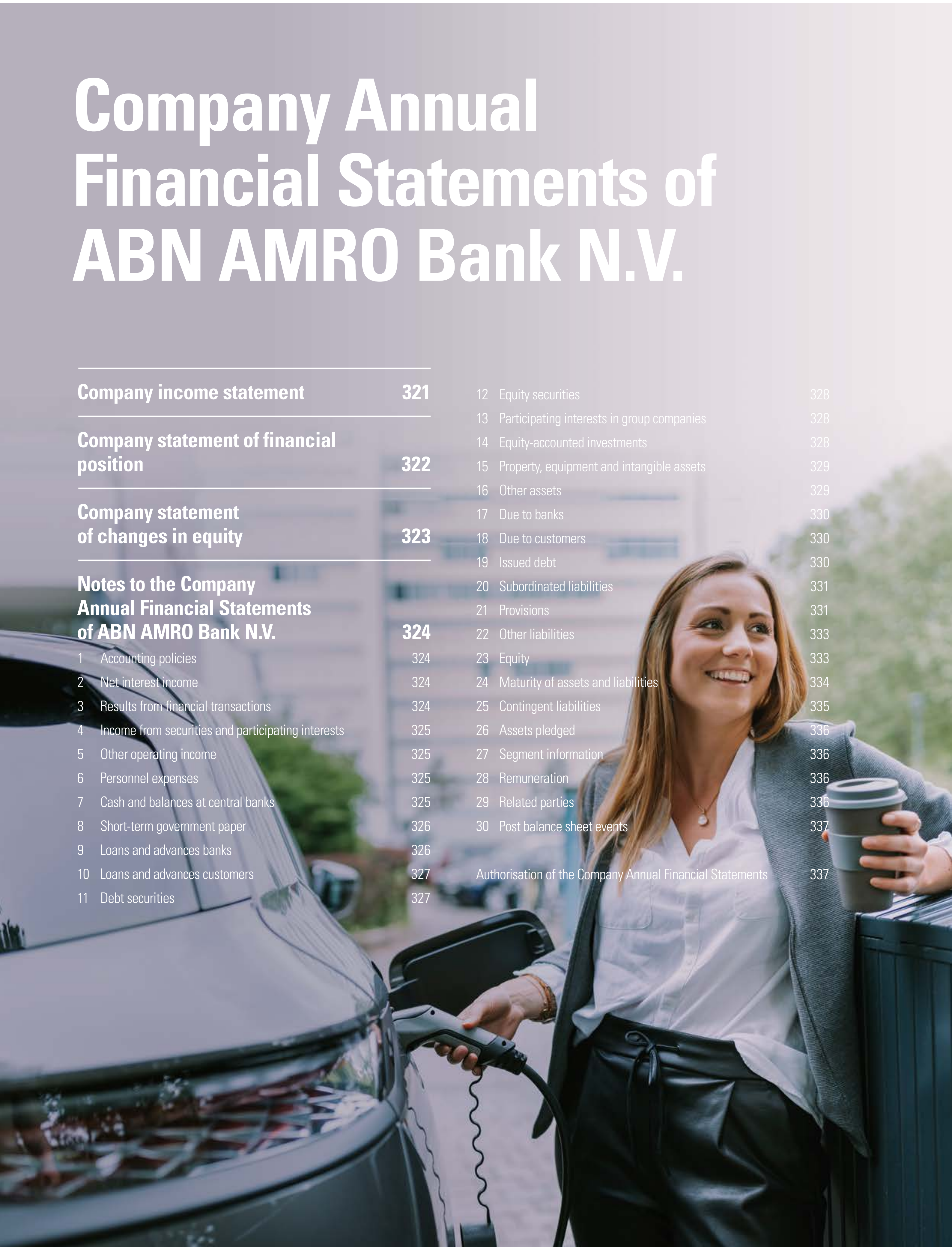
ABN AMRO EUR 500 million share buyback programme

In February 2023 ABN AMRO announced the start of a share buyback programme under which it plans to repurchase depositary receipts and ordinary shares of ABN AMRO Bank N.V. for a maximum total value of EUR 500 million and for a number of shares not exceeding the authority granted by the general meeting of shareholders on 20 April 2022 (10% of the issued shares).
The share buyback programme will commence on 9 February 2023 and is expected to end no later than June 2023.

Authorisation of the Consolidated Annual Financial Statements
7 March 2023

Supervisory Board
T. (Tom) de Swaan, Chairman
A.C. (Arjen) Dorland, Vice-Chairman
L.J. (Laetitia) Griffith
M.P. (Michiel) Lap
S.A.C. (Sarah) Russell
A.M. (Anna) Storåkers
M.L. (Mariken) Tannemaat
J.S.T. (Tjalling) Tiemstra

Executive Board
Robert Swaak, Chief Executive Officer and Chairman
Tanja Cuppen, Chief Risk Officer
Lars Kramer, Chief Financial Officer
Carsten Bittner Chief Innovation and Technology Officer
Annerie Vreugdenhil, Chief Commercial Officer - Personal & Business Banking (from 1 March 2022)
Choy van der Hooft-Cheong, Chief Commercial Officer - Wealth Management
Dan Dorner, Chief Commercial Officer - Corporate Banking



Company Annual Financial Statements of ABN AMRO Bank N.V.

Company income statement

(in millions)	Note	2022	2021
Income			
Interest income		11,293	12,145
Interest expense		8,152	9,058
Net interest income	2	**3,141**	**3,087**
Fee and commission income		1,315	1,235
Fee and commission expense		232	277
Net fee and commission income		**1,083**	**958**
Results from financial transactions	3	360	112
Income from securities and participating interests	4	1,260	1,046
Other operating income	5	189	361
Operating income		**6,034**	**5,563**
Expenses			
Personnel expenses	6	1,939	1,764
General and administrative expenses		1,872	2,293
Depreciation, amortisation and impairment losses of tangible and intangible assets		153	165
Operating expenses		**3,964**	**4,222**
Impairment charges on financial instruments		40	-123
Total expenses		**4,004**	**4,099**
Profit/(loss) before taxation		**2,030**	**1,465**
Income tax expense		162	234
Profit/(loss)		**1,868**	**1,231**

Company statement of financial position

(in millions)	Note	31 December 2022	31 December 2021
Assets			
Cash and balances at central banks	7	56,593	60,489
Short-term government paper	8	31,312	36,414
Loans and advances banks	9	162,929	166,629
Loans and advances customers	10	97,372	103,236
Debt securities	11	15,476	11,817
Equity securities	12	43	35
Participating interests in group companies	13	4,034	6,329
Equity-accounted investments	14	205	262
Intangible assets	15	83	25
Property and equipment	15	511	573
Other assets	16	6,814	5,369
Total assets		**375,372**	**391,178**
Liabilities			
Due to banks	17	28,403	62,405
Due to customers	18	248,170	235,008
Issued debt	19	52,773	56,919
Subordinated liabilities	20	7,290	7,549
Provisions	21	784	852
Other liabilities	22	15,140	6,450
Total liabilities		**352,561**	**369,184**
Equity			
Share capital		898	940
Share premium		12,529	12,970
Revaluation reserves		-331	-609
Currency translation reserves		-15	-43
Other legal reserves		164	178
Other reserves[1]		5,715	5,340
AT1 Capital securities		1,985	1,987
Profit/(loss) for the period		1,868	1,231
Total equity	23	**22,812**	**21,994**
Total liabilities and equity		**375,372**	**391,178**
Committed credit facilities	25	70,503	62,860
Guarantees and other commitments	25	42,495	35,663

[1] Consists of actuarial gains/(losses) on post-employment benefit plans and retained earnings.

Company statement of changes in equity

(in millions)	Share capital	Share premium	Revaluation reserves	Currency translation reserves	Other legal reserves	Other reserves[1]	Capital securities	Profit/ (loss) for the period	Total
Balance at 1 January 2021	**940**	**12,970**	**-1,178**	**-75**	**185**	**6,205**	**1,987**	**-45**	**20,989**
Total comprehensive income			568	32	-7	-88		1,231	1,737
Transfer						-45		45	
Dividend						-639			-639
Interest on AT1 capital securities						-91			-91
Other changes in equity						-2			-2
Balance at 31 December 2021	**940**	**12,970**	**-609**	**-43**	**178**	**5,340**	**1,987**	**1,231**	**21,994**
Total comprehensive income			278	28	-14	93		1,868	2,253
Transfer						1,231		-1,231	
Dividend						-840			-840
Share buyback	-42	-441				-16			-500
Interest on AT1 capital securities						-91			-91
Decrease of capital							-2		-2
Other changes in equity						-2			-2
Balance at 31 December 2022	**898**	**12,529**	**-331**	**-15**	**164**	**5,715**	**1,985**	**1,868**	**22,812**

[1] Consists of actuarial gains/(losses) on post-employment benefit plans and retained earnings.

Notes to the Company Annual Financial Statements of ABN AMRO Bank N.V.

1 Accounting policies
The Company Annual Financial Statements of ABN AMRO Bank N.V. have been prepared in accordance with the requirements in Title 9 of Book 2 of the Dutch Civil Code. ABN AMRO Bank N.V. applies the option as included in Section 2:362 paragraph 8. ABN AMRO Bank N.V. prepares its Consolidated Annual Financial Statements in accordance with International Financial Reporting Standards as adopted by the European Union (EU IFRS). Reference is made to the accounting policies section in the Consolidated Annual Financial Statements and the respective notes.

Corporate information
ABN AMRO Bank N.V. is registered at Gustav Mahlerlaan 10, 1082 PP Amsterdam, the Netherlands (Chamber of Commerce number 34334259).

Basis of preparation
The impairment requirements of IFRS 9 are applicable to financial instruments measured at amortised cost and FVOCI. These requirements also apply to intercompany transactions, which are eliminated upon consolidation. In ABN AMRO Bank's Company Annual Financial Statements, the elimination of expected credit losses on intercompany transactions with subsidiaries is recognised in the carrying amount of the loans and advances and participating interests in group companies.

Participating interests in group companies are measured at net asset value, determined on the basis of EU IFRS. The share in the results of participating interests in group companies is reported in accordance with the principles of valuation and profit determination that apply to the Consolidated Annual Financial Statements.

The financial statements are presented in euros, which is the functional and presentation currency of the company, rounded to the nearest million (unless otherwise stated).

The financial statements are prepared on a going concern basis.

2 Net interest income
Net interest income for 2022 amounted to EUR 3,141 million, an increase of EUR 54 million compared to EUR 3,087 million in 2021.

Net interest income is comprised of interest income from loans, investments and other lending, interest expense on borrowings by ABN AMRO and client accounts, as well as the results from interest rate and foreign exchange contracts entered into for hedging purposes. Interest income from loans and advances customers amounted to EUR 2,116 million (2021: EUR 1,794 million).

3 Results from financial transactions

(in millions)	2022	2021
Securities trading and derivatives transactions	344	82
Foreign exchange transaction results	-33	-29
Other	49	59
Total results from financial transactions	**360**	**112**

Results from financial transactions increased by EUR 249 million in 2022 due to an increase in results from net trading income.

4 Income from securities and participating interests

(in millions)	2022	2021
Shares and equity-accounted investments	88	39
Participating interests	1,171	1,007
Total income from securities and participating interests	**1,260**	**1,046**

Income from securities and participating interests increased by EUR 214 million, mainly due to higher results from participating interests in 2022.

5 Other operating income

(in millions)	2022	2021
Disposal of operating activities and equity-accounted investments	147	3
Other	43	358
Total other operating income	**189**	**361**

Total other operating income decreased by EUR 172 million, mainly due to the sale and leaseback of ABN AMRO's head office at Gustav Mahlerlaan in 2021. This was partly offset by the increase in the disposal of operating activities and equity-accounted investments related to the sale of ABN AMRO Pensioeninstelling N.V. and ABN AMRO Levensverzekering N.V.

6 Personnel expenses

(in millions)	2022	2021
Salaries and wages	1,439	1,303
Social security charges	169	151
Pension expenses relating to defined benefit plans	13	
Defined contribution plan expenses	270	244
Other	48	65
Total personnel expenses	**1,939**	**1,764**

Total personnel expenses increased by EUR 175 million in 2022 compared to 2021.

The increase in salaries and wages of EUR 136 million was mainly due to the 4% salary increase under the new Collective Labour Agreement in combination with higher numbers of FTEs for AML-related activities, IT and strategy execution throughout 2022.

Social security charges increased by EUR 18 million, mainly due to the increase in FTEs and the effect of the new Collective Labour Agreement.

Pensions expenses relating to defined benefit plans increased by EUR 12 million, mainly due to the provision for early retirement scheme.

Defined contribution plan expenses increased by EUR 26 million, mainly due to the increase in FTEs.

Other personnel expenses decreased by EUR 17 million. This was mainly attributable to releases of restructuring provisions.

7 Cash and balances at central banks

Cash and balances at central banks decreased by EUR 3.9 billion to EUR 56.6 billion at 31 December 2022, mainly due to changes in steering, liquidity and funding needs.

8 Short-term government paper

(in millions)	31 December 2022	31 December 2021
Short-term government paper held at fair value through other comprehensive income	31,097	35,934
Short-term government paper held for trading	214	480
Short-term government paper	**31,312**	**36,414**

Short-term government paper decreased by EUR 5.1 billion, mainly as a result of changes in steering and liquidity needs. Most of these instruments are part of the liquidity buffer and are held for liquidity contingency purposes.

Changes in short-term government paper held at fair value through other comprehensive income

(in millions)	2022	2021
Balance at 1 January	**35,934**	**38,727**
Purchases	8,882	9,454
Proceeds from sales and redemptions	-10,037	-11,400
Gains/(losses) recorded in profit and loss	-4,108	-1,543
Unrealised gains/(losses)	-238	107
Foreign exchange differences	418	589
Other	247	
Balance at 31 December	**31,097**	**35,934**

The gains and losses were mainly caused by increased interest yields during 2022. Foreign exchange differences were mainly due to the appreciation of the USD.

9 Loans and advances banks

(in millions)	31 December 2022	31 December 2021
Group companies	160,212	164,142
Third parties	2,717	2,487
Loans and advances banks	**162,929**	**166,629**

(in millions)	31 December 2022	31 December 2021
Interest-bearing deposits	160,916	160,398
Loans and advances	856	1,322
Mandatory reserve deposits with central banks	113	47
Securities financing	959	4,794
Other	85	68
Loans and advances banks	**162,929**	**166,629**

Loans and advances banks mainly consists of transactions with group companies. Loans and advances banks decreased by EUR 3.7 billion to EUR 162.9 billion at 31 December 2022, mainly due to a decrease in securities financing, partly offset by an increase in interest-bearing deposits.

