



NORGES BANK

# Norges Bank Annual Report 2021



Norges Bank's mission is to promote economic stability and manage substantial assets on behalf of the Norwegian people.



Press conference on 23 September.  
Policy rate raised from 0.00% to 0.25%

# Key figures

The policy rate  
was raised to

0.5%

in 2021

Annual consumer  
price inflation was

3.5%

in 2021

The market value of  
the foreign exchange reserves was

NOK 643bn

at year-end 2021

The market value of the  
Government Pension Fund Global (GPF) was

NOK 12 340bn

at year-end 2021

Norges Bank's total  
comprehensive income was

NOK 23bn

in 2021

Norges Bank has

940 permanent employees

from 33 countries

The countercyclical  
capital buffer rate was

1%

at year-end 2021

In Norges Bank's settlement system,  
interbank payments totalling on average

301bn

were settled daily in 2021

The market value of  
the GPF increased by

NOK 1 426bn

in 2021

Transfers to  
the Treasury totalled

NOK 11bn

in 2021

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# Annual report and financial statements 2021



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# 1 About Norges Bank

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I am very proud of the way Norges Bank has fulfilled its mission under difficult conditions.

A handwritten signature in white ink that reads "Øystein Olsen".

Øystein Olsen  
Governor



Annual address 2021  
Øystein Olsen prepares to give an all digital annual address without a physically present audience.

# Another extraordinary year

Norges Bank has once again worked its way through an extraordinary year, a year that both started and ended in our offices at home. Despite steadily improving vaccination coverage in 2021, new virus variants and rising infection rates continued to create a confusing landscape that was difficult to navigate. I am very proud of the way Norges Bank has fulfilled its mission to serve the public interest under difficult conditions.

Norges Bank implemented a wide range of extraordinary measures in 2020 to calm financial markets and mitigate the economic downturn that arose as a result of the pandemic. Yet even though the pandemic continued in 2021, the year was for Norges Bank mainly a matter of making our way back to a normal situation.

Extraordinary F-loans for banks were discontinued, and the loans have been repaid. After a period with the policy rate at zero percent, the Monetary Policy and Financial Stability Committee started to gradually increase the policy rate. And the countercyclical capital buffer rate was raised from 1% to 2%. The latest buffer rate decision was made by Norges Bank in December, after the Bank was given responsibility for setting this rate.

Within the Bank's other areas of activity, 2021 has largely centred on implementing important change projects and launching significant new initiatives. In autumn, the Executive Board decided to start negotiations with the European Central Bank on participation in TARGET Instant Payment Settlement (TIPS), the Eurosystem's instant payment settlement service. In addition, Norges Bank continues to explore central bank digital currency. Another important milestone was the establishment of a new framework to test the cyber resilience of Norway's financial sector (TIBER-NO). The Differentiated IT portfolio (DiffIT), a large-scale IT project for Norges Bank's central banking operations, was also completed in 2021. The settlement system for banks and business-critical IT systems, PCs and networks were migrated to new platforms.

The infrastructure needed for remote working was already in place as we entered 2021. Nevertheless, adaptable and competent IT departments, together with Norges Bank

Administration, the department providing the Bank's shared support functions, were crucial to the efficient operation of the organisation in 2021 and provided invaluable support to the entire Bank, across its operational areas.

The pandemic also had a substantial impact on the management of the Government Pension Fund Global (GPF) in 2021. However, 2021 proved to be a particularly good year in the markets. The GPF posted an overall return of 14.5 percent in 2021, equivalent to NOK 1 580bn. Norges Bank Investment Management (NBIM) achieved a positive excess return of 0.74 percentage point over the GPF's benchmark index.

The Executive Board approved a revised strategy plan (2021–2022) for NBIM in 2021, emphasising strategies to achieve a higher return, provide staff with opportunities for further development and promote transparent communication. The objective of Norges Bank's management of the GPF is to achieve the highest possible return after costs, with acceptable risk and based on set limits for responsible investment.

Particular attention was paid to the management of climate risk in the GPF in 2021. In a letter to the Ministry of Finance, Norges Bank supported the introduction of a long-term responsible investment goal of net zero emissions for the companies in which the GPF is invested.

As I sign this Annual Report, I recognise that this will be for the last time. I am in the "home stretch" of my tenure as Governor, a tenure that has been both exciting and rewarding. With so many highly skilled employees, the Bank is well equipped to meet new challenges and fulfil its important mission in a sound manner.

NORGES BANK

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# Introduction to Norges Bank

Norges Bank is Norway's central bank and is responsible for monetary policy and financial stability. Norges Bank manages the Government Pension Fund Global (GPFG) and Norway's foreign exchange reserves.

## About Norges Bank

The foundation of Norges Bank in 1816 was an important part of the nation-building process following the dissolution of the union with Denmark. The Storting (Norwegian parliament) gave the central bank two main tasks: to issue a Norwegian currency, the *spesiedaler*, and to extend credit to firms and private individuals.

Today, Norges Bank no longer extends credit to the public. On the other hand, the Bank has been assigned a number of other tasks that it performs on behalf of the Norwegian people. The Bank has executive and advisory responsibilities in the area of monetary policy, manages Norway's foreign exchange reserves and the GPFG and is responsible for promoting robust payment systems and financial markets. In addition, the Bank has the sole right to issue Norwegian banknotes and coins.

## Governance

Norges Bank's activities are regulated by the Act of 21 June 2019 No 31 relating to Norges Bank and the Monetary System etc. (the Central Bank Act). Norges Bank's responsibility for the management of the GPFG is regulated by the Central Bank Act, the Government Pension Fund Act and the management mandate for the GPFG issued by the Ministry of Finance.

Norges Bank's highest decision-making bodies are the Executive Board, the Monetary Policy and Financial Stability Committee and the Supervisory Council. The governor of Norges Bank chairs the Executive Board, which also comprises the deputy governors and six external board members, all appointed by the King in Council. Two additional board members are selected by and from among employees to participate when administrative matters are on the agenda.