None of the items within loans and advances banks were subordinated at 31 December 2022.

Mandatory reserve deposits are held with local central banks in accordance with statutory requirements. Most relevant for the bank are the minimum reserve requirements determined by the ECB. The ECB prescribes how the minimum reserve amount should be calculated during pre-defined reserve periods. During such a period the balances are available for use by ABN AMRO. The bank manages and monitors the deposits to ensure that the minimum reserve requirements for the period are met.

(in millions)	31 December 2022	31 December 2021
The Netherlands	162,482	165,961
Rest of Europe	217	147
USA	191	401
Asia	38	113
Rest of the world		7
Loans and advances banks	**162,929**	**166,629**

10 Loans and advances customers

(in millions)	31 December 2022	31 December 2021
Group companies	27,310	28,093
Third parties	70,062	75,143
Loans and advances customers	**97,372**	**103,236**

Loans and advances customers decreased by EUR 5.9 billion to EUR 97.4 billion at 31 December 2022, mainly due to third parties.

(in millions)	31 December 2022	31 December 2021
Residential mortgages	520	689
Consumer loans	5,665	4,920
Corporate loans	79,359	88,849
Securities financing	10,048	7,103
Other loans and advances customers	1,780	1,675
Loans and advances customers	**97,372**	**103,236**

Loans and advances customers decreased by EUR 5.9 billion, mainly due to lower corporate loans following repayment of the Dolphin Program securitisation notes in the amount of EUR 9.5 billion, partly offset by an increase in securities financing of EUR 2.9 billion.

(in millions)	31 December 2022	31 December 2021
The Netherlands	84,709	91,818
Rest of Europe	4,713	3,012
USA	7,950	8,201
Asia		205
Loans and advances customers	**97,372**	**103,236**

11 Debt securities

(in millions)	31 December 2022	31 December 2021
Group companies	8,508	5,300
Third parties	6,968	6,517
Debt securities	**15,476**	**11,817**

(in millions)	31 December 2022	31 December 2021
Debt securities held at fair value through other comprehensive income	14,795	11,148
Debt securities held for trading	681	670
Debt securities	**15,476**	**11,817**

Debt securities increased by EUR 3.7 billion at 31 December 2022, mainly due to purchases. Most of these instruments are part of the liquidity buffer and are held for liquidity contingency purposes. At 31 December 2022, EUR 42 million of the debt securities were subordinated (31 December 2021: EUR 42 million).

Changes in debt securities held at fair value through other comprehensive income

(in millions)	2022	2021
Balance at 1 January	**11,148**	**6,849**
Purchases	5,855	5,655
Proceeds from sales and redemptions	-1,784	-1,218
Gains/(losses) recorded in profit and loss	-647	-143
Unrealised gains/(losses)	-41	8
Foreign exchange differences	11	-3
Other	253	
Balance at 31 December	**14,795**	**11,148**

12 Equity securities

(in millions)	31 December 2022	31 December 2021
Equity securities held for trading	9	2
Equity securities held at fair value through profit or loss	33	33
Equity securities	**43**	**35**

Equity securities increased by EUR 8 million due to a short-term position to be settled.

13 Participating interests in group companies

(in millions)	2022	2021
Balance at 1 January	**6,329**	**7,819**
Increase/(decrease) of capital	258	7
Proceeds from sales and redemptions	-64	79
Result from participating interests	1,171	1,007
Dividends	-1,021	-934
Unrealised gains/(losses)	-34	2
Foreign exchange differences	62	89
Other	-2,668	-1,740
Balance at 31 December	**4,034**	**6,329**

Other movements mainly relate to the legal merger of Bethman Bank AG and ABN AMRO N.V.

14 Equity-accounted investments

			31 December 2022		31 December 2021	
(in millions)	Principle place of business	Business line	Carrying amount	Equity interest	Carrying amount	Equity interest
Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	The Netherlands	Personal & Business Banking	54	49%	128	49%
Other			152		134	
Total equity associates and joint ventures			**205**		**262**	

In 2022, ABN AMRO sold ABN AMRO Levensverzekering N.V., to NN Group.

(in millions)	2022	2021
Balance at 1 January	**262**	**261**
Purchases	6	10
Proceeds from sales and redemptions	-121	
Gains/(losses) recorded in profit and loss	83	12
Dividends	-8	-33
Unrealised gains/(losses)	-24	11
Other	7	
Balance at 31 December	**205**	**262**

15 Property, equipment and intangible assets

The following table shows the book value of property, equipment and intangible assets.

	2022		2021	
(in millions)	Total property and equipment	Intangible assets	Total property and equipment	Intangible assets
Acquisition costs at 1 January	**2,149**	**720**	**2,634**	**731**
Additions	161	1	304	16
Reversal of cost due to disposals	-390	-443	-824	-28
Foreign exchange differences	1		4	
Other	-33	169	31	
Acquisition costs at 31 December	**1,888**	**447**	**2,149**	**720**
Accumulated depreciation/amortisation at 1 January	**-1,543**	**-685**	**-1,770**	**-674**
Depreciation/amortisation	-138	-15	-152	-10
Reversal of depreciation/amortisation due to disposals	360	443	544	
Foreign exchange differences			-2	
Other	-35	-61	-163	
Accumulated depreciation at 31 December	**-1,355**	**-318**	**-1,543**	**-685**
Impairments at 1 January	**-33**	**-10**	**-32**	**-38**
Increase of impairments charged to the income statement	-5		-3	
Reversal of impairments due to disposals	9		1	28
Foreign exchange differences	-1		-1	
Other	9	-36	2	
Impairments at 31 December	**-22**	**-46**	**-33**	**-10**
Total at 31 December	**511**	**83**	**573**	**25**

In 2021, ABN AMRO completed the sale and leaseback of its head office at Gustav Mahlerlaan in Amsterdam. ABN AMRO is the seller-lessee in the transaction. The buyer-lessor of the Gustav Mahlerlaan paid total consideration of EUR 765 million. As part of the sale, ABN AMRO recognised a pre-tax gain of EUR 327 million (EUR 245 million net of tax) in other operating income (please refer to Note 5 Other operating income). As part of the lease, ABN AMRO recognised a ROU asset of EUR 78 million and a corresponding lease liability of EUR 203 million (please refer to Note 22 Other liabilities).

More details on the background of the sale and leaseback transaction can be found in Note 24 Property and equipment, leases, goodwill and other intangible assets in the Consolidated Annual Financial Statements.

16 Other assets

(in millions)	31 December 2022	31 December 2021
Derivatives	5,237	3,779
Tax assets	710	822
Other	866	767
Other assets	**6,814**	**5,369**

Other assets increased by EUR 1.4 billion, mainly as a result of an increase of EUR 1.5 billion in derivatives.

Derivatives increased mainly due to an increase of EUR 1.8 billion in trading over-the-counter derivatives, offset by a decrease of EUR 0.4 billion in non-trading derivatives, which were mainly over-the-counter contracts. Derivatives include EUR 4.8 billion of derivatives held for trading (2021: EUR 3.0 billion).

17 Due to banks

(in millions)	31 December 2022	31 December 2021
Group companies	10,693	24,714
Third parties	17,710	37,691
Due to banks	**28,403**	**62,405**

(in millions)	31 December 2022	31 December 2021
Current accounts	6,870	13,055
Demand deposits	75	18
Time deposits	18,670	48,080
Securities financing	2,162	786
Other	625	467
Due to banks	**28,403**	**62,405**

On 23 November and 21 December 2022, ABN AMRO partly repaid the TLTRO III funding in the amounts of EUR 8.0 billion and EUR 13.0 billion, respectively. On 31 December 2022, an amount of EUR 14.0 billion remained outstanding, of which EUR 11.0 billion matures in June 2023 and EUR 3.0 billion matures in June 2024. The repayment followed the change made by the ECB in the TLTRO III interest rate terms and conditions.

18 Due to customers

(in millions)	31 December 2022	31 December 2021
Group companies	4,673	5,773
Third parties	243,497	229,235
Due to customers	**248,170**	**235,008**

(in millions)	31 December 2022	31 December 2021
Current accounts	111,625	117,631
Demand deposits	99,214	92,895
Time deposits	23,965	13,293
Total deposits	**234,803**	**223,819**
Securities financing	7,525	7,944
Other due to customers	5,842	3,245
Due to customers	**248,170**	**235,008**

Due to customers increased by EUR 13.2 billion, mainly due to the merger of Bethman Bank AG and ABN AMRO N.V. Frankfurt Branch for an amount of EUR 6.6 billion. The increase in demand and time deposits was mainly due to interest rate developments.

19 Issued debt

The following table shows the debt issued by ABN AMRO Bank.

(in millions)	31 December 2022	31 December 2021
Group companies		
Third parties	52,773	56,919
Issued debt	**52,773**	**56,919**

The following table shows the types of debt issued by ABN AMRO Bank.

(in millions)	31 December 2022	31 December 2021
Bonds and notes issued	41,300	49,597
Certificates of deposit and commercial paper	11,250	6,431
Total at amortised cost	**52,550**	**56,027**
Designated at fair value through profit or loss	223	892
Issued debt	**52,773**	**56,919**

Total issued debt decreased by EUR 4.1 billion to EUR 52.7 billion at 31 December 2022, mainly due to changes in senior unsecured and covered bonds issued, partly offset by issuance of certificates of deposit and commercial paper.

20 Subordinated liabilities

The following table specifies the outstanding subordinated liabilities. The issued and outstanding loans qualifying as subordinated liabilities are subordinated to all other current and future liabilities.

(in millions)	31 December 2022	31 December 2021
Group companies		
Third parties	7,290	7,549
Subordinated liabilities	**7,290**	**7,549**

The following table shows the main types of subordinated liabilities issued by ABN AMRO Bank.

(in millions)	ISIN/CUSIP	31 December 2022	31 December 2021
Subordinated liabilities		7,290	7,549
- of which USD 113 million 7.75% per annum	*US00080QAD79 / USN0028HAP03*	*103*	*101*
- of which USD 1,500 million 4.75% per annum	*US00080QAF28 / XS1264600310*	*1,360*	*1,402*
- of which USD 1,000 million 4.8% per annum	*US0008DAL47 / XS1392917784*	*868*	*901*
- of which EUR 1,000 million 2.875% per annum	*XS1346254573*	*1,027*	*1,035*
- of which USD 1,500 million 4.4% per annum	*XS1586330604*	*1,392*	*1,358*
- of which USD 300 million 5.6% per annum	*XS1385037558*	*249*	*279*
- of which SGD 750 million 5.5% per annum	*XS2498035455*	*520*	
- of which EUR 1,000 million 5.125% per annum	*XS2558022591*	*979*	
- of which USD 1,000 million 3.324% per annum	*XS2415308761 / US00084DAV29*	*778*	*876*
- of which USD 595 million 6.250% per annum	*XS0619547838*		*537*
- of which EUR 1,000 million 7.125% per annum	*XS0802995166*		*1,045*

The subordinated liabilities decreased by EUR 0.3 billion. This was mainly due to maturing of subordinated loans, partly offset by issuance of new instruments.

Interest expense on subordinated liabilities remained stable at EUR 0.3 billion in 2022 (2021: EUR 0.4 billion).

21 Provisions

The following table shows a breakdown of provisions at 31 December 2022 and 31 December 2021.

(in millions)	31 December 2022	31 December 2021
Legal provisions	361	305
Restructuring provision	65	130
Provision for pension commitments	59	50
Other staff provision	125	130
Other	174	237
Provisions	**784**	**852**

(in millions)	Legal provisions	Restructuring provision	Provision for pension commitments	Other staff provision	Deferred tax liabilities	Other	Total
At 1 January 2021	47	158	69	127		261	662
Increase of provisions	273	33				104	410
Reversal of unused provisions	-4	-17				-94	-115
Utilised during the year	-11	-56				-43	-109
Transfer between stages						6	6
Foreign exchange differences		3					3
Other		10	-19	4		2	-4
At 31 December 2021	**305**	**130**	**50**	**130**		**237**	**852**
Increase of provisions	122	22				104	248
Reversal of unused provisions	-6	-31				-60	-98
Utilised during the year	-60	-59				-126	-245
Transfer between stages						2	2
Foreign exchange differences		2				1	3
Other		1	9	-6		17	22
At 31 December 2022	**361**	**65**	**59**	**125**		**174**	**784**

Restructuring

Restructuring provisions cover the costs of the restructuring plans for which implementation has been formally announced. The decrease relates to the use of the provision.

Legal provisions

Legal provisions are based on best estimates available at the year-end and taking into account the opinion of legal specialists. The timing of the outflow of cash related to these provisions is by nature uncertain, given the unpredictability of the outcome and the time required to conclude litigation. Any provision recognised does not constitute an admission of wrongdoing or legal liability. Legal provisions increased mainly because of the increase in the provision for variable interest.

Variable interest rates for consumer loans

On 3 March 2021, the Kifid Appeals Committee confirmed a ruling by the Kifid Disputes Committee on recalculating the variable interest charged to a specific client on a revolving credit. In short, Kifid ruled that ABN AMRO should have followed the market rate when establishing the variable interest rate for certain revolving consumer credits.

In light of the Kifid ruling, ABN AMRO reached agreement with the Dutch Consumers' Association (Consumentenbond Claimservice) on 5 September 2021 regarding a compensation scheme for affected clients. In Q3 2022, following an August 2022 ruling by the Kifid Appeals Committee, ABN AMRO adjusted the compensation scheme to include interest on interest. ABN AMRO has provisioned around EUR 481 million for the interest to be compensated and the costs incurred in carrying out the scheme. To date, EUR 70 million of this provision has been used, while the remaining provision at 31 December 2022 totalled EUR 411 million.

It is unclear what the exact scope and application of the Kifid ruling is and whether the ruling will have a knock-on effect on other products with variable interest rates, beyond the range of products covered by the compensation scheme. ABN AMRO cannot give a reliable estimate of the (potentially substantial) financial risk of these contingent liabilities not provided for.

Other provisions

Other provisions decreased, mainly due to use of the "Know Your Client" provision.

AML remediation programme

To address shortcomings, as well as increasingly strict regulations and continuously evolving forms of financial crime, ABN AMRO had already started an extensive, bank-wide AML remediation programme. In 2022, remediation of client files progressed at full speed. The AML remediation programme is expected to be finalised in 2023. The total provision for the AML programme at 31 December 2022 amounted to EUR 50 million.

22 Other liabilities

(in millions)	31 December 2022	31 December 2021
Financial liabilities held for trading	640	687
Derivatives	4,143	4,336
Current tax liabilities	3	3
Other	10,354	1,424
Other liabilities	**15,140**	**6,450**

The increase in other liabilities relates to the hedged risk of residential mortgages, which are part of ABN AMRO Hypothekengroep B.V. In prior years, the hedged risk was reported as part of the participating interest, however due to market movements in interest rates, the hedged risk became a negative amount and is therefore reported under other liabilities.

23 Equity

Issued capital and reserves

At 31 December 2022, the authorised share capital of ABN AMRO Bank N.V. amounted to 2,400,000,000 shares. The authorised share capital consists of 2,200,000,000 ordinary A-shares with a nominal value of EUR 1.00 and 200,000,000 ordinary B-shares with a nominal value of EUR 1.00. Every share is entitled to one vote during the General Meeting. The total number of issued shares at 31 December 2022 was 897,521,916 (31 December 2021: 940,000,001). For further information, please refer to Capital section in Risk, funding & capital.

Revaluation reserves

(in millions)	31 December 2022	31 December 2021
Fair value reserve	31	238
Cash flow hedge reserve	-946	-1,540
Accumulated share of OCI of associates and joint ventures	78	133
Unrealised gains on FVTPL items	505	560
Revaluation reserves	**-331**	**-609**

Legal reserves

(in millions)	31 December 2022	31 December 2021
Accumulated share of result in equity-accounted investments (net of dividends)	62	76
Accumulated share of result in participating interests (net of dividends)		3
Statutory reserves	103	100
Other legal reserves	**164**	**178**

Distribution of the dividends

The final dividend for 2021 of EUR 0.61 per share was paid on 18 May 2022 for a total of EUR 553 million. The interim dividend for 2022 of EUR 0.32 per share was paid on 9 September 2022 for a total of EUR 287 million. For the year 2022 a final dividend has been proposed of EUR 0.67 per share.

Capital securities

Securities classified as Additional Tier 1 (AT1) capital are perpetual, junior, resettable securities that are callable and are considered part of equity. The payment of interest on the AT1 capital securities had an impact on equity of EUR 91 million.

24 Maturity of assets and liabilities

										31 December 2022
(in millions)	On demand	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets										
Cash and balances at central banks	56,593									56,593
Short-term government paper		389	981	2,803	3,662	4,143	9,890	9,444		31,312
Loans and advances banks	1,678	4,775	147,170	215	3,164	4,701	572	653		162,929
Loans and advances customers	17,423	17,424	5,336	3,380	8,281	13,483	27,298	4,746		97,372
Debt securities	65	99	264	270	249	1,269	11,093	2,167		15,476
Equity securities									43	43
Participating interests in group companies	4,034									4,034
Equity-accounted investments	205									205
Intangible assets	83									83
Property and equipment	511									511
Other assets	904	509	386	155	242	243	486	3,888		6,814
Total assets	**81,495**	**23,197**	**154,138**	**6,823**	**15,599**	**23,839**	**49,340**	**20,898**	**43**	**375,372**
Liabilities										
Due to banks	6,672	1,698	2,904	11,389	427	3,231	563	1,519		28,403
Due to customers	212,622	20,398	6,055	1,721	1,345	397	1,384	4,249		248,170
Issued debt		2,763	7,939	828	4,056	3,526	9,972	23,689		52,773
Subordinated liabilities		1,027	1,401	103			3,731	1,028		7,290
Provisions	753	18		3			8			784
Other liabilities	10,544	710	211	74	169	392	1,118	1,922		15,140
Total liabilities	**230,591**	**26,613**	**18,511**	**14,119**	**5,997**	**7,546**	**16,776**	**32,406**		**352,561**
Total equity									**22,812**	**22,812**
Total liabilities and equity	**230,591**	**26,613**	**18,511**	**14,119**	**5,997**	**7,546**	**16,776**	**32,406**	**22,812**	**375,372**

										31 December 2021
(in millions)	On demand	Up to one month	Between one and three months	Between three and six months	Between six and twelve months	Between one and two years	Between two and five years	More than five years	No maturity	Total
Assets										
Cash and balances at central banks	60,489									60,489
Short-term government paper	803	400	1,928	1,018	5,020	5,200	11,253	10,792		36,414
Loans and advances banks	3,142	5,035	142,909	816	4,323	8,707	700	996		166,629
Loans and advances customers	6,598	13,468	6,518	2,474	13,389	15,039	27,967	17,783		103,236
Debt securities	388		42	216	167	792	8,241	1,970		11,817
Equity securities									35	35
Participating interests in group companies	6,329									6,329
Equity-accounted investments	262									262
Intangible assets	25									25
Property and equipment	573									573
Other assets	943	537	293	239	110	240	468	2,538		5,369
Total assets	**79,552**	**19,440**	**151,690**	**4,763**	**23,009**	**29,978**	**48,629**	**34,080**	**35**	**391,178**
Liabilities										
Due to banks	7,463	1,260	6,837	407	5,960	33,667	3,367	3,444		62,405
Due to customers	212,630	12,795	3,359	1,011	288	293	1,213	3,420		235,008
Issued debt	51	5,251	4,338	1,433	2,459	4,420	11,684	27,283		56,919
Subordinated liabilities				537	1,045	112	2,308	3,547		7,549
Provisions	782	49		5		1	7	9		852
Other liabilities	14	799	495	123	368	1,122	556	2,974		6,450
Total liabilities	**220,939**	**20,155**	**15,029**	**3,515**	**10,120**	**39,615**	**19,134**	**40,676**		**369,184**
Total equity									**21,994**	**21,994**
Total liabilities and equity	**220,939**	**20,155**	**15,029**	**3,515**	**10,120**	**39,615**	**19,134**	**40,676**	**21,994**	**391,178**

25 Contingent liabilities

(in millions)	31 December 2022	31 December 2021
Committed credit facilities	**70,503**	**62,860**
Guarantees and other commitments		
Guarantees granted	36,584	30,163
Irrevocable letters of credit	3,898	4,109
Recourse risks arising from discounted bills	2,013	1,392
Total guarantees and other commitments	**42,495**	**35,663**
Total	**112,998**	**98,523**

(in millions)	31 December 2022	31 December 2021
Group companies	26,217	19,956
Third parties	44,286	42,904
Committed credit facilities	**70,503**	**62,860**

(in millions)	31 December 2022	31 December 2021
Group companies	35,565	33,668
Third parties	6,930	1,995
Guarantees and other commitments	**42,495**	**35,663**

Commitments and contingent liabilities increased by EUR 14.5 billion, mainly related to an increase in committed credit facilities, guarantees and other commitments by Markets.

The increase in committed credit facilities of EUR 7.6 billion related mainly to an increase in the volume of committed credit facilities to group companies.

The increase of EUR 6.8 billion in guarantees granted related mainly to an increase of EUR 4.9 billion in guarantees granted to third parties.

More information regarding the disclosed legal and compliance cases is provided in Note 35 Commitments and contingent liabilities in the Consolidated Annual Financial Statements.

26 Assets pledged

(in millions)	31 December 2022	31 December 2021
Cash and balances at central banks		425
Financial assets held for trading	15	252
Financial investments FVOCI	7,400	2,778
Loans and advances banks	1,429	1,110
Loans and advances customers	822	8,508
- of which Corporate loans	*818*	*8,345*
Assets pledged as security	**9,666**	**13,073**

The total of assets pledged decreased by EUR 3.4 billion at 31 December 2022, mainly due to called retained notes, partly offset by the additional pledged HQLA.

More information regarding transferred, pledged, encumbered and restricted assets is provided in Note 34 in the Consolidated Annual Financial Statements.

27 Segment information

The total number of FTEs at 31 December 2022 was 16,362 (31 December 2021: 15,757). This increase was mainly due to additional resources for the upscaling of AML activities, IT and strategy execution.

The total number of FTEs in Personal & Business Banking was 2,924 (31 December 2021: 3,168), in Wealth Management 2,065 (31 December 2021: 1,640), in Corporate Banking 2,337 (31 December 2021: 2,467) and in Group Functions 9,036 (31 December 2021: 8,481). The number of FTEs at 31 December 2021 was restated due to the change in the business structure.

More financial information on the segments is provided in Note 2 Segment reporting in the Consolidated Annual Financial Statements.

The average number of FTEs per country is disclosed in the Consolidated Annual Financial Statements in Note 11 Income tax expense, tax assets and tax liabilities.

28 Remuneration

For more information, please refer to Note 36 Remuneration of Executive Board and Supervisory Board in the Consolidated Annual Financial Statements.

29 Related parties

As part of its business operations, ABN AMRO frequently enters into transactions with related parties. Transactions conducted with the Dutch State are limited to normal banking transactions, taxation and other administrative relationships, with the exception of items specifically disclosed in the Consolidated Annual Financial Statements. Normal banking transactions relate to loans and deposits and are entered into on the same commercial and market terms that apply to non-related parties. Total assets with related parties amounted to EUR 2.8 billion at 31 December 2022, compared with EUR 4.4 billion at 31 December 2021. Total liabilities amounted to EUR 0.9 billion at 31 December 2022, compared with EUR 1.1 billion at 31 December 2021. For more information, please refer to Note 36 and Note 38 in the Consolidated Annual Financial Statements.

30 Post balance sheet events

In February 2023, ABN AMRO announced the start of a share buyback programme, under which it plans to repurchase depositary receipts and ordinary shares of ABN AMRO Bank N.V. for a maximum total value of EUR 500 million and for a number of shares not exceeding the authority granted by the general meeting of shareholders on 20 April 2022 (10% of the issued shares). The share buyback programme will commence on 9 February 2023 and is expected to end no later than June 2023.

Authorisation of the Company Annual Financial Statements

7 March 2023

Supervisory Board

T. (Tom) de Swaan, Chair
A.C. (Arjen) Dorland, Vice-Chair
L.J. (Laetitia) Griffith
M.P. (Michiel) Lap
S.A.C. (Sarah) Russell
A.M. (Anna) Storåkers
M.L. (Mariken) Tannemaat
J.S.T. (Tjalling) Tiemstra

Executive Board

Robert Swaak, Chief Executive Officer and Chair
Tanja Cuppen, Chief Risk Officer
Lars Kramer, Chief Financial Officer
Carsten Bittner, Chief Innovation and Technology Officer
Annerie Vreugdenhil, Chief Commercial Officer - Personal & Business Banking (from 1 March 2022)
Choy van der Hooft-Cheong, Chief Commercial Officer - Wealth Management
Dan Dorner, Chief Commercial Officer - Corporate Banking

Other

Our approach to reporting

Our approach to reporting

Basis of preparation

- The purpose of this report is to explain how the bank creates value over time for its stakeholders. The report is written for all stakeholders, including providers of financial capital.
- Content is based on extensive internal reporting. Where external sources are used, this is clearly indicated in the text.
- To decide on content, we apply a materiality test: only content that is sufficiently material to the bank's strategy, performance, reputation or value creation is included.
- Content is reviewed by ABN AMRO's Group Disclosure Committee and approved by the bank's Executive and Supervisory Boards prior to publication. Ultimately, the Executive Board is responsible for the content, accuracy and integrity of the report.
- In addition to adherence to all regulatory requirements, the Executive Board also confirms that this report has been prepared in accordance with the <IR> Framework.
- Production of the report is overseen by ABN AMRO's Finance department.

Scope, boundaries and general reporting guidance

- Unless stated otherwise, this report covers ABN AMRO Bank N.V. (including all business and consolidated entities).
- Where applicable, the scope and boundaries for metrics and other key performance indicators are included in the main text of the report.
- Annual data relates to the bank's financial year (1 January – 31 December).
- Financial information has been prepared in accordance with the IFRS, as adopted by the EU (EU IFRS). Certain sections of the Risk, funding and capital section contain audited information and are considered part of the Consolidated Annual Financial Statements. Audited information in this section is labelled as 'audited'. Unless stated otherwise, all capital metrics and risk exposures are reported under the Basel III (CRD IV/CRR) framework, and all capital figures and ratios, including comparatives, are shown on a fully loaded basis.
- Company Annual Financial Statements comply with Title 9, Book 2, of the Dutch Civil Code and apply the EU IFRS valuation principles, as also applied in the Consolidated Annual Financial Statements. See Note 1 on page 242 for more general reporting guidance on the Company Annual Financial Statements.
- This report is presented in euros (EUR), ABN AMRO's functional and presentation currency. Figures are rounded to the nearest million and relate to results for the entire ABN AMRO organisation, unless stated otherwise.
- All financial year-end averages are based on month-end figures. Management does not believe that using daily instead of month-end figures would make a material difference to the annual averages.
- Due to rounding, certain figures in this report may not tally exactly. In addition, certain percentages have been calculated using rounded figures.
- Non-financial data is collected centrally; this includes data relating to environmental performance, customer loyalty and employee engagement.

Please be aware that information provided in this report does not constitute an offer, investment advice or a financial service. Its purpose is not to encourage any person to buy or sell any ABN AMRO product or service. Nor should it be used as a basis for any investment decision. Any such decision can and should be based on the contents of this report, a definite prospectus and other key investor information (if, and to the extent, required).

To download this report or obtain more information, please visit abnamro.com/annual report or contact us at investorrelations@nl.abnamro.com. Definitions and abbreviations used in this report can be found on pages 343-346 and in the Abbreviations and definitions of important terms 2022.

Forward-looking statements

Certain sections of this report contain statements that may be construed as forward-looking. These statements are not historical facts, and represent ABN AMRO's beliefs regarding future events, many of which are inherently uncertain and outside the bank's control. These statements apply only at publication date. ABN AMRO does not intend to update or revise statements after publication and assumes no responsibility to do so. Readers should also take into account disclosures made in future interim reports issued by the bank.

External assurance

External assurance for this report was provided by EY (see the Independent Auditors Report and Assurance Report on pages 351-361). ABN AMRO believes that external assurance strengthens the credibility of its reporting, and helps improve internal information gathering, systems and processes. For this report, EY audited the Financial Statements (comprising the Consolidated and Company Annual Financial Statements on pages 236-337). EY also provided limited assurance on the non-financial information included in the front end of this report (pages 6-54) and reasonable assurance on the information included in our materiality assessment section (Our value-creating topics, (pages 340-342).

Targets on strategic KPIs

The targets for 2024 published in this report are the targets that we believe are the most reliable and relevant for stakeholders. Given our rapidly changing operating environment, we have decided not to publish any interim targets other than operational sustainability KPIs, which play an important role in our climate strategy. Our aim is always to be clear and consistent in our communications with stakeholders.

Targets are supported by operational KPIs at a product level. We have not set targets beyond 2024; all targets are assessed periodically and will be updated for the period after 2024 at the appropriate time.