Under the Central Bank Act, the governor is the general manager of Norges Bank, but the Executive Board is nonetheless required to appoint a separate CEO for Norges Bank Investment Management (NBIM), which manages the GPFG. The management and operation of Norges Bank are the responsibility of the Executive Board, with the exception of matters that under or pursuant to the Act are within the remit of the Monetary Policy and Financial Stability Committee. The Executive Board is responsible for Norges Bank's management of the GPFG. The Executive Board is responsible for ensuring the sound and efficient organisation of the Bank's operations.

The Monetary Policy and Financial Stability Committee consists of the governor of Norges Bank, the two deputy governors and two external members. The external members are appointed by the King in Council.

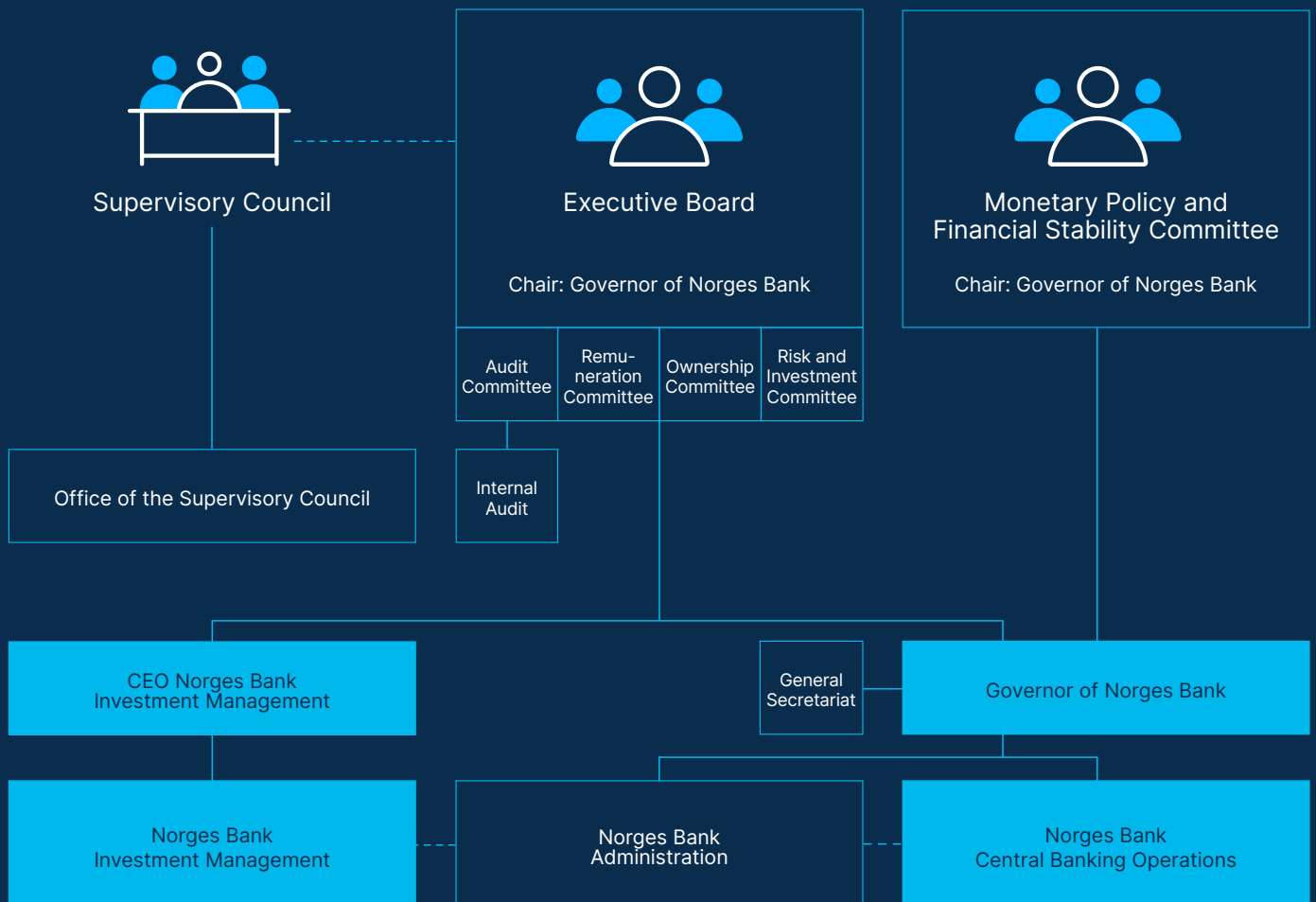
# Organisation of Norges Bank



The Storting  
(Norwegian parliament)



Ministry of Finance



The governor chairs the Committee. The Committee is Norges Bank's executive and advisory authority for monetary policy and is responsible for the use of instruments to achieve monetary policy objectives. Its aim is to contribute to promoting financial stability by providing advice and using the instruments at its disposal.

### Organisation

Norges Bank's governing bodies are the Executive Board, the Monetary Policy and Financial Stability Committee and the Supervisory Council.

Norges Bank Central Banking Operations (NBCBO) is headed by the governor of Norges Bank, who is appointed by the King in Council, and comprises three departments: Monetary Policy, Financial Stability and Markets and ICT.

NBIM is responsible for managing the GPF. The CEO of NBIM is appointed by the Executive Board. NBIM comprises the following units: Technology, Operations, Governance and Compliance, Asset Strategies, Equity Strategies, Real Assets, Investment Risk and Staff.

NBIM is an international organisation with offices in Oslo, London, New York, Shanghai and Singapore, and subsidiaries in Tokyo, Paris and Luxembourg.

Norges Bank Administration (NBA) was established to provide shared support functions for NBCBO and NBIM. The executive director of NBA reports to the governor of Norges Bank.

### Risk management and control

Pursuant to the regulation on risk management and internal control at Norges Bank, regular reviews of significant risks for all areas of activity are conducted.

The Executive Board has the primary responsibility for risk management and for the sound organisation of the Bank. Internal Audit supports the Executive Board in its exercise of this responsibility and submits an annual independent assessment of risk management and internal control to the Executive Board.

The division of roles and responsibilities within Norges Bank's risk management system is organised along "three lines of defence":

First line of defence: Operational risk management and control activities. Risk assessment and compliance are required to be an integral part of the Bank's business processes and include the management of outsourced services.