Note on value creation

Our materiality assessment

Every two years, we conduct an extensive assessment of our operating environment, allowing us to identify our value creating topics, where we believe ABN AMRO has potential to create the most value for its stakeholders. Our 2022 Integrated Annual Report is based on results from the assessment carried out in 2020 (these results were used to steer the bank in 2022). Our 2020 assessment identified nine strategic differentiators, linked to our three strategic pillars.

In addition to these strategic differentiators, we also identified 27 fundamental value creators, which we consider important for protecting our licence to operate. These fundamental value creators are not directly linked to our strategic KPIs.[1] In 2021 a pulse check was conducted to identify emerging topics and validate the 2020 results. This has not led to an adjusted materiality matrix.

Our 2020 assessment comprised of four distinct steps:

1. We define an initial long list of topics, based on a comprehensive review of media and trend reports, peer disclosures, current reporting requirements and the bank's Risk Event register.
2. The long list is reduced to a short list, which is then submitted to stakeholders, the bank's Extended Leadership Team and other senior management for prioritisation. Topics are rated according to their 'magnitude' (i.e., potential impact on value creation) and 'likelihood' (i.e. how likely a topic is to bring about this impact) – see materiality matrix.
3. From the results, we identify our strategic differentiators and fundamental value creators.
4. Based on the materiality matrix results, an assessment was conducted by Group Strategy & Sustainability and our Strategy Execution Team to define which topics were strategically differentiating to ABN AMRO based on our corporate strategy, strategic pillars and KPIs. The materiality matrix including the classification of strategic differentiators and the KPIs were subsequently validated by the Executive Board.

Our 2022 assessment for future steering as from 2023

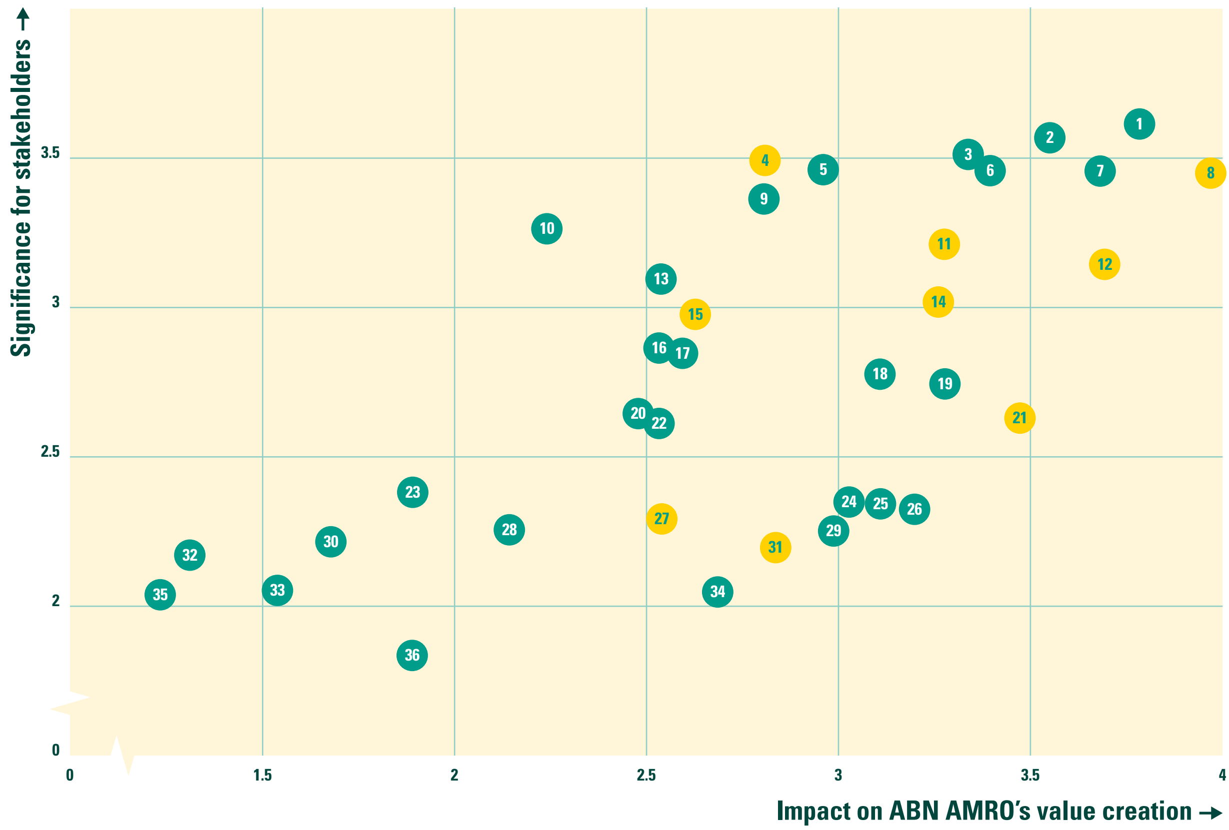
We conducted our latest assessment in 2022 in order to align the bank's steering on these topics in 2023 with our strategy. This assessment used a double materiality approach (applying both impact materiality & financial materiality) based on the Integrated Reporting Framework approach in combination with own criteria. The own criteria were based on the draft European Sustainability Reporting Standards (ESRS) in preparation of the EU's planned Corporate Sustainability Reporting Directive (CSRD).[1]

Our 2022 assessment comprised four basic steps:

1. We defined an initial long list of topics, based on a comprehensive review, including media and trend reports, peer disclosures, current reporting requirements and the bank's Risk Event register.
2. The long list was reduced to a short list (containing 28 value-creating topics), using data analysis by applying weights to the different sources used and subsequently ranking the topics by importance. To provide an inside-out perspective, this short list was then submitted for prioritisation to:
   - Representatives of our four main stakeholder groups (clients, employees, investors and society), who were asked to assess significance to stakeholders.
   - Members of our Extended Leadership Team, who are asked to assess the impact on ABN AMRO's long-term value creation.
3. We then performed an outside-in analysis to determine our most material topics.[2] The weighting applied was as follows: 25% outside-in; 75% inside-out (as the inside-out perspective also contains outside-in views).
4. These material topics were then linked to our strategic pillars and to specific key performance indicators (KPIs).

[1] Due to take effect from 2024. The CSRD will be accompanied by extensive European Sustainability Reporting Standards (ESRS). Double materiality relates to an inside-out/outside-in approach to determining materiality, which may be defined as follows:
Inside-out: impacts that can be influenced by the bank through its actions or activities and that have a short, medium or long-term impact on stakeholders
Outside-in: impacts outside the bank's control, which may affect its enterprise or franchise value through opportunities and/or risks.
[2] Based on opportunities and threats identified by the bank, current and forthcoming legislation and investor requirements.

Materiality matrix



Strategic Differentiators

These are topics, vital to our strategy, where we believe we can create most value for our stakeholders:

- 4 Risk profile/management
- 8 Viable business model
- 11 Responsible investment & financing
- 12 Customer experience
- 14 Clear and appropriate advice
- 15 Financial performance
- 21 Digitalisation
- 27 Circular economy
- 31 Diversity & equal opportunity

Fundamental Value Creators

These are topics that play a vital role in implementing our strategy:

- 1 Ethics & integrity
- 2 Secure banking
- 3 System stability
- 5 Client data protection
- 6 Strong balance sheet
- 7 Vision & leadership
- 9 Anti-corruption
- 10 Corporate governance
- 13 Regulatory compliance
- 16 Human rights
- 17 Financial inclusion
- 18 Stakeholder engagement
- 19 Adaptability
- 20 Employee health & safety
- 22 Non-financial performance
- 23 Environmental impact
- 24 Talent attraction
- 25 Employee empowerment
- 26 Co-creation and innovation
- 28 Community investment
- 29 Employee training and education
- 30 Responsible procurement
- 32 Fair taxes
- 33 Geopolitical instability
- 34 Platforms and eco-systems
- 35 Remuneration policy
- 36 Policy influence

Our materiality assessments are overseen by a project team and a separate Steering Group Committee. Members are drawn from our Strategy, Sustainability, Risk Management, Investor Relations, Finance, External Reporting and Corporate Banking departments. Results are validated by the Chief Strategy & Innovation Officer before submission to the Executive Board for discussion and approval. The assessment covers all ABN AMRO businesses and consolidated entities worldwide.

The 2022 assessment resulted in the following most material topics for 2023:
- Secure banking (including Client data protection)
- Customer experience
- Viable business model
- Responsible investment and financing
- Risk profile/management

From 2023, management will monitor and take decisions based on these topics. For definitions of these topics please see the Abbreviations and definitions of important terms 2022 report.

Comparison of results

Following our previous assessment in 2020, four topics were added to our value-creating topics shortlist in 2022:
- Biodiversity, climate change, efficient operations management and social impact

At the same time, twelve topics were removed or merged with other topics:
- Anti-corruption, community investment, fair taxes, financial inclusion, non-financial performance, platforms and eco-systems, policy influence, remuneration policy, responsible procurement, stakeholder engagement, system stability and vision & leadership

This comparison between the assessments in 2020 and 2022 relates mainly to inside-out results; 2022 was the first year in which the outside-in analysis was conducted more explicitly, as part of our introduction of double materiality (impact materiality & financial materiality). In 2022, we no longer distinguished between fundamentals & strategic differentiators. Five most material topics were identified from a short list of 28 value creating topics. For an overview of the comparison between the assessments in 2020 and 2022 per topic, please see the Abbreviations and definitions of important terms 2022 report.

Definitions

Definitions of strategic key performance indicators

Indicator	2022	2021	Definition used
Absolute cost base	5.3	5.3	Operating expenses excluding AML settlement and restructuring costs.
Cost of risk (basis points)	3	-7	Annualised impairment charges on loans and advances made to clients, divided by the average total loans and advances for the year (on the basis of gross carrying amount and excluding fair value adjustments resulting from hedge accounting).
Return on average equity	9%	6%	Annual profits (excluding coupons attributable to Additional Tier 1 capital securities and results from non-controlling interests) as a percentage of average equity attributable to the bank's owners (excluding Additional Tier 1 capital securities).
CET1 ratio (fully loaded)	15%	16%	Common Equity Tier 1 as a percentage of total risk-weighted assets under Basel III regulations (where the CET1 ratio refers to Basel IV, this is stated in the text).
Relational Net Promoter Score			To calculate NPS, clients are asked if they would recommend ABN AMRO to friends or colleagues on a scale of 0-10. Those scoring 9 or 10 are 'promoters'; those scoring below 7 are 'detractors'. NPS is then calculated by subtracting the percentage of detractors from the percentage of promoters.
Mortgages	0	-1	The score is based on a weighted average (on exposure) between the ABN AMRO label and Florius. Scores based on quarterly online survey carried out by Kantar TNS for ABN AMRO and by MWM2 for Florius.
SME	-38	-33	Based on biannual online /telephone survey carried out by Ipsos (sample size for 2022: 371 clients). The SME scope has been revised from business clients with a revenue below EUR 10 million to business clients with a revenue below EUR 25 million, due to new top structure and refined priorities. The comparative figures have not been adjusted.
Marketshare			
Mortgages	17%	16%	Market share of new residential mortgages in the Netherlands, based on monthly market scan by the Dutch Land Registry (Kadaster). Market share is calculated as new mortgages of ABN AMRO labels divided by all new passed mortgages that are registered by the Dutch Land Registry.
SME	16%	18%	This score is based on an annual online survey performed by Ipsos (sample size of 3,900 companies). The SME scope has been revised from business clients with a revenue below EUR 10 million to business clients with a revenue below EUR 25 million, due to new top structure and refined priorities. The comparative figures have not been adjusted.
Sustainability (acceleration) asset volume	31%	27%	Loans or investments that adhere to the sustainability acceleration standards. These standards contain clear definitions with regard to clients' sustainability policies, practice and governance and include both environmental and social criteria for labelling a loan or investment as sustainable. Definitions are often based on current market practice or improving the sustainability performance of clients. The overall target for sustainability (acceleration) asset volume is calculated as the sum of sustainability (acceleration) asset volume and sustainability (acceleration) client asset volume, divided by the sum of the outstanding mortgage loan book, corporate loan book and relevant client asset volume. The sustainability (acceleration) volume consists of the sustainability (acceleration) asset volume and the sustainability (acceleration) client asset volume. The sustainability (acceleration) asset volume includes Sustainability Linked Loans, ESG Best in Class and Acceleration Finance Loans. Acceleration Finance Loans are loans that are used to make a positive environmental or social impact in line with sector best practices. As an example, reals estate financing and mortgages are included in the sustainability (acceleration) volume when the real estate has an A-label or higher. For client assets we have aligned our definition of sustainable acceleration client assets with the definitions set in the EU SFDR regulation (article 8 and 9).

Indicator	2022	2021	Definition used
Sustainability (acceleration) asset volume			Due to the new simplified organisational structure implemented in 2022, the bank's four business lines were replaced by three client units: Personal & Business Banking, Wealth Management and Corporate Banking. These three client units are included in the new line item Corporate loans to clients. Where previously only Corporate loans in the Commercial Banking and Corporate & Institutional Banking segments were considered for sustainability (acceleration) asset volume, we have expanded this in the past half-year to include all corporate loans to the three above-mentioned client units, except the non-core Corporate Banking loans.
Gender diversity (sub-top)	31%	30%	Bank-wide percentage of women in sub-top (Hay scales 12 or 13) within the bank's workforce (in the Netherlands only).
Dow Jones Sustainability Index (DJSI)	top 15%	top 15%	Published by S&P Global, the DJSI tracks the sustainability performance of leading companies. Scores are not directly comparable year-on-year because of regular recalibrations and changes to methodology.
Straight-through-processing rate	63%	n/a	Straight-through-processing rate is the percentage of processes which are fully digital. A process consists of five steps. The steps "input", "output" and "signing" are considered digital when a client can complete the step via the app, website, chatbot or voice automation. "Throughput" and "archiving" steps are considered digital when automated. High volume service and product processes in scope are generic service, transaction banking, investments and (home and other) financing solutions processes key to serving Personal & Business Banking and Wealth clients (i.e. the client segments with the highest client volumes) with the highest annual transaction volumes (i.e. annual transaction volumes of ≥30.000).

Other sustainability terms and indicators

EU Taxonomy	
EU taxonomy	The EU Taxonomy is a classification system that establishes a list of environmentally sustainable economic activities, as set out in article 3 of the Taxonomy Regulation (Regulation (EU) 2020/852. Based on article 8 of that regulation companies that are required to report under the Non-Financial Reporting Directive (NFRD) are obligated to disclose taxonomy-related information. The article differentiates between financial and non-financial companies. For credit institutions, being a financial company, the reporting obligation differentiates between exposures to NFRD companies, households and local governments. Exposures to non-NFRD companies, central governments, central banks and supranational issuers may not be included in the eligibility and alignment disclosures.
EU Taxonomy: eligibility	An economic activity that is described and has Technical Screening Criteria (TSC) set out in the EU Taxonomy. When the economic activity is in line with the activity description it can be considered eligible for taxonomy-related disclosure. As currently only two of the six environmental objectives under the EU Taxonomy have been implemented in the Delegated Acts, our eligibility percentage only reflects those two.
EU Taxonomy: mandatory eligibility	The reporting requirements under the EU Taxonomy are limited to specific counterparties. The mandatory eligibility percentage should be limited to all exposures eligible for the EU Taxonomy to households, local governments and NFRD counterparties. Eligibility for NFRD exposures may only be based on actual eligibility percentages as reported by our NFRD counterparties.
EU Taxonomy: voluntary eligibility	We have elected to voluntarily estimate and disclose eligibility of our non-NFRD exposures based on their main economic activity using the respective NACE codes of these counterparties. This voluntary disclosure is in addition to our mandatory eligibility disclosure and may not be comparable between issuers given that non-NFRD corporates are not included in the scope of the numerator for both eligibility and alignment under the regulation. In addition, we have elected to disclose voluntary on client assets, for which the NACE method is also used to estimate eligibility.
EU Taxonomy: Alignment	An economic activity that meets all requirements for a sustainable activity. These requirements are: 1. the activity significantly contributes to an environmental objective, 2. the activity does no significant harm to any other environmental objective, and 3. the activity meets a set of minimum social safeguards. The methodology that is used for the pilot Green Asset Ratio can be found under 'Methodology GAR pilot Hypotheken Groep'.
Non-financial Reporting Directive scope	The NFRD (Directive2014/95/EU) requires all large undertakings which are public-interest entities and that employ on average more than 500 employees during their respective financial years to report on certain non-financial information.
Covered assets	This term is defined as the total on-balance sheet assets minus exposures to central governments, central banks and supranational issuers and assets held for trading.
Green Asset Ratio	This ratio is calculated by dividing our EU Taxonomy-aligned exposures by our total covered assets.

Energy labels	
Energy labels	Energy labels are governed at European level and described in the Directive (2010/31/EU) on the energy performance on buildings. The directive was updated on 1 January 2021, which resulted in a new methodology for calculating the energy performance. The energy label figures in this report consist of a combination of energy labels under the old methodology (prior to 1 January 2021) and the new methodology. Buildings from 2016 onwards without a definite energy label are classified under the old methodology and estimated at energy label A. Buildings built after the 1st of January 2021 are classified under the new methodology and estimated at energy label A+++. Both estimates are based on the Dutch Building Decree. The category 'no label' consists of properties that are not required to have a label in the Regulation, while 'unknown' means ABN AMRO does not have the label of the property. In the event multiple real estate objects are related to one loan, the amount of the loan has been allocated to energy labels based on the floor area in square metres of the real estate objects. In line with the European Banking Authority's requirements for reporting on financial information, the energy labels are assigned to any immovable property collateral, regardless of the loan/collateral ratio (commonly referred as the loan-to value ratio).

Greenhouse gas emissions (GHG)	
Greenhouse gas emissions (GHG)	▶ **Scope 1:** Direct GHG emissions that occur from owned or controlled sources ▶ **Scope 2:** Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating or cooling ▶ **Scope 3:** All indirect GHG emissions (not included in Scope 2) occurring in the value chain, including own operations and financed emissions The financed GHG emissions have been calculated according to the PCAF Global GHG Accounting and Reporting Standard for the Financial Industry (2020) for the corporate loan book, mortgage portfolio, and client asset portfolio. Scope 1, scope 2 and scope 3 related to own operations have been calculated in accordance with the guidelines from the Greenhouse Gas Protocol.
GHG emissions for corporate clients	The ISS ESG database has been used as source to collect GHG emissions for our corporate clients. For corporate clients which are not covered by the ISS ESG database the CBS and the PCAF databases have been used, which provide country and sector-specific carbon intensity information. For clients active in renewable energy production from solarpower, windpower or hydropower we have used an emission intensity of 0 as the nature of the activity already implies there is no emissions associated with these activities.
GHG emissions for client assets	For the client assets portfolio, the calculations have been made using the ISS ESG database.
GHG emissions for the shipping	The Poseidon Principles framework has been used as our main source to collect GHG emissions for the shipping portfolio at vessel level. For all vessels which are not covered by the Poseidon Principles framework the CBS and the PCAF databases have been used, which provide country and sector-specific carbon intensity information.
GHG emissions for residential mortgages	For mortgages the calculations are based on floor area, (indicated) energy labels and asset type. CBS data for energy consumption has been used to calculate emission factors per square meters. To convert the energy data into carbon emission data, the emission factors provided by CBS have been used. An attribution factor at loan level has been applied which is the ratio of the gross carrying amount and the property value at origination.
GHG emissions for commercial real estate	For the commercial real estate portfolio (residential and non-residential) the GHG emissions calculations are based on floor area, energy label and asset type and the corresponding emission factors provided by the PCAF emission factor database. An attribution factor at portfolio level for residential and non-residential commercial real estate has been applied, using the loan-to-market value based on the most recent property value.

Sectors that contribute most to climate change	
Sectors that contribute most to climate change	These sectors are identified by NACE codes A to H and L, which are Agriculture, Mining, Manufacturing, Energy, Water Supply, Construction, Wholesale and Retail Trade, Transport and Real Estate/Built Environment, as specified in Recital 6 of the Commission Delegates Regulation (EU) 2020/1818.
Carbon-related assets	A carbon-related organisation is an organisation that directly takes part in exploration, mining, extraction, distribution or refining of fossil fuels. These organisations can be identified as the companies excluded from EU-Paris Aligned Benchmarks (under Article 12(1) (d)-(g) Commission Delegated Regulation (EU) 2020/1818). Identification of such an organisation should be done based on revenue split. However, in this Integrated Annual Report this was done only for the client asset portfolio, while for the banking book portfolio these exposures were identified based on the NACE code of the counterparty's principal activity, due to data constraint. The NACE codes used to identify such organisations were: B05.10, B05.20, B06.10, B06.20, B09.10, C19.20, C20.11, D35.11, D35.21, D35.22 and D35.23. Since NACE code D35.11 does not distinguish between renewable and non-renewable energy, but renewable energy should not be labelled as carbon-related, we have excluded all exposures to clients where the principal activity is renewable energy, or the loan specifically finances a renewable energy project.

Climate and environmental risk	
Subject to physical risk	Dependent on financial and non-financial risk of a changing climate or environmental degradation. Physical risk can be acute, for example when it relates to extreme weather events, or chronic, relating to progressive shifts such as rising temperatures and biodiversity loss.
Subject to transition risk	Dependent on the financial and non-financial risks that result, directly or indirectly, from the process of adjusting to a lower-carbon and more environmentally sustainable economy (e.g. changes in regulations, consumer preferences and technology).

Climate strategy	
Mortgages	Our financing scope exists of our Dutch residential mortgage exposures, except customised credits. In setting our target we have included Scope 1 and 2 emissions. We have benchmarked our residential mortgage portfolio against the pathways laid out by the Carbon Risk Real Estate Monitor (CRREM) for the Netherlands. We measure our emissions by using the kg of CO_2 associated with each square metre we finance.
CRE	We have set a target covering our loan book for our commercial real estate (CRE) clients in the Netherlands, excluding general corporate loans. This approach is in line with guidance from methodologies such as PCAF. With this approach, we are covering all of our Dutch CRE portfolio. In setting our commercial real estate target we have included Scope 1 and 2 emissions. We have benchmarked our commercial real estate portfolio against the Carbon Risk Real Estate Monitor (CRREM NL) 1.5-degree pathways for the Netherlands, which have been tailored to a 1.5-degree carbon budget for the Dutch commercial real estate sector. We measure our emissions by using the kg of CO_2 associated with each square metre we finance.
Power Generation	Included in our target is our corporate lending to the sector as represented by the drawn loan amount. Our portfolio includes wind, solar and some gas-fired power, but excludes exposure to utilities that have no or only limited power generation activities in relation to total revenues, as well as energy from waste. Smaller clients that are producing (often renewable) energy for their own use are also excluded due to data constraints. We target Scope 1 carbon emissions because this comprises most emissions in this sector. We calculate the carbon emission intensity (kg CO_2/MWh) of our power generation loan book. We benchmark our power portfolio against the International Energy Agency's (IEA) Net Zero Emissions (NZE) 2050 global power CO_2 emission intensity curve.
Oil and Gas	Included in our target is our corporate lending to the sector as represented by the fully committed loan amount, drawn and undrawn. We cover exploration and production in our portfolio as this segment accounts for a significant part of our oil and gas portfolio's total carbon emissions. With our absolute committed financing target, we are ensuring that all three GHG emission scopes will decline as our exposure to oil and gas companies declines. We have benchmarked our upstream oil and gas portfolio against the International Energy Agency's (IEA) Net Zero Emissions (NZE) oil and gas global supply curve.
Shipping	We include all loans used to finance vessels above 5,000 GT. We calculate carbon emissions related to the fuel consumed by the vessels. We measure our financed emissions in the shipping sector using the Alignment Delta (AD), which is based on the Annual Efficiency Ratio (AER). The AD represents how the portfolio has performed in relation to the target AER carbon intensity, measuring the % above, on or below the target. The lower the AD, the closer the carbon intensity is to that of the decarbonisation trajectory, with a negative number meaning that carbon intensity was below the target level for the year. The AER is a measure of the carbon intensity of each vessel calculated by dividing the amount of CO 2 a ship emits by its cargo carrying capacity and the distance sailed. In the shipping sector we have taken the trajectory set by the Poseidon Principles as our benchmark scenario.
Client assets	We have included line-by-line equities in our ambitions for the DPM model portfolios. Currently Scope 1 and Scope 2 emissions are included in our ambitions. The benchmarks used are the same benchmarks that are now used in model portfolios to compare risk and return performance. Our aim is to reduce the weighted average carbon intensity ("WACI") of our clients' investment portfolios in our DPM mandates. The model portfolios that the bank manages as a basis for our clients' investments will have specific ambitions based on the WACI. To determine this intensity, we use Institutional Shareholder Services' (ISS) emission intensity on issuer (e.g. company) level, in CO2e/million EUR revenues. Carbon emissions per million of revenues shows the carbon efficiency of a company.

GAR pilot methodology

To be aligned with the taxonomy, an economic activity has to meet three criteria. The activity:

- Must make a substantial contribution to one of the six environmental objectives.
- Must do no significant harm to the other five environmental objectives (known as the DNSH criterion).
- Should not violate minimum social safeguards (MSS criterion).

For our pilot, we identified climate change mitigation as the main environmental objective (acquisition and ownership of buildings – activity 7.7 in the taxonomy) and considered the DNSH criteria for climate change adaptation. While we did analyse the MSS criterion, this did not apply to household exposures.

Substantial Contribution

Activity 7.7 in the Taxonomy (Acquisition and ownership of buildings) makes a substantial contribution when it complies with the specific Technical Screening Criteria ('TSC'). The TSC largely depend on 1) the type of building 2) the building permit date being before or after 31 December 2020, and 3) the energy performance. If the date of the building permit was before 31 December 2020, the building should have at least an Energy Performance Certificate class A. For buildings licensed after 31 December 2020, the building must have a Primary Energy Demand of at least 10% lower than the BENG2 (primary fossil energy consumption) standard. Due to data unavailability of the building permit dates, ABN AMRO has assessed the TSC based on building year of the building instead of the building permit date. As an alternative, the building is within the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.

Do no significant Harm

An economic activity aligned with the EU taxonomy may not significantly harm any of the remaining five objectives. For residential real estate, only the DNSH check related to Climate Change Adaptation is applicable. We assessed our mortgage portfolio to check which climate hazards are material, taking the high probability of the occurrence of the climate phenomenon into account. The definition of high risk probability of Kennis Centrum Aanpak Funderings-problematiek (KCAF) is used for foundation risk. For the other risks the definition of the Climate Adaptation Services (CAS) is used. In the data that is available at CAS, the most severe scenario of Koninklijk Nederlands Meteorologisch Instituut (KNMI) is used. This scenario is in line with the Representative Concentration Pathway (RCP) 8.5 from the Intergovernmental Panel on Climate Change.

We identified material physical climate risks by taking into account the probability of occurrence of the climate risk. The time horizon used in the assessment is 2050. In this risk assessment we have included plans from the Dutch government aimed at mitigating physical risks. Due to data unavailability, we did not take into account the individual adaptation solutions that home owners implement to mitigate the identified climate risks. The material climate hazards for our mortgage portfolio are flooding, wild fire and subsidence risk. As a result, any real estate object for which a material physical risk has been identified is considered non-compliant with the DNSH criteria and is marked as not aligned with the EU taxonomy.

Minimum Safeguard

The UN Guiding Principles on Business & Human Rights (UNGPs) and Organization for Economic Co-operation and Development (OECD) Guidelines only apply to business entities, but do not apply to individuals. This is because business & human rights standards are meant to shape the conduct of enterprises (and reiterate some of the obligations of States), but do not deal with the obligations or the conduct of private citizens or individuals. As such, the Minimum Safeguard criterion does not apply for our exposures to retail clients.

Compliance with the International Integrated Reporting Framework

This Integrated Annual Report has been prepared in accordance with the Integrated Reporting Framework, part of the IFRS Foundation. The <IR> Framework comprises Guiding principles and Content elements and focuses on an organisation's ability to create value.

Guiding principles	Details of our approach
A. Strategic focus and future orientation	Our positioning and strategy provide detailed insight into our strategy (pages 18-19). Strategic and operational sustainability targets are presented on pages 21 & 33. Our performance chapters describe in detail the execution of our strategy (pages 30-54). Under Outlook, there is an additional note on availability of inputs and resources.
B. Connectivity of information	This report has a clear structure and describes how the bank's strategy relates to changes in its operating environment (pages 10-11). It also provides details of performance against this strategy (pages 30-54), as well as details of possible opportunities and risks arising from our strategy (pages 22-23).
C. Stakeholder relationships	Our main stakeholder groups are clearly identified (page 25). We describe methods of engagement with each stakeholder group, as well as the principal issues discussed during the year (page 25). Our value creation model provides further information on value created for our stakeholder groups (pages 26-27).
D. Materiality	This report focuses on our material topics, i.e., those with the greatest impact on ABN AMRO and its stakeholders. Our materiality assessment is described in detail on pages 340-342 (including results).
E. Conciseness	ABN AMRO applies the materiality principle to ensure focused content. This report acts as a standalone document, providing sufficient information for stakeholders to form an opinion or take decisions with regard to their relationship with the bank. At the same time, we also have to comply with current reporting regulations applying to the bank. These may result in additional content on certain topics.
F. Reliability and completeness	This report covers all our material topics – in terms of content, we work to ensure a proper balance between positive and negative aspects. To achieve this, the report is subject to a robust review and approval process and is ultimately approved by the Executive Board prior to publication. We also request EY to provide external assurance on certain content (pages 359-361).
G. Consistency and comparability	Where possible, all data, is shown in its proper context. Comparison with previous years' performance is also included. Significant variations in performance are explained in the text.