Second line of defence: The key risk management and compliance functions advise and support the departments. Their responsibility is to challenge the assessments made by the first line of defence and monitor the first line of defence to ensure that appropriate controls are carried out. The second line of defence reports to the head of the operational area.

Third line of defence: Internal Audit reports to the Executive Board and is required to assess, independently of the administration, whether risk management and compliance function as intended.

Norges Bank's Supervisory Council is appointed by the Storting (Norwegian parliament) and comprises 15 members. The Supervisory Council is Norges Bank's supervisory and control body and has primary responsibility for supervising the Bank's operation and compliance with formal frameworks.

The Council's area of responsibility includes approving the budget proposed by the Executive Board, adopting the annual accounts prepared by the Executive Board and selecting the Bank's auditor, and approving the auditor's plans and expenses. The Supervisory Council selects the Bank's external auditor and submits an annual report to the Storting.





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# Norges Bank's Executive Board

The Executive Board comprises the governor, two deputy governors and six external board members, all appointed by the King in the Council of State. In addition, two board members are selected by and among employees to participate when administrative matters are on the agenda.

The governor is chair and the two deputy governors are first deputy chair and second deputy chair of the Executive Board. The Executive Board has four preparatory and advisory committees, whose work strengthens and streamlines the Executive Board's discussions.

## Audit Committee

The Committee's tasks focus on the monitoring, supervision and control of Norges Bank's financial reporting, operational risk, compliance, and risk management and internal control systems.

The Audit Committee has three members elected by and from among the external members of Norges Bank's Executive Board. Internal Audit serves as the Committee's secretariat.

## Remuneration Committee

The Remuneration Committee contributes to thorough and independent discussions of matters pertaining to Norges Bank's salary and remuneration schemes. The Executive Board has decided that the statutory Remuneration Committee for Asset Management is to also prepare matters relating to Norges Bank Central Banking Operations' (NBCBO).

The Committee comprises three members elected from among the external members of Norges Bank's Executive Board and one member elected from among the employee-elected board members. The General Secretariat functions as the Committee's secretariat.

## Ownership Committee

The Ownership Committee is a preparatory body for the Executive Board on matters related to Norges Bank's responsible investment activities. The Committee prepares matters related, for example, to the observation or exclusion of companies from the investment universe of the Government Pension Fund Global (GPF), within the framework laid down in the Ministry of Finance's management mandate for the GPF and the ethical guidelines for the management of the GPF.

The Ownership Committee comprises three members and is chaired by the deputy governor of Norges Bank with particular responsibility for following up management of the GPF. The other two members are elected among the Executive Board's external members. Norges Bank Investment Management (NBIM) and the General Secretariat function as the Committee's secretariat.

## Risk and Investment Committee

The Risk and Investment Committee strengthens and streamlines the Executive Board's work related to investment strategy, current exposure, performance assessment, determination and use of risk limits, and major investment decisions.

The Risk and Investment Committee comprises three members and is chaired by the deputy governor of Norges Bank with particular responsibility for following up the management of the GPF. The other two members are elected among the Executive Board's external members.



Norges Bank's Executive Board visited the London office of Norges Bank Investment Management in October 2021.

NBIM and the General Secretariat provide necessary assistance to the Committee. The General Secretariat functions as the Committee's secretariat.

### Work of the Executive Board in 2021

In recent years, the Executive Board has held 15 to 20 meetings per year and considered close to 250 matters. The Executive Board held 14 meetings and considered 228 matters in 2021. Meetings also take place in the form of seminars for more in-depth presentations and discussions with the administration on the premises for important matters on the Board's agenda.

In addition, time is spent by the Executive Board's four subcommittees on preparing selected matters to be considered by the Executive Board.

The Executive Board's time for the period 2017-2019 was relatively evenly distributed between central banking operations and investment management. In 2020 and 2021, approximately two thirds of the Board's time was spent on investment management. This is a consequence of the new central bank act where the newly established Monetary Policy and Financial Stability Committee has been assigned responsibility for areas that were previously the responsibility of the Executive Board so that the Executive Board can increase its focus on matters related to the management of the GPFG.

**Table 1** Work of the Executive Board 2017–2021.

	2017	2018	2019	2020	2021
Number of Executive Board meetings	17	18	18	20	14
Number of Executive Board seminars	9	10	11	4	5
Number of matters considered by the Executive Board	248	232	242	222	228
<b>Preparatory committee meetings:</b>					
Audit Committee	7	7	5	7	11
Remuneration Committee	4	6	4	5	7
Ownership Committee	5	5	5	7	9
Risk and Investment Committee	9	6	7	10	13



The Executive Board held 14 meetings and considered 228 matters in 2021.

# Members of the Executive Board



## Øystein Olsen

Re-appointed Governor of Norges Bank and Chair of the Executive Board on 1 January 2017 for a second six-year term. Øystein Olsen has held this post since 1 January 2011.

His work experience includes posts as Director General of Statistics Norway and Director General at the Ministry of Finance. He also chaired or was a member of several government-appointed commissions. Øystein Olsen holds a postgraduate degree in economics (Cand. oecon.) from the University of Oslo.

## Ida Wolden Bache

Appointed Deputy Governor with particular responsibility for Norges Bank Central Banking Operations (NBCBO) for the period 1 April 2020–31 March 2026. Ida Wolden Bache is First Deputy Chair of the Executive Board and the Monetary Policy and Financial Stability Committee.

Her work experience includes posts as Executive Director of Norges Bank Monetary Policy and Executive Director of Norges Bank Financial Stability and as a macroeconomist at Handelsbanken Capital Markets. Ida Wolden Bache has been a member of the Systemic Risk Council in Denmark since 2017. She holds a PhD in economics from the University of Oslo and an MSc in economics from the London School of Economics.



## Øystein Børsum

Appointed Deputy Governor with particular responsibility for the management of the GPFG for the period 2 August 2021–1 August 2027. Øystein Børsum is Second Deputy Chair of the Executive Board and the Monetary Policy and Financial Stability Committee.

Øystein Børsum's latest position was chief economist at Swedbank. He has previously worked for Accenture, Norges Bank and for the Ministry of Finance, at the Economic Policy Department and the Asset Management Department. He holds a degree in economics and business administration from the NHH Norwegian School of Economics, a Cycle International d'Etudes Politiques (a one-year master's programme in French) from Sciences Po, a Master of Science in Finance and Economics from the London School of Economics and a PhD in economics from the University of Oslo.





#### Karen Helene Ulltveit-Moe

Appointed board member for the period to 15 May 2024. Chair of the Audit Committee and member of the Risk and Investment Committee of the Executive Board.

Karen Helene Ulltveit-Moe holds a professorship at the Department of Economics of the University of Oslo and is Research Fellow at the Centre for Economic Policy Research (CEPR) and CESifo. She is chair of the board at the NHH Norwegian School of Economics. She has extensive experience as board member in a number of companies, including Unitor, the Kverneland Group, the Renewable Energy Corporation (REC), Norwegian Property and Gassnova. She was also a member of the Board of Representatives at Storebrand and the corporate assembly at Norsk Hydro and Norske Skog. She chaired or was a member of several government-appointed commissions, including the Norwegian Government Commission on Tax Policy, the Financial Crisis Commission, the Norwegian Government Commission assessing the impact of Norway's agreement with the EU, the Government Commission on Working Time and the Aquaculture Tax Commission. Her main research interests are in international economics, productivity analysis, tax policy and industrial policy. She holds an MSc in economics from the University of Mannheim and a PhD in economics from the NHH Norwegian School of Economics.

#### Kristine Ryssdal

Appointed board member for the period to 15 May 2022. Member of the Ownership Committee and the Remuneration Committee of the Executive Board.

Kristine Ryssdal is General Counsel at Yara International ASA. Other previous professional experience includes the positions of Vice President Legal at Statoil, Chief Legal Officer at the Renewable Energy Corporation (REC) and Legal Counsel at Norsk Hydro. In addition, she served for several years as an attorney at the Office of the Attorney General. She was previously a member of the board at Borregaard ASA and has held various board positions in the REC group and was a member of Kommunalbanken Norway's Supervisory Board. Kristine Ryssdal holds a degree in law (Cand. jur.) from the University of Oslo and a Master of Laws from the London School of Economics. She is qualified to appear before the Supreme Court.



#### Arne Hyttnes

Appointed board member for the period to 15 May 2022. Chair of the Remuneration Committee and member of the Audit Committee of the Executive Board.

Arne Hyttnes has extensive experience from the financial industry, including positions at DnC/DnB, the Norwegian Savings Banks Association, Finance Norway and the Norwegian Banks' Guarantee Fund. He was managing director of the Norwegian Industrial and Regional Development Fund for four years and also has board experience from the NHH Norwegian School of Economics and "Ungt Entreprenørskap", a non-profit organisation to promote cooperation between schools and the business sector. Arne Hyttnes holds a degree in economics and business administration from the NHH Norwegian School of Economics.





### Hans Aasnæs

Appointed board member for the period to 15 May 2024. Member of the Risk and Investment Committee of the Executive Board.

Hans Aasnes is CEO of the shipping company Western Bulk ASA. He is chair of the board at Strand Havfiske and Investinor. Hans Aasnes has extensive experience in investment management, real estate management and direct investment at Storebrand and the UMOE Group, among others. He also has extensive board experience from a number of companies, including the Government Pension Fund Norway, Statskog, Gjensidige pensjonsforsikring, Bergvik Skog, Foran Realestate and Fornebu Lumber Company. Hans Aasnes is an agricultural economist from the Norwegian College of Agriculture (now the Norwegian University of Life Sciences), holds a higher degree from the NHH Norwegian School of Economics and is a certified financial analyst.

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### Nina Udnes Tronstad

Appointed board member for the period to 15 May 2022. Member of the Audit Committee and the Remuneration Committee of the Executive Board.

Nina Udnes Tronstad is a professional board member. She is a member of the board at Bladt Industries, Prosafe and Fishency Innovation, and is chair of the board at Source Energy. She was executive vice president at Statoil and Kværner. Her most recent position was as general manager of a private investment company until she was appointed board member in Norges Bank. She has been a board member at Peab AB, Ramboll Group, the Norwegian University of Science and Technology (NTNU) and Trelleborg AB, among others. Nina Udnes Tronstad holds an MSc in chemical engineering from the Norwegian University of Science and Technology.



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### Egil Herman Sjørnsen

Appointed board member for the period to 15 May 2024. Member of the Ownership Committee of the Executive Board.

He stepped down as Chief Executive Officer of Holberg Fondsforsvaltning in 2018 after having served in this position since 2006. He has held executive positions in asset management in DNB (including London), Vesta Forsikring and Nordea Investment Management since the end of the 1980s. Sjørnsen also has extensive board experience from the financial industry, including 14 years as chair of the board and board member at the Norwegian Fund and Asset Management Association. Egil Herman Sjørnsen is currently chair of the board at the Bergen Philharmonic Orchestra, Stiftelsen Universitetsforskning i Bergen (Unifob) and Janus Holding AS and is board member at Nysnø Klimainvesteringer AS. He also chairs the Nibor Oversight Committee. Sjørnsen holds a postgraduate degree in social sciences (cand. polit.), with a major in economics, from the University of Bergen.



## Employee-elected board members

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### Mona Sørensen

Appointed employee-elected board member from 1 January 2016.

Chair and chief union representative of the Finance Sector Union of Norway at Norges Bank from 1 January 2016. Mona Sørensen holds a degree in economics and administration and an Executive Master of Management with a specialisation in applied organisational psychology from the BI Norwegian Business School.

Marianne Depraetere is alternate for Mona Sørensen.

### Truls Oppedal

Appointed employee-elected board member from 1 January 2021.  
Member of the Remuneration Committee of the Executive Board.

Deputy chair of the Federation of Norwegian Professional Associations. Truls Oppedal holds a master's degree in Business and Finance from Heriot-Watt University in Edinburgh, Scotland.

Kjersti Gro Lindquist is alternate for Truls Oppedal.







# Annual Report of the Executive Board for 2021

The Covid-19 pandemic continued throughout 2021. The pandemic has had an impact on Norges Bank's work, both because of its effect on the Norwegian economy and the global economy and because the Bank's offices in Norway and abroad have been partially closed. Despite this, the Bank's staff put in considerable effort, maintaining consistently high performance and high professional standards in their work throughout the year.