Content Element	Our approach
H. Organisational overview and external environment	Our bank provides an overview of ABN AMRO's activities, purpose, core values and business model (pages 7-9). Our operating environment describes the most significant changes to our external business environment over the past year (pages 10-11).
I. Governance	Leadership & governance describes our system of corporate governance, as well as its importance to long-term value creation (pages 179-235). This report also contains interviews with the bank's CEO, CRO and Supervisory Board Chair (pages 4-5, 62-63 and 192-193 respectively).
J. Business model	Our business model is clearly described on page 26. The model is also included as part of our value creation model (pages 26-27).
K. Risks and opportunities	Our strategy provides an overview of the principal opportunities and risks arising from our strategy; these are linked both to our strategic pillars and to our material topics (page 22-23). Each opportunity/risk is identified as short, medium and/or long-term. Further information on our approach to risk management is provided under Risk, funding & capital (page 56).
L. Strategy and resource allocation	Our strategy describes ABN AMRO's strategy, allocation of resources and intended future direction (pages 18-19). Outlook contains the bank's view of markets, performance and strategy execution in 2023 and beyond (page 53). There is also a separate Note on the availability of inputs and resources on page 54.
M. Performance	Our performance describes the bank's performance in 2022 against its strategic pillars and targets (pages 30-51). This section is organised by strategic pillar (Customer experience, Sustainability and Future-proof bank). Meanwhile, our value creation model explains outputs/outcomes from our business model, our impact on capitals and value created for stakeholders (pages 26-27). Further information on our financial performance can be found in our Annual Financial Statements (page 236). We disclose strategic targets for 2024, but do not include all interim targets. This approach is explained on page 340.
N. Outlook	Outlook provides forward-looking information relating to ABN AMRO's performance, strategy execution and operating environment (page 53).
O. Basis of preparation and presentation	The basis of preparation and presentation is included under Our approach to reporting (page 339). We decide on content based on the materiality principle and in compliance with relevant regulations.

Regulatory developments

We operate in a highly-regulated sector: our operations are governed by laws and regulations, some of which apply specifically to the financial services industry. These are in addition to our own internal policies, controls and guidelines, aimed at maintaining the highest ethical standards within the bank and protecting our moderate risk profile. Below, we provide an overview of relevant regulatory developments.[1]

Regulation	Current developments
Anti-money laundering and countering terrorism finance legislation (AML/CFT)	The European Commission has presented an ambitious package of legislative proposals to strengthen the EU's anti-money laundering and countering the financing of terrorism rules. The proposals are aimed at, among other things, introducing new rules in the areas of customer due diligence, beneficial ownership, national supervisors' powers and financial intelligence units in the EU member states, as well as transfers of crypto assets and the establishment of a new EU supervisory authority. On 21 October 2022, the Dutch Minister of Finance submitted a bill with amendments to Dutch AML legislation (Wet plan van aanpak witwassen) for discussion in parliament. The bill comprises four main amendments, the most important being the creation of a legal provision allowing banks to jointly monitor their retail clients' transactions involving more than EUR 100. In addition, institutions in scope of the AML legislation will be required to share data on high-risk customers. There will also be a ban for traders on cash payments for goods of over EUR 3,000. The bill is the subject of a public debate on the privacy of retail clients. It is uncertain what the outcome of the public and political discussions will be and how this will affect the bill.
Initial Margin phase 6 (EMIR)	EU margin rules are largely driven by the regulations for margin requirements specified by the BCBS and the IOSCO Working Group. Being one of the legs of the regulatory margin, initial margin is the collateral that covers a party's current and potential future exposure in the interval between the last collection of (variation) margin and the liquidation of positions or the hedging of that exposure following a default by the other party. Application of initial margin rules depends on the regulatory implementation phase of an in-scope entity. ABN AMRO has been included in phase 5 and as such it implemented the initial margin rules by 1 September 2021. This mainly entailed ensuring custodial arrangements and legal documentation with a selection of core counterparts based on the trade exposures. On 1 September 2022, the initial margin rules entered into force for the phase 6 entities. In implementing these rules with its phase 6 counterparties, ABN AMRO has largely chosen the threshold monitoring route which is also permitted by the regulation. This means Global Markets is required to monitor exposures and take action when the agreed level has been reached.
EU banking rules (Basel III/IV)	In late 2021, the European Commission proposed a review of EU banking rules – the Capital Requirements Regulation and the Capital Requirements Directive. This package finalises the implementation of Basel III (including the finalisation of Basel III, also known as Basel IV) taking into account the specific features of the EU banking sector. Apart from ensuring EU banks will become more resilient to potential future economic shocks, the new rules also aim to support the transition to a more sustainable economy, and ensure that the risks involved in this transition are adequately managed by EU banks. The legislative procedures needed to reach agreement on the changes to the EU banking rules are nearing the final stages, while the new rules (including transitional arrangements) are expected to be implemented as from 2025.
Benchmark Regulation/IBOR	In 2014, at the request of the G20, the Financial Stability Board issued its report 'Reforming Major Interest Rate Benchmarks'. This report sets out several recommendations for strengthening existing benchmarks for key interbank offered rates (IBOR) in unsecured lending markets, and for promoting the development and adoption of alternative nearly risk-free reference rates, where appropriate. These recommendations led to a fundamental review of the key interest rate benchmarks used in global financial markets. Throughout 2022, as in previous years, public authorities in various jurisdictions continued to make progress on reforming or replacing the existing benchmarks in order to ensure a smooth transition, and ABN AMRO's bank-wide project continued to deliver on the changes required. Whilst in previous years the main focus was on adapting to the new discounting regimes for centrally cleared swaps and bilateral counterparties, and to the new rules relating to swaps denominated in CHF, JPY and GBP, 2022 saw the preparation for changes required in relation to USD-Libor-linked contracts such as loans and swaps. The year 2022 also saw a limited start to the repapering of such agreements.
EU taxonomy of sustainable activities	The EU Taxonomy Regulation entails a classification system establishing a list of activities considered environmentally sustainable. The system is meant to be used by companies, investors and policymakers in their sustainability reporting in order to prevent greenwashing and help companies become more climate-friendly. The EU Taxonomy Regulation covers six environmental objectives. Two of them have already been published (climate change mitigation and adaptation). The remaining four were expected in 2022, but their publication was postponed and is now expected to be published in 2023. Moreover, on 1 January 2023, the delegated act to include nuclear energy and gas in the EU taxonomy entered into force.

[1] These regulations were selected for inclusion because of their potential impact on ABN AMRO and relations with its main stakeholder groups.

Regulation	Current developments
EU Sustainable Finance Disclosure Regulation	The Sustainable Finance Disclosure Regulation (SFDR) came into effect in March 2021 and aims to redirect capital flows towards sustainable finance. This regulation was introduced to improve transparency in the market for sustainable investment products, prevent greenwashing and increase transparency around sustainability claims made by financial market participants. SFDR imposes comprehensive sustainability disclosure requirements by way of a broad range of environmental, social & governance (ESG) metrics at entity and product level. One of the results of this regulation is that clients in Discretionary Portfolio Management will receive sustainability information about their portfolio.
EU Corporate Sustainable Reporting Directive	On 5 January 2023, the Corporate Sustainability Reporting Directive (CSRD) entered into force. As part of the European Green Deal and the Sustainable Finance Agenda, the CSRD was introduced to strengthen the existing rules for sustainability reporting. It further builds on the Non-Financial Reporting Directive (NFRD) and introduces more detailed reporting requirements on a company's risks and opportunities arising from social and environmental issues, as well as on the impact of the company's activities on people and the environment. In addition to the more detailed disclosure requirements, the CSRD requires companies to obtain assurance on the sustainability information they report. The new legislation will apply to all large companies and all listed companies, but application will take place in four stages. The first stage applies to companies already subject to NFRD (i.e. large public-interest companies with more than 500 employees), such as ABN AMRO. This means that ABN AMRO will have to apply the CSRD for the first time in its 2024 Annual Report.
General Data Protection Regulation (GDPR)	The General Data Protection Regulation (GDPR) is not uniform throughout the EU. Some important aspects of the GDPR have been left to member states to further legislate. In the Netherlands, a bill to amend the current act implementing certain aspects of the GDPR has been presented to the Dutch parliament. One of the relevant amendments for the sector envisaged in this draft is that the Financial Supervision Act will provide for a ground that brings automated decisions in the context of transaction monitoring for fraud prevention in line with GDPR requirements. Another relevant amendment is that in order to be able to rely on the exception for using biometric identification procedures (for example, to protect access to services), such use must be necessary in the context of a general public interest. Despite this extra requirement, it seems that the sector may be able to rely on this exception in the context of identification and verification, which will be necessary to comply with AML legislation in the context of fully online onboarding processes.
Markets in Financial Instruments Directive (MiFID II)	Following publication of the Commission's Action Plan, the MiFID II Delegated Regulation was updated in 2021 to integrate sustainability factors, risk and preferences into certain organisational requirements for investment firms. Furthermore, the Commission introduced amendments to the MiFID II Delegated Directive to integrate sustainability factors into the product governance obligations. The Regulation entered into force in 2022. Based on this regulation, ABN AMRO is required to ask all its clients in advisory and Discretionary Portfolio Management to specify their sustainability preferences. Furthermore, we are required to take them into account when providing our investment services.
Packaged Retail and Insurance-based Investment Products (PRIIPS)	The Commission revised its Delegated Regulation in 2021 with regard to requirements for key information documents. The revision was considered necessary in order to provide retail investors with more appropriate information across the range of different types of packaged retail and insurance-based investment products (PRIIPs). The main impact for ABN AMRO relates to the methodology applied to performance scenarios and costs, and the way these are displayed. The PRIIPS entered into force on 1 January 2023.
Schrems II	In July 2020, the Court of Justice of the European Union ruled that the transfer of personal data outside the European Economic Area (EEA) may require additional technical measures to provide adequate protection of personal data (the Schrems II judgment). As a result of this judgment, ABN AMRO needs to assess and monitor its data transfers outside the EEA to verify whether additional technical measures are required. In some cases, if the required protection of personal data cannot be provided, we may be required to discontinue the data transfer and the related service, platform or application.

Independent auditor's report

To: the shareholders and supervisory board of ABN AMRO Bank N.V.

Report on the audit of the financial statements 2022 included in the integrated annual report

Our opinion

We have audited the financial statements 2022 of ABN AMRO Bank N.V. (hereinafter: ABN AMRO or the bank), based in Amsterdam. The financial statements comprise the consolidated and company annual financial statements.

In our opinion:

- the accompanying consolidated annual financial statements give a true and fair view of the financial position of ABN AMRO as at 31 December 2022 and of its result and its cash flows for 2022 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code
- the accompanying company annual financial statements give a true and fair view of the financial position of ABN AMRO as at 31 December 2022 and of its result for 2022 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The consolidated annual financial statements comprise:

- the consolidated statement of financial position as at 31 December 2022
- the following statements for 2022: the consolidated income statement, the consolidated statements of comprehensive income, changes in equity and cash flows
- the notes comprising a summary of the significant accounting policies and other explanatory information.

The company annual financial statements comprise:

- the company statement of financial position as at 31 December 2022
- the company income statement for 2022
- 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 ABN AMRO 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

ABN AMRO provides a broad range of financial services to private and business banking clients. These activities are conducted primarily in the Netherlands, with foreign operations mainly related to private banking activities in Germany and France and clearing operations in the United States. The bank is at the head of a group of entities and we tailored our group audit approach accordingly.

Materiality

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	EUR 160 million (2021: EUR 160 million)
Benchmark applied	0.7% of total equity (2021: 0.7% of total equity)
Explanation	Based on our professional judgment, a benchmark of 0.7% of total equity is an appropriate quantitative indicator of materiality as equity best reflects the financial position of ABN AMRO and is the basis for determining available regulatory capital. We determined materiality consistently with the previous financial year.

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 EUR 8 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

ABN AMRO is at the head of a group of entities ('components'). The financial information of this group is included in the consolidated annual 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 components. Decisive were the size and/or the risk profile of the components. 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 on specific items.

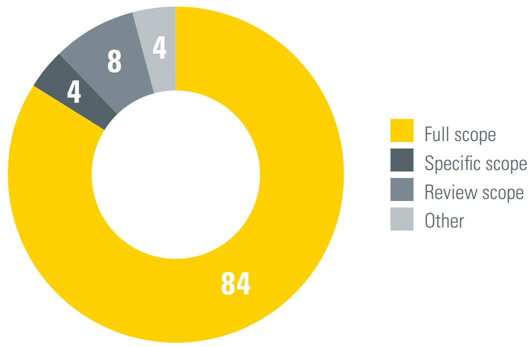
Our group audit mainly focused on significant components of ABN AMRO in the Netherlands, France, Germany and the United States. We have:

- performed audit procedures ourselves at the central group level and at the components in the Netherlands;
- used the work of other auditors within our EY network when auditing the components in France, Germany and the United States;
- performed review procedures or specific audit procedures at other components.

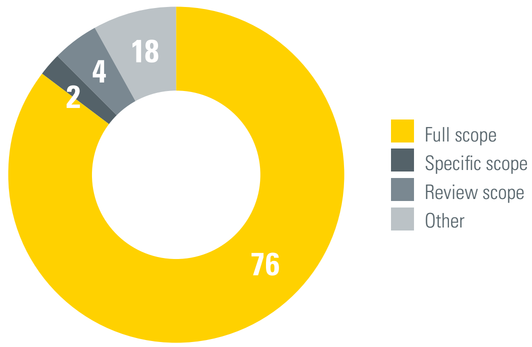
We sent instructions to component auditors, covering the significant areas and the information required to be reported to us. Based on our risk assessment, we determined the level of involvement in component audits. We have visited the component teams in France, Germany and the United States, reviewed key local working papers and conclusions, met with local management teams and obtained an understanding of key processes. We interacted regularly with the component teams during various stages of the audit, using videoconferencing facilities. Where deemed appropriate, we attended component closing meetings with management. We reviewed key working papers of component auditors using the EY electronic audit file platform, screen sharing or copies of work papers submitted to the group audit team.

Through these procedures we covered in total 96% of the group's total assets and 82% of operating income.