Norges Bank manages the Government Pension Fund Global (GPFG). Despite the uncertainty surrounding the pandemic, the GPFG's investments in global financial markets generated a solid return in 2021, particularly owing to the sharp rise in equity indexes. Investment management at Norges Bank outperformed the GPFG's benchmark index by 0.74 percentage point. At year-end 2021, the market value of the GPFG was NOK 12 340bn.

In spring 2021, the Executive Board approved a revised strategy for Norges Bank Investment Management (NBIM), which sets out the Board's primary objectives for the organisation. The strategy emphasises a high return, responsible investment and transparency as key priorities for the GPFG ahead. The revised strategy also describes goals related to process optimisation, technology and staff development.

The payment system is evolving rapidly. The general public is continually being offered new methods, new means of payment are being launched and the payments market has opened up to new operators. The Executive Board made a number of decisions related to the payment system in 2021: to develop real-time payments, to further explore and test central bank digital currency (CBDC) and to introduce a framework for testing the cyber resilience of the financial system.

Norges Bank was assigned new tasks in 2021. The Government gave Norges Bank the responsibility for setting the countercyclical capital buffer rate for banks. Until 2021, Norges Bank provided advice to the Ministry of Finance regarding this buffer rate on a quarterly basis. The Bank has

also been assigned responsibility for advising the Ministry on the level of the systemic risk buffer.

The Bank's executive management underwent changes in 2021. On 28 May, the Government appointed Øystein Børsum as Deputy Governor with particular responsibility for following up on the management of the GPFG.

The Annual Report of the Executive Board also includes the section on sustainability and corporate social responsibility (forthcoming).

## Management of the GPFG

Norges Bank manages the GPFG with a view to achieving the highest possible long-term return within the constraints laid down in the mandate from the Ministry of Finance.

### Management of the GPFG in 2021

At year-end 2021, the market value of the GPFG was NOK 12 340bn. The GPFG's market value is affected by returns, capital inflows and withdrawals and exchange rate movements.

The return in 2021 was equivalent to NOK 1 580bn. Movements in the krone exchange rate reduced the market value of the GPFG by NOK 25bn, but this has no bearing on the GPFG's international purchasing power. Withdrawals by the Norwegian government came to NOK 129bn after payment of management fees.

The return on the GPFG before management costs was 14.5% measured in terms of the GPFG's currency basket. Equities returned 20.8% and bonds -1.9%. The return on

bonds was the weakest in the history of the GPFG. Investments in unlisted real estate returned 13.6% and the return on investments in unlisted renewable energy infrastructure was 4.2%. Management costs amounted to 0.04% of assets under management.

Norges Bank achieved an overall return before management costs that was 0.74 percentage point higher than the return on the GPFG's benchmark index.

The year 2021 was marked by the pandemic. Bank staff put considerable effort into managing the GPFG during partial closures of the Bank's offices in Norway and abroad.

The Bank pursues a variety of investment strategies, and since 2013 these strategies have been grouped into three main categories: asset management, security selection and fund allocation. All three categories made a positive contribution to the excess return in 2021.

The contributions to the relative return from equity, fixed income and real asset management show that equity management contributed most to the GPFG's relative return. After the poor performance of the real estate sector in 2020, real estate management made a solid contribution to the excess return on the GPFG in 2021.

Norges Bank manages the GPFG close to the benchmark, but all the investment strategies also have active components. Norges Bank has reported contributions to the relative return from the same three categories of strategies throughout the period 2013–2021. The management within each main category has, however, been subject to change.

Norges Bank's Executive Board adopted a revised strategy plan for the Bank's management of the GPFG in early 2021. The plan builds on the previously adopted strategy but has less emphasis on overall allocation. In keeping with this, the strategies within fund allocation were adjusted in 2021 to reduce exposure to strategies for systematic risk factors and investments in certain segments outside the benchmark index. However, investments in unlisted real estate, unlisted renewable energy infrastructure and emerging-market debt remain part of the strategy.

When it comes to asset management, the Executive Board has put emphasis on further developing the Bank's

strategies for achieving the desired market exposure efficiently. Within security selection, the plan is to expand the number of companies the Bank follows closely and increase the use of external managers with deep insight into specific companies and markets. Knowledge about the GPFG's company investments helps achieve the objective of the highest possible return. It could also improve risk management and strengthen work on responsible investment.

In April, Norges Bank announced the GPFG's first investment in unlisted renewable energy infrastructure. The Bank will gradually build up this portfolio, primarily through investments in wind and solar power.

#### **Performance measured over time**

In the period from 1998 to 2021, the annual return on the GPFG was 6.6%. The annual net real return, after deductions for inflation and management costs, was 4.6% in the same period.

Over the past five years, the annual net real return has been 7.7%. The strong return in recent years serves as a reminder that the market value of the GPFG could fluctuate considerably in the future.

The Executive Board emphasises the importance of assessing the performance of the GPFG over time. Viewed over the full period 1998–2021, the annual return before management costs has been 0.27 percentage point higher than the return on the benchmark index defined by the Ministry of Finance. In the period since 2013, during which the strategies have been grouped into asset management, security selection and fund allocation, the annual excess return before management costs has been 0.25 percentage point. The contributions from the three groups of strategies show that the strategies employed by the Bank within fund allocation have made a negative contribution to the relative return, while asset management and security selection have both made a positive contribution.

The objective of Norges Bank's management of the GPFG is the highest possible return after costs. This is to be achieved with acceptable risk. Risk is measured, analysed and followed up using a broad set of measures and analyses. One key provision in the mandate from the Ministry of Finance requires the Bank to manage the GPFG with a view to ensuring that expected relative volatility

(tracking error) does not exceed 1.25 percentage points. Expected relative volatility was 0.50 percentage point at the end of 2021, compared with 0.56 percentage point a year earlier.

Measured over the full period since 1998, realised relative volatility has been 0.64 percentage point.

The management of the GPFG is to be cost-effective. Cost-effective management supports the objective of the highest possible return after costs. In the period 2013–2021, annual management costs averaged 0.05% of assets under management. In 2021, total management costs amounted to NOK 4.6bn, or 0.04% of assets under management.

The Executive Board is satisfied with the return, which both in 2021 and over time has been higher than the return on the benchmark index, against which the return is measured.

#### **Further development of investment management**

One important part of the Executive Board's work on the GPFG is advising on the further development of the GPFG's investment strategy. The Executive Board responded to a number of enquiries from the Ministry of Finance and issued advice, including on the composition of the GPFG's benchmark index for equities. The Executive Board also submitted a review of the Bank's management of the GPFG. The Ministry of Finance regularly requests reviews of this kind, at the beginning of each parliamentary term.

Responsible investment and active ownership are an integral part of the management of the GPFG. The Executive Board has noted that this work was strengthened further through 2021. Among other things, the Bank began publishing its voting intentions five days ahead of general meetings and introduced pre-screening of companies being added to the GPFG's benchmark index. Norges Bank also responded to a number of enquiries from the Ministry of Finance regarding responsible investment, including the management of climate risk in the GPFG and the possible introduction of a long-term responsible investment goal of net zero emissions for the companies in which the GPFG is invested.

For more information on the management of the GPFG, see the *Government Pension Fund Global Annual Report for 2021*.

#### **Management of the foreign exchange reserves**

Norges Bank manages Norway's foreign exchange reserves. The foreign exchange reserves are held for the purpose of crisis management and are to be used as part of the conduct of monetary policy, to promote financial stability and to meet Norges Bank's international commitments. Considerable weight is given to the importance of investing the reserves in liquid assets. The foreign exchange reserves are managed with the aim of achieving the highest possible return within the management framework.

The foreign exchange reserves are divided between a fixed income portfolio and an equity portfolio. An additional portfolio, the petroleum buffer portfolio, receives the government's cash flow from petroleum activities in foreign currency. The purpose of the petroleum buffer portfolio is to provide for an appropriate management of the government's need for converting foreign currency into NOK and vice versa and to conduct transfers to and from the GPFG.

The principles for the management of Norges Bank's foreign exchange reserves are laid down by the Bank's Executive Board. The Executive Board has delegated responsibility for issuing supplementary guidelines to the governor of Norges Bank and has authorised the governor to depart from the principles if warranted by security considerations.

#### **Management of the foreign exchange reserves in 2021**

The market value of the foreign exchange reserves was NOK 643bn at year-end 2021. The total for the equity portfolio was NOK 122bn, for the fixed income portfolio NOK 478bn and for the petroleum buffer portfolio NOK 43bn. The value of the reserves increased by NOK 47bn in the course of 2021. Return in international currency terms increased the value of the reserves by NOK 22bn, while the depreciation of the krone increased the value of the reserves by NOK 1bn. Net inflows increased the reserves by NOK 24bn.

The foreign exchange reserves are held for the purpose of crisis management. Changes in value measured in NOK are thus of secondary importance. Movements in the krone exchange rate primarily affect Norges Bank's equity and not its ability to meet its commitments in foreign currency. The return on the reserves will be measured in international currency in the remainder of this section.



The return on the foreign exchange reserves was 3.8% in 2021. Equity investments returned 25.1%, while fixed income investments returned -1.5%. Equity investments amounted to 20.3% of the equity and fixed income portfolio combined at year-end 2021.

In accordance with the Executive Board's principles, rebalancing is required if the equity allocation deviates from the strategic equity allocation by more than 4 percentage points. Following strong growth in the value of the equity portfolio, rebalancing was implemented in November by transferring NOK 27.7 bn from the equity portfolio to the fixed income portfolio.

Investments denominated in Chinese yuan renminbi (CNY) were included in the reserves fixed income portfolio for the first time in 2021. The CNY currency was gradually phased in during 2021 Q1, and investments in Chinese government bonds account for 2% of the market value of the portfolio.

The Executive Board amended the principles for the management of the foreign exchange reserves in 2021 to clarify the responsible investment requirements for the management of the equity portfolio.

In the Executive Board's assessment, the foreign exchange reserves are managed efficiently, and the Board is satisfied with the solid return posted by the reserves both in 2021 and over time.

For more information on the management of the Bank's foreign exchange reserves, see the report [Management of Norges Bank's foreign exchange reserves](#).

### Government debt management

Norges Bank provides services in connection with government borrowing on behalf of the Ministry of Finance. The mandate is to meet the government's borrowing requirement at the lowest possible cost within established limits. Government borrowing is also intended to promote well-functioning and efficient financial markets in Norway. Each year, the Ministry of Finance sets an upper limit for gross borrowing volume and a minimum average time to refinancing. Norges Bank's Executive Board approves the annual strategy and borrowing programme.

The government's borrowing requirement is primarily met through long-term borrowing in the market (government bonds) at a fixed interest rate. The government also borrows short-term by selling Treasury bills, which are debt instruments with a maturity of one year or less so that government securities with different maturities are offered in the market. The government borrows exclusively in NOK. Government securities are issued through auctions. Government bonds may also be issued by syndication.

### Government debt management in 2021

At year-end 2021, government debt totalled NOK 522bn, with NOK 466bn in government bonds and NOK 56bn in Treasury bills. Of this amount, the government's own

holdings amounted to NOK 54bn in bonds and NOK 24bn in Treasury bills.

A new 10-year government bond was issued in 2021 via syndication, in the amount of NOK 20bn. Existing bonds were also reopened in the amount of NOK 45bn at 19 auctions. NOK 6bn was issued to the government's own stock in the course of the year.

Treasury bills worth NOK 54bn were issued to the market at 19 auctions. NOK 24bn was issued to the government's own stock in the course of the year.

In 2021, the average auction premium at bond issuance was 4.4 basis points compared with 3.5 basis points in 2020. Corrected for a very poor auction in June, the auction premium was 2.1 basis points. The average yield for bonds issued in 2021 was 1.24%, compared with 0.89% in 2020, which was the result of a general rise in interest rates.

The Executive Board is satisfied that government bond issuance was carried out in accordance with the approved borrowing programme. An annual report is published on government debt management.



Ida Wolden Bache  
Norges Bank's annual "Finansiell fagdag"  
conference in 2021.