Total assets
(in %)



Operating income
(in %)



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 bank. We included team members with specialized knowledge in the areas of IT audit, forensics, treasury, and sustainability and have made use of our own specialists in the areas of income tax, valuation of derivatives, financial investments and real estate, goodwill impairment testing, credit risk modelling, macro-economic forecasting, regulatory reporting compliance and legal, and actuarial calculations.

Our focus on climate risks and the energy transition

The executive board of ABN AMRO (hereinafter 'management') has reported in the section 'sustainability risk' of the Integrated Annual Report how the bank is addressing risks related to climate change, energy transition and the environment, thereby taking into account related regulatory and supervisory guidance and recommendations.

Furthermore, we refer to the introduction and strategy sections of the integrated annual report where ABN AMRO discloses its assessment and implementation plans in connection to climate related risks and the effects of energy transition.

As part of our audit of the financial statements, we evaluated the extent to which climate-related and environmental risks and the effects of the energy transition and ABN AMRO's implementation plans are taken into account in estimates and significant assumptions underlying the valuation of certain account balances of ABN AMRO, including those related to the estimation of expected credit losses. Furthermore, we read the specific non-financial information on climate risks, eligible assets in the energy transition and carbon reduction and considered whether there is any material inconsistency with the financial statements.

We describe in our key audit matter relating to the estimation of impairment allowances for loans and advances to customers the audit procedures responsive to the risk related to climate and environmental risk and energy transition. Based on the audit procedures performed, we do not deem climate-related risks to have a material impact on the financial reporting judgments, estimates or significant assumptions per 31 December 2022.

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 bank and its environment and the components of the system of internal control, including the risk assessment process and management'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 the section "risk, funding & capital" as included in the Integrated Annual Report of ABN AMRO for management's fraud risk assessment.

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 conduct, whistle blower procedures and incident registration. We evaluated the design and implementation, and where appropriate, tested the operating effectiveness of certain of the 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 and we also considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance.

As in all of our audits, we addressed the risks related to management override of controls. We performed procedures among others 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 judgments' section of the accounting policies in the notes to the financial statements. We 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. As described in our key audit matter related to the estimation of impairment allowances for loans and advances to customers, we specifically considered whether the judgments and assumptions in the determination of this allowance indicate a management bias. We did not identify a risk of fraud in revenue recognition.

We considered available information and made enquiries of relevant executives (including internal audit, legal, security affairs, compliance, risk management and human resources), business line management and the supervisory board.

The fraud risks we identified, enquiries and other available information did not lead to specific indications of fraud or suspected fraud potentially materially impacting the financial statements.

Our audit response related to risks of non-compliance with laws and regulations

ABN AMRO is subject to laws and regulations that directly affect the financial statements, including financial reporting standards, corporate tax law and various banking supervisory regulations. Also, ABN AMRO is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or instructions. Examples are laws and regulations in respect of anti-money laundering ('AML'), sanctions, customer care and market transparency.

We performed 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. This includes our industry experience, enquiries of relevant executives, internal audit, legal, compliance, risk management and human resources, business line management, executive board and supervisory board, reading minutes, inspection of internal audit and compliance reports and performing substantive tests of details of classes of transactions, account balances and disclosures.

We inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. In case of potential non-compliance with laws and regulations that may have a material effect on the financial statements, we assessed whether ABN AMRO has an adequate process in place to evaluate the impact of non-compliance for its activities and financial reporting and, where relevant, whether ABN AMRO implemented remediation plans. Finally, we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us. Specifically with regard to the progress on the AML remediation activities, we make reference to the key audit matter on estimation of other provisions and contingent liabilities and related disclosures.

Our audit response related to going concern

As disclosed in the 'basis of preparation' of the notes to the consolidated annual financial statements, the financial statements have been prepared on a going concern basis. When preparing the financial statements, management made a specific assessment of ABN AMRO's ability to continue as a going concern and to continue its operations for at least the next 12 months. We discussed and evaluated this specific assessment with management, exercising professional judgment and maintaining professional scepticism. We considered whether management's going concern assessment, based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, contains all relevant events and conditions that may cast significant doubt on the bank's ability to continue as a going concern. Furthermore, we assessed the impact that such events and conditions may have on the bank's operations and forecasted cash flows, with a focus on whether the bank meets the regulatory solvency and liquidity 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 for the next 12 months. 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 bank 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 the previous year, the nature of our key audit matters remained unchanged.

Estimation of impairment allowances for loans and advances to customers	
Risk	Loans and advances to customers are measured at amortized cost, less an allowance for impairment. Impairment allowances represent the company's best estimate of expected credit losses calculated in accordance with IFRS 9 "Financial Instruments". At 31 December 2022, the gross loan portfolio of ABN AMRO amounts to EUR 246 billion. The allowances for expected credit losses of EUR 2 billion are deducted from the gross loan balance and disclosed in Note 21 to the financial statements and in the sections credit risk management and credit risk review in the integrated annual report. The expected credit losses are calculated based on risk staging of loans, using assumptions such as the probability of default, loss given default, macro-economic scenarios and other forward-looking information. ABN AMRO also recognizes certain expert overlays, among others for uncertainties in the macro-economic environment resulting from the war in Ukraine and the potential impact of the government's nitrogen reducing measures on clients in livestock farming in the Netherlands. The determination of impairment allowances is a key area of judgment for management. The determination of the individual or collective recoverability of loans and advances to customers is subject to inherent estimation uncertainty. This also involves setting assumptions and determining scenarios for macro-economic developments, geopolitical trends, climate and other environmental related factors. Given the materiality of the loans and advances to customers of ABN AMRO, the complex accounting requirements with respect to calculating allowances for expected credit losses, the subjectivity involved in the judgments made and the inherent risk of management override, we considered this to be a key audit matter.
Our audit approach	Our audit procedures included, amongst others, evaluating the appropriateness of ABN AMRO's accounting policies related to expected credit losses according to IFRS 9. We also obtained an understanding of the impairment allowance process, evaluated the design and tested operating effectiveness of internal controls in respect of expected credit loss calculations. We performed substantive procedures, including the reconciliation of the data used in the allowance calculations and disclosures to source systems. For individually assessed loan impairment allowances, we selected individual loan files across all stages and performed detailed credit file reviews to assess whether the bank correctly applied its credit risk and staging policy. We challenged the applied recovery scenarios and the weighting of these scenarios. With the support of our valuation specialists, we assessed the assumptions underlying the loan impairment calculation, such as estimated future cash flows and collateral valuations. Furthermore, we agreed the data used to source systems and underlying documentation and we reperformed the impairment calculations to assess the mathematical accuracy. Further, with the support of our internal modelling specialists, we assessed the appropriateness of the models used by ABN AMRO for collectively determined impairment allowances and verified whether the models were adequately designed, implemented and periodically validated. We performed an overall assessment of the provision levels by risk stage to determine if they were reasonable considering the risk profile of the loan and advances portfolios, arrears management and credit risk management practices. We challenged the criteria used to allocate loans to risk stage 1, 2 or 3 in accordance with IFRS 9 and tested a sample of loans on appropriate stage allocation. Finally, we assessed the retrospective review procedures performed by management which compare modelled predictions to actual results and expert overlays. To assess the estimation uncertainty inherent in the calculations, we developed our independent range of estimates for a sample of models. Regarding the application of macro-economic scenarios and forward-looking information, we assessed with the support of our internal economic specialists the base case and alternative economic scenarios. We considered the impact of the uncertainties in geopolitical trends, climate and other environmental related factors. This included challenging probability weights and the severity and magnitude of modelled downside scenarios, as well as assessing the sensitivity of changes in the assumptions in the calculations. We tested the appropriateness of expert overlays and post model adjustments and recalculated a sample. We also considered the impact of the expert overlays and post model adjustments based on findings from regulatory inspections, industry sector trends, product wind-down decisions and considered the ongoing process of model redevelopments at ABN AMRO. Finally, we evaluated the adequacy of the related disclosures, as included in Note 21 to the financial statements and in the risk management section of the integrated annual report. In particular we evaluated that disclosures adequately convey the degree of estimation uncertainty and the range of possible outcomes under the different economic scenarios.
Key observations	Based on our procedures performed we consider the estimation of and disclosures on the impairment allowances for loans and advances to customers to be reasonable and in compliance with EU-IFRS.

Estimation of other provisions and contingent liabilities and related disclosures	
Risk	In accordance with IAS 37 "Provisions, contingent liabilities and contingent assets", ABN AMRO provides for liabilities related to, among others, legal claims, restructuring, and compliance remediation matters when an outflow of resources is probable and reliably estimable. As disclosed in Note 30 of the financial statements, ABN AMRO recognized at 31 December 2022 legal provisions, including the provision for compensation of variable interest, and reorganization and other provisions, of EUR 447 million, EUR 105 million and EUR 128 million, respectively. In Note 35 the commitments and contingent liabilities are disclosed. This includes contingent liabilities in respect of legal proceedings related to dividend arbitrage, a discussion on regulatory levies, and certain duty of care procedures. Furthermore, developments with regard to legal and compliance risk are disclosed in the integrated annual report. The estimation process in relation to provisions and contingent liabilities is inherently complex following the nature of the business and the heightened regulatory scrutiny. Developments at ABN AMRO with regard to the internal organization, services to customers and the range of products also contribute to that complexity. This specifically impacts the determination of whether outflows of resources are probable and can be reliably estimated and the appropriateness of assumptions and judgments used in the estimation of the provisions and disclosure of contingent liabilities. Therefore, we considered this to be a key audit matter.
Our audit approach	We evaluated ABN AMRO's accounting policies related to provisions and contingent liabilities in accordance with IAS 37, and whether assumptions and the methods for making estimates are appropriate and have been applied consistently. We also obtained an understanding of the internal controls and the legal and regulatory framework of the company. Further, we evaluated the design and implementation of controls by ABN AMRO to identify, monitor provisions for obligations and disclose contingent liabilities, and to assess the completeness and accuracy of data used to estimate provisions. For material provisions we challenged the provisioning methodology and tested the underlying data and assumptions used. Specifically, for the provision related to the variable interest client compensation scheme we performed test of details to underlying contract data and assessed the assumptions and judgments made by the bank, including the expected number of client responses to compensation offerings. We also performed test of details on the anti-money laundering remediation provision and assessed the progress of the number of files considered remediated. For the various restructuring programs following the new strategy of ABN AMRO we tested the calculations and assessed whether the IAS 37 criteria are met to record provisions per 31 December 2022. We examined the relevant internal reports, minutes of management and supervisory board meetings, as well as regulatory and legal correspondence to assess developments. We performed follow-up procedures to examine the company's assessment of the impact on the financial statements and the adequacy of risk management disclosures. We obtained legal letters from external counsel and, where appropriate, involved legal and compliance specialists. Furthermore, we evaluated whether the disclosures provided on the other provisions and contingent liabilities with regard to restructuring, legal and compliance matters are in compliance with the EU-IFRS requirements. In particular, we assessed whether they adequately convey the degree of estimation uncertainty and the range of possible outcomes. Finally, we evaluated the appropriateness of the compliance and legal risk disclosures in the integrated annual report.
Key observations	Based on our procedures performed we consider the provisions and the disclosures on provisions and contingent liabilities to be reasonable and in compliance with EU-IFRS.

Reliability and continuity of IT environment	
Risk	The activities and financial reporting of ABN AMRO 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 operational (non-financial) risk in the integrated annual report, the IT environment and the IT organization of ABN AMRO continues 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 as 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 additional substantive 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.
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 electronic data processing relevant for our audit of the financial statements.

Report on other information included in the integrated annual report

The integrated annual report 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.

Management 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. Management 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 supervisory board as auditor of ABN AMRO on 11 September 2015, as of the audit for the year 2016 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)

ABN AMRO has prepared the integrated annual report 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 integrated annual report, prepared in the XHTML format, including the partially marked-up consolidated annual financial statements, as included in the reporting package by ABN AMRO, complies in all material respects with the RTS on ESEF.

Management is responsible for preparing the integrated annual report, including the financial statements, in accordance with the RTS on ESEF, whereby management combines the various components into a single reporting package.

Our responsibility is to obtain reasonable assurance for our opinion whether the integrated annual report in this reporting package complies with the RTS on ESEF.

We performed our examination in accordance with Dutch law, including Dutch Standard 3950N on assurance engagements relating to compliance with criteria for digital reporting. Our examination included amongst others:

- obtaining an understanding of the bank'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 annual 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 management and the supervisory board for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, management is responsible for such internal control as management 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, management is responsible for assessing the bank's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the bank or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant doubt on the bank's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the bank'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 scepticism 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 bank's internal control
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- 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, 7 March 2023

Ernst & Young Accountants LLP
signed by A.B. Roeders

Assurance report of the independent auditor

To: The executive board and supervisory board of ABN AMRO Bank N.V.

Our conclusions

We have reviewed the non-financial information in the accompanying Integrated Annual Report for 2022 of ABN AMRO Bank N.V. at Amsterdam (hereinafter: the Integrated Annual Report). A review is aimed at obtaining a limited level of assurance.

Furthermore we have audited the section "Our value-creating topics" as included in the non-financial information on page 20 of the Integrated Annual Report. An audit is aimed at obtaining a reasonable level of assurance.

Based on our review procedures performed nothing has come to our attention that causes us to believe that the non-financial information is not prepared, in all material respects, in accordance with the reporting criteria as included in the section 'Reporting criteria'.

In our opinion the section "Our value-creating topics" is prepared, in all material respects, in accordance with the reporting criteria as included in the section Reporting criteria.

The non-financial information in scope is included in the chapters "Introduction" and "Strategy and value creation" (up to and including page 43) of the Integrated Annual Report (hereinafter: the non-financial information). The non-financial information comprises a representation of the policy and business operations of ABN AMRO Bank N.V. with regard to sustainability and the thereto related, events and achievements during the year.

Basis for our conclusions

We have performed our review of the non-financial information and our audit of the section "Our value-creating topics" in accordance with Dutch law, including Dutch Standard 3810N, "Assurance-opdrachten inzake maatschappelijke verslagen" (Assurance engagements relating to sustainability reports), which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000, "Assurance engagements other than audits or reviews of historical financial information". Our responsibilities under this standard are further described in the section 'Our responsibilities' of our report.

We are independent of ABN AMRO Bank 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).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Reporting criteria

The reporting criteria used for the preparation of the non-financial information are the International <IR> Framework of the IFRS Foundation and the supplemental reporting criteria applied as disclosed in the appendix "Our approach to reporting" in the Integrated Annual Report. The reporting criteria used for the section "Our value-creating topics" are disclosed in the section "Note on value creation" on page 340 of the Integrated Annual Report.