## Payment system

Norges Bank is tasked with promoting an efficient, secure and attractive payment system. Norges Bank is the ultimate settlement system for interbank payments in Norway and issues banknotes and coins. Norges Bank oversees the payment system and other financial infrastructure and contributes to contingency arrangements. Under the Payment Systems Act, Norges Bank is the supervisory authority for interbank systems.

The operation of the financial infrastructure in Norway was stable in 2021. The Executive Board considers the operation of the Norwegian financial infrastructure to be secure and efficient.

### Norges Bank's settlement system

Payment settlement between banks and other financial sector undertakings with an account at Norges Bank takes place in Norges Bank's settlement system (NBO). Thus, most payments in NOK are ultimately settled in NBO. With the exception of one brief disruption, the operation of NBO was stable through 2021. NBO handled a daily average of approximately NOK 301bn in payment transactions. At year-end 2021, banks' sight deposits and reserves on deposit with Norges Bank totalled NOK 23bn.

### Further development of the infrastructure for fast payments

A well-functioning solution for real-time payments is an important part of an efficient payment system. These are payments where the money is made available on the payee's account seconds after payment is initiated. The share of payments settled in real time will likely increase in the coming years.

In their responses to a public consultation, banks expressed support for the initiation by Norges Bank of negotiations with the European Central Bank (ECB) on participation in TARGET Instant Payment Settlement (TIPS), the Eurosystem's infrastructure for real-time payments. Participation would imply settlement of real-time payments in NOK in the TIPS system on behalf of Norges Bank. The Executive Board decided in October 2021 to start such negotiations. A final decision on participation will be made after negotiations on a participation agreement have been completed and an evaluation of the conclusions has been made.

## Cash

The public's access to central bank money in the form of cash is a key feature of the payment system. Cash usage in Norway has declined over many years and the decline accelerated during the pandemic. In Norges Bank's opinion, it is important to ensure that cash remains available and easy to use so that it can fulfil its functions in the payment system.

### Central bank digital currency (CBDC)

The structural changes in the payment system raise questions about whether there is a need for Norges Bank to implement measures to ensure that payments can continue to be made efficiently and securely in NOK in the future. One key question is whether Norges Bank should provide central bank money to the public in digital as well as physical form. Norges Bank is in the process of exploring this issue, motivated by both declining cash usage and a desire to be prepared to introduce a CBDC if necessary for the Norwegian payment system to develop in a desirable manner.

In spring 2021, the Executive Board decided that the Bank would continue its research into CBDC. Over the next two years, experimental testing of different technical CBDC solutions will be carried out, and the Bank will continue its work on analysing the purposes and consequences of introducing a CBDC. The research will provide a basis for a decision on whether the Bank will test a preferred solution that could be introduced.

### Cyber resilience of the financial system

Cyber attacks are a potential threat to financial stability.

Extensive digitalisation and interconnectedness make the financial system vulnerable. In September, Norges Bank's Executive Board approved the introduction of a framework for testing entities' capabilities in detecting and responding to cyber attacks (TIBER-NO). TIBER-NO has been prepared in collaboration with Finanstilsynet (Financial Supervisory Authority of Norway). This will help strengthen the cyber resilience of the financial sector and enhance our knowledge about the potential impact of cyber attacks on the financial system.

For more information on the payment system, see the 2021 [Financial Infrastructure Report](#).



The Executive Board is impressed by the way Bank staff have performed their duties under challenging conditions in 2021.



## Staff

Norges Bank's staff are central to the Bank's operations. The Bank's working environment must be one of mutual respect, where it is safe to share and challenge each other's views, and where there are equal opportunities for all. The Executive Board is impressed by the way Bank staff have performed their duties under the difficult and challenging conditions arising from the pandemic in 2021.

Norges Bank works systematically to attract and recruit top candidates from leading national and international academic institutions. The Bank promotes continuous career development, for example by offering targeted courses and study programmes. To further develop as an organisation, the Bank aims for gender balance and to actively make use of the advantages provided by a high degree of diversity in the workforce.

At year-end 2021, Norges Bank had 940 permanent members of staff, of which 519 were in Norges Bank Investment Management (NBIM), 264 in Norges Bank Central Banking Operations (NBCBO) and 150 in Norges Bank Administration (NBA). In addition, there were seven employees at the Office of the Supervisory Council.

The Bank has employees from a total of 33 countries and offices in Oslo, London, New York, Shanghai and Singapore. Norges Bank works systematically to achieve gender balance and to bring the share of each gender to at least 40% in the Bank as a whole. The share of women on the permanent staff of Norges Bank at year-end 2021 was 34%, with percentages varying across areas of the Bank from 27% in NBIM to 34% in NBCBO and 58% in NBA.

Employer branding and recruiting initiatives increased substantially through 2021. In spring, the Bank became a signatory of the Women in Finance initiative, and an action plan was drawn up. The Executive Board is nevertheless not satisfied with the overall gender balance and will prioritise following up the initiatives for achieving the target ahead.

Norges Bank's priority is to protect the health and safety of all those who work in the Bank. Seven workplace accidents or injuries directly relating to work conducted at Norges Bank's premises were reported in 2021, none of which were severe or reported as occupational injuries to the Norwegian

Labour Inspection Authority. Sickness absence at the Bank remained stable at a low level of 1.7% in 2021.

The Bank's management has constructive and regular dialogue with the trade unions. The Bank engages in negotiations and discussions to create the basis for a positive work environment. Collaboration with the trade unions was particularly important in 2021 when Bank staff were working under challenging conditions. In 2021, an agreement was reached to harmonise common working hours across operational areas.

## Corporate governance

Norges Bank's governance framework aims to be in line with best practice. The Executive Board follows up the Bank's operations through periodic reporting on performance and goals, action plans, budgets, financial and operational risk and compliance.

Norges Bank's use of resources is required to be cost-efficient and prudent, with a cost level that is reasonable compared with that of similar organisations. The Executive Board uses benchmarking, ie external comparisons of the Bank's use of resources with that of other similar organisations, as a corporate governance tool. During 2021, comparisons were conducted of management costs for the GPFG and the use of resources in NBCBO, in NBA and in Norges Bank as a whole. The Executive Board is satisfied with the Bank's favourable results in these comparisons.