The absence of an established practice on which to draw, to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

Consequently, the non-financial information, including the section "Our value-creating topics", needs to be read and understood together with the reporting criteria used.

Limitations to the scope of our review and our audit

The non-financial information includes prospective information such as ambitions, strategy, plans, expectations, estimates and risk assessments. Inherent to this prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the non-financial information.

The references to external sources or websites in the non-financial information are not part of the non-financial information as reviewed by us and the section "Our value-creating topics" as audited by us. We therefore do not provide assurance on this information.

Our conclusions are not modified in respect to these matters.

Responsibilities of the executive board and the supervisory board for the non-financial information

The executive board is responsible for the preparation of reliable and adequate non-financial information, including the section "Our value-creating topics", in accordance with the reporting criteria as included in the section 'Reporting criteria', including the identification of stakeholders and the definition of material matters. The executive board is also responsible for selecting and applying the reporting criteria and for determining that these reporting criteria are suitable for the legitimate information needs of stakeholders, taking into account applicable law and regulations related to reporting. The choices made by the executive board regarding the scope of the non-financial information and the reporting policy are summarised in the appendix "Our approach to reporting" of the Integrated Annual Report.

Furthermore, the executive board is responsible for such internal control as it determines is necessary to enable the preparation of the non-financial information, including the section "Our value-creating topics", that is free from material misstatement, whether due to error or fraud.

The supervisory board is responsible for overseeing the reporting process of ABN AMRO Bank N.V.

Our responsibilities

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 conclusions.

Our review of the non-financial information is aimed at obtaining a limited level of assurance. Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a review is therefore substantially less than the assurance obtained in an audit.

Our audit of the section "Our value-creating topics" is aimed at obtaining a reasonable level of assurance. Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud.

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS, Regulations for quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

Our review and our audit included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant sustainability themes and issues and the characteristics that are most relevant to achieving the company's strategy and value creation
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the Integrated Annual Report. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the executive board
- Obtaining an understanding of the value creation model of ABN AMRO Bank N.V.
- Evaluating the consistency of the non-financial information and section "Our value-creating topics" with the information in the Integrated Annual Report which is not included in the scope of our review and our audit
- Evaluating the overall presentation and content of the non-financial information and the section "Our value-creating topics"
- Considering whether the non-financial information as a whole, including the disclosures, reflects the purpose of the reporting criteria used

Our review of the non-financial information included amongst others:

- Obtaining through inquiries a general understanding of internal control, reporting processes and information systems relevant for the preparation of the non-financial information, without obtaining evidence about implementation or testing the operating effectiveness of controls
- Obtaining an understanding of the procedures performed by the external subject matter experts of ABN AMRO Bank N.V.
- Identifying areas of the non-financial information with a higher risk of misleading or unbalanced information or material misstatements, whether due to error or fraud. Designing and performing further assurance procedures aimed at determining the plausibility of the non-financial information responsive to this risk analysis. These procedures consisted amongst others of:

- Interviewing management and relevant staff at corporate level responsible for the sustainability strategy, policy and results
- Interviewing management and relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the non-financial information
- Obtaining assurance information that the non-financial information reconciles with underlying records of the ABN AMRO Bank N.V.
- Evaluating the suitability and plausibility of the assumptions and external sources used in the calculations on which the scope 3 emissions as included on page 27 are based, which are further explained in the section "Other sustainability terms and indicators"
- Reviewing, on a limited test basis, relevant internal and external documentation
- Evaluating ABN AMRO's approach to reporting in accordance with the <IR> Framework as disclosed in the section "Compliance with the Integrated Reporting Framework" on page 348 of the Integrated Annual Report
- Performing an analytical review of the data and trends in the information submitted for consolidation at corporate level

Our audit of the section "Our value-creating topics" included amongst others:

- Obtaining an understanding of the systems and processes for collecting, reporting and consolidating the data in the section "Our value-creating topics", including obtaining an understanding of internal control relevant to our audit, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control
- Identifying and assessing the risks that the section "Our value-creating topics" is misleading or unbalanced, or contains material misstatements, whether due to error or fraud. Designing and performing further audit procedures responsive to those risks and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk that the section "Our value-creating topics" is misleading or unbalanced, or the risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from errors. Fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. These procedures consisted amongst others of:
  - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the section "Our value-creating topics"
  - Obtaining assurance evidence that the section "Our value-creating topics" reconciles with underlying records of the ABN AMRO Bank N.V.
  - Evaluating relevant internal and external documentation, on a test basis, to determine the reliability of the section "Our value-creating topics"

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the review and the audit and significant findings that we identify during our review and our audit. We also communicate any significant findings in internal control that we identify during our audit.

Amsterdam, 7 March 2023

Ernst & Young Accountants LLP
Signed by J. Niewold

Other information

Major subsidiaries and participating interests as at 31 December 2022

Personal & Business banking		
ABN AMRO Assuradeuren B.V.[1]	49%	Zwolle, The Netherlands
ABN AMRO Hypotheken Groep B.V.[1]		Amersfoort, The Netherlands
ABN AMRO Kredieten B.V.[1]		Bunnik, The Netherlands
ABN AMRO Schadeverzekering N.V.	49%	Zwolle, The Netherlands
ABN AMRO Verzekeringen B.V.	49%	Zwolle, The Netherlands
ALFAM Holding N.V.[1]		Bunnik, The Netherlands
Alpha Credit Nederland B.V.[1]		Bunnik, The Netherlands
Credivance N.V.[1]		Bunnik, The Netherlands
Currence Holding B.V.	36%	Amsterdam, The Netherlands
DEFAM B.V.[1]		Bunnik, The Netherlands
European Merchant Services B.V.	49%	Amsterdam, The Netherlands
Geldmaat B.V.	33%	Weesp, The Netherlands
International Card Services B.V.[1]		Diemen, The Netherlands
Moneyou B.V.[1]		Amersfoort, The Netherlands
Moneyou Kredieten B.V.[1]		Bunnik, The Netherlands
Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	49%	Zwolle, The Netherlands
New10 B.V.[1]		Amsterdam, The Netherlands
Stater N.V.	25%	Amsterdam, The Netherlands

Wealth Management		
ABN AMRO Investment Solutions S.A.		Paris, France
Banque Neuflize OBC S.A.		Paris, France
Bethmann Liegenschafts K.G.	50%	Frankfurt am Main, Germany
IFCIC S.A.	16%	Paris, France
Neuflize Vie S.A.	60%	Paris, France

Corporate Banking		
ABN AMRO Acquisition Finance Holding B.V.		Amsterdam, The Netherlands
ABN AMRO Asset Based Finance N.V.[1]		Utrecht, The Netherlands
ABN AMRO Capital USA LLC		New York, USA
ABN AMRO Clearing Bank N.V.[1]		Amsterdam, The Netherlands
ABN AMRO Clearing Chicago LLC		Chicago, USA
ABN AMRO Clearing Hong Kong Ltd		Hong Kong, China
ABN AMRO Clearing Investments B.V.		Amsterdam, The Netherlands
ABN AMRO Clearing London Ltd		London, United Kingdom
ABN AMRO Clearing Singapore Pte Ltd		Singapore, Singapore
ABN AMRO Clearing Sydney Nominees Pty Ltd		Sydney, Australia
ABN AMRO Clearing Sydney Pty Ltd		Sydney, Australia
ABN AMRO Clearing Tokyo Co Ltd		Tokyo, Japan
ABN AMRO Corretora de Títulos e Valores Mobiliários Ltda		São Paulo, Brazil
ABN AMRO Effecten Compagnie B.V.[1]		Amsterdam, The Netherlands
ABN AMRO Groenbank B.V.[1]		Amsterdam, The Netherlands
ABN AMRO Holdings USA LLC		New York, USA
ABN AMRO Investment Holding B.V.[1]		Amsterdam, The Netherlands
ABN AMRO Jonge Bedrijven Fonds B.V.		Amsterdam, The Netherlands
ABN AMRO Participaties NPE Fund B.V.		Amsterdam, The Netherlands
ABN AMRO Securities (USA) LLC		New York, USA
ABN AMRO Social Impact Fund B.V.		Amsterdam, The Netherlands
ABN AMRO Sustainable Impact Fund PE B.V.		Amsterdam, The Netherlands
ABN AMRO Sustainable Impact Fund VC B.V.		Amsterdam, The Netherlands

Corporate Banking		
Banco ABN AMRO S.A.		São Paulo, Brazil
Franx B.V.		Amsterdam, The Netherlands
Maas Capital Investments B.V.		Amsterdam, The Netherlands
Maas Capital Offshore B.V.		Amsterdam, The Netherlands
Principal Finance Investments Holding B.V.		Amsterdam, The Netherlands
Group Functions		
ABN AMRO Arbo Services B.V.[1]		Amsterdam, The Netherlands
ABN AMRO Captive N.V.		Amsterdam, The Netherlands
ABN AMRO Funding USA LLC		New York, USA
ABN AMRO Strategic Partnership Fund B.V.		Amsterdam, The Netherlands
ABN AMRO Ventures B.V.		Amsterdam, The Netherlands
Nederlandse Financieringsmaatschappij voor Ontwikkelingslanden N.V.	20%	Den Haag, The Netherlands
Branches/Representative Offices		
ABN AMRO Asset Based Finance N.V. (France) Branch[1]		Levallois-Perret, France
ABN AMRO Asset Based Finance N.V. (Deutschland) Branch[1]		Frankfurt am Main, Germany
ABN AMRO Asset Based Finance N.V. (United Kingdom) Branch[1]		London, United Kingdom
ABN AMRO Bank N.V. (Belgium) Branch		Berchem, Belgium
ABN AMRO Bank N.V. (Greece) Branch		Athens, Greece
ABN AMRO Bank N.V. (Singapore) Branch		Singapore, Singapore
ABN AMRO Bank N.V., Frankfurt Branch		Frankfurt am Main, Germany
ABN AMRO Bank N.V. Hong Kong Branch		Hong Kong, China
ABN AMRO Bank N.V., Oslo Branch		Oslo, Norway
ABN AMRO Bank N.V., Paris Branch		Paris, France
ABN AMRO Bank N.V. Representative Office New York		New York, USA
ABN AMRO Bank N.V. (United Kingdom) Branch		London, United Kingdom
ABN AMRO Clearing Bank N.V., London Branch[1]		London, United Kingdom
ABN AMRO Clearing Bank N.V., Singapore Branch[1]		Singapore, Singapore
International Card Services B.V. (Deutschland) Branch[1]		Düsseldorf, Germany

[1] A statement of liability within the meaning of Article 403, subsection 1, paragraph f, Book 2 of the Dutch Civil Code has been issued for these companies.

Provisions of the Articles of Association concerning profit appropriation

The provisions regarding the reservation and distribution of profits are set out in Article 10 of the Articles of Association. In accordance with the reserve and dividend policy and subject to approval by the Supervisory Board, the Executive Board submits a proposal to the General Meeting of Shareholders specifying which part of the profit is to be reserved. The remainder of the profit is at the free disposal of the General Meeting of Shareholders, pursuant to a proposal to this end by the Executive Board and subject to approval by the Supervisory Board.

Fiscal unity

ABN AMRO Bank N.V. constitutes a fiscal unity with several Dutch subsidiaries for corporate income tax purposes. All members of the fiscal unity are jointly and severally liable for the corporate income tax liabilities of the fiscal unity.

Cautionary statements

The Bank has included in this Integrated Annual Report and may from time to time make certain statements in its public filings, press releases or other public statements that may constitute "forward-looking statements" within the meaning of the safe-harbour provisions of the United States Private Securities Litigation Reform Act of 1995. This includes, without limitation, such statements that include the words "expect", "estimate", "project", "anticipate", "should", "intend", plan", "aim", "desire", "strive", "probability", "risk", "Value at Risk" ("VaR"), "target", "goal", "objective", "will", "endeavour", "outlook", "optimistic", "prospects" and similar expressions or variations on such expressions. In particular, this document includes forward-looking statements relating, but not limited, to ABN AMRO's potential exposures to various types of operational, credit and market risk, such as counterparty risk, interest rate risk, foreign exchange rate risk and commodity and equity price risk. Such statements are subject to risks and uncertainties. These forward-looking statements are not historical facts and represent only ABN AMRO's beliefs regarding future events, many of which by their nature are inherently uncertain and beyond the bank's control.

Other factors that could cause actual results to differ materially from those anticipated by the forward-looking statements contained in this document include, but are not limited to:

- The extent and nature of future developments and continued volatility in the credit and financial markets and their impact on the financial industry in general and ABN AMRO in particular;
- The effect on ABN AMRO's capital of write-downs in respect of credit and other risk exposures;
- Risks relating to ABN AMRO's stock exchange listing;
- Risks related to ABN AMRO's corporate transactions (e.g. merger, separation and integration process);
- General economic, social and political conditions in the Netherlands and in other countries in which ABN AMRO has significant business activities, investments or other exposures, including the impact of recessionary economic conditions on ABN AMRO's performance, liquidity and financial position;
- Macroeconomic and geopolitical risks;
- Reductions in ABN AMRO's credit ratings;
- Actions taken by the European Commission, governments and their agencies to support individual banks and the banking system;
- Monetary and interest rate policies of the ECB and G20 central banks;
- Inflation or deflation;
- Unanticipated turbulence in interest rates, foreign currency exchange rates, commodity prices and equity prices;
- Liquidity risks and related market risk losses;
- Potential losses associated with an increase in the level of substandard loans or non-performance by counterparties to other types of financial instruments, including systemic risk;
- Changes in Dutch and foreign laws, regulations, policies and taxes, or the interpretation and monitoring thereof;
- Changes in competition and pricing environments;
- Inability to hedge certain risks economically;
- Adequacy of loss reserves and impairment allowances;
- Technological changes;
- Changes in consumer spending, investment and saving habits;
- Effective capital and liquidity management;
- ABN AMRO's success in managing the risks involved in the foregoing;
- Public health crises, epidemics and pandemics such as the Covid-19 pandemic, including government orders and restrictions associated therewith, and the impact thereof on economic conditions in countries in which ABN AMRO operates and the effects thereof on ABN AMRO's business, operations, employees, clients and counterparties.

The forward-looking statements made in this Integrated Annual Report are only applicable as from the date of publication of this document. ABN AMRO does not intend to publicly update or revise these forward-looking statements to reflect events or circumstances after the date of this report, and ABN AMRO does not assume any responsibility to do so. The reader should, however, take into account any further disclosures of a forward-looking nature that ABN AMRO may make in ABN AMRO's interim reports.

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abnamro.com/annualreport

Information published on our websites does not constitute part of this Integrated Annual Report, unless expressly stated otherwise.

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