The Executive Board followed up the budgeting process closely, and planning and the budget for 2022 were discussed at several Executive Board meetings in the latter half of 2021.

Norges Bank attaches considerable weight to managing and controlling financial risk. Norges Bank complies with the regulation on risk management and internal control at Norges Bank issued by the Ministry of Finance. The Executive Board has issued principles for risk management. In addition, the Ministry of Finance defines limits for the management of the GPFG, including allocation of asset classes and the benchmark index. The Executive Board sets similar limits for the management of the foreign exchange reserves. There were no breaches of the limits for the management of the GPFG or the foreign exchange reserves in 2021. Valuations, performance measurement,

management and control of risk in investment management comply with internationally recognised standards and methods. See the notes to the financial statements.

Reporting and following up risks and incidents constitute an important part of the measures to improve operations and internal control. Significant risks are followed up through regular reporting and follow-up of Executive Board measures. The Executive Board has set a 12-month risk tolerance limit for NBIM specifying that the probability that operational risk factors will result in a gross loss of NOK 750m or more must be less than 20%. In 2021, operational risk exposure was within the Board's risk tolerance limit. Liability insurance has not been specifically

provided for the members of the Executive Board or the chair of the Board, ie the governor, in his role as general manager of Norges Bank.

### Information security and IT systems

Stable IT systems are essential for Norges Bank to fulfil its mission. Norges Bank works systematically to ensure a high level of operational stability and has sound disruption management and change management processes in place.

A multi-year NBCBO project to modernise the IT platform was completed in autumn 2021. Mission-critical and business-critical systems were separated and are operated on two different platforms to improve security. The new



platforms facilitate further development of the system portfolio.

The Executive Board continuously monitors operational and financial risk related to the use of IT systems through its assessment of operational risk and internal control. The Executive Board submits an annual risk assessment to the Supervisory Council based on reporting by the administration and Internal Audit.

No material deficiencies in the risk management and control regime were identified in 2021 and the Executive Board assesses the control environment and control systems at Norges Bank as satisfactory.

### Security

Norges Bank faces a complex threat landscape. The Bank's assets, threats and vulnerabilities are continuously assessed and tracked. Risk reduction measures are continuously identified and implemented. A range of training activities are conducted, such as phishing drills and e-learning modules, to boost security awareness among staff. Relevant controls are performed based on frameworks and standards for best practice. Norges Bank uses the US National Institute of Standards and Technology Cyber Security Framework (NIST CSF) for its management of information and IT security risks.

The Covid-19 pandemic has led to extensive use of remote working and video conferencing. There has been a particular focus on security related to remote working. The number of cyber attacks rose during the pandemic. However, thanks to effective controls, none of these attacks had serious consequences.

There were no security incidents with serious consequences in 2021.

### Balance sheet composition and financial outlook

#### Norges Bank's balance sheet

Norges Bank's balance sheet contains a number of items directly related to the Bank's mission. The balance sheet total at year-end 2021 was NOK 13 172bn. The majority of balance sheet items are related to the GPFG and the Bank's foreign exchange reserves, while deposits from the government and banks, banknotes and coins in circulation and claims on and liabilities to the IMF are other significant items.

Norges Bank is responsible for the operational management of the GPFG. The Ministry of Finance has therefore placed a portion of the government's assets in a separate account in Norges Bank (the GPFG's krone account), presented as a liability to the Ministry of Finance. The Bank reinvests these funds, in its own name, in accordance with the GPFG's management mandate issued by the Ministry of Finance. The net value of the investment portfolio and the GPFG's krone account are presented on separate lines in Norges Bank's balance sheet. The value of the krone account will always equal the value of the investment portfolio less accrued management fees.

At year-end 2021, the market value of the GPFG's investments was NOK 12 340bn.

Detailed financial reporting for the investment portfolio of the GPFG is presented in Note 20 to the financial statements. In addition, an annual report on the management of the GPFG is produced that also includes the financial statements for the investment portfolio. Norges Bank, in its role as asset manager, bears no financial risk associated with the management of the GPFG.

Excluding the GPFG, the foreign exchange reserves are the Bank's largest balance sheet asset. The foreign exchange reserves are primarily invested in equities, fixed income instruments and cash. Net foreign exchange reserves amounted to NOK 643bn at year-end 2021, compared with NOK 596bn at year-end 2020.

For more details on the management of the GPFG and the foreign exchange reserves, see pages 26 and 28.

Under the government's consolidated account system, all government liquidity is collected in government accounts at Norges Bank. At year-end 2021, deposits amounted to NOK 344bn. Except for the GPFG krone account, this is the largest liability item on the balance sheet. However, this item fluctuates considerably through the year owing to substantial incoming and outgoing payments over the government's accounts and transfers to and withdrawals from the GPFG. The average amount on deposit was around NOK 259bn in 2021, compared with NOK 260bn in 2020.

Banknotes and coins in circulation are a liability item for Norges Bank as they are a claim on the Bank. Norges Bank guarantees the value of this money. The amount of cash in circulation is driven by public demand. In recent years, lower demand for cash has reduced the amount in circulation. At year-end 2021, banknotes and coins in circulation amounted to NOK 40bn, compared with NOK 41bn at year-end 2020.

Deposits from banks, comprising sight deposits, reserve deposits and F-deposits, are managed by Norges Bank through its liquidity management policy. At 31 December 2021, these deposits amounted to NOK 23bn, compared with NOK 53bn at year-end 2020.

Norges Bank administers Norway's financial obligations and rights ensuing from participation in the International Monetary Fund (IMF). Norges Bank has therefore both claims on and liabilities to the IMF. See Note 17 in the notes to the financial statements for more details. At year-end 2021, Norway's net position with the IMF amounted to a claim of NOK 19bn, compared with NOK 17bn at year-end 2020.

This balance sheet composition is normally expected to generate a positive return over time, disregarding foreign currency effects, as returns on the Bank's investments in equities and fixed income instruments are expected to exceed the cost of the Bank's liabilities. The Bank's assets are primarily invested in foreign currency, whereas its liabilities are primarily in NOK.

Given the Bank's balance sheet composition, income will to a large degree be affected by developments in global fixed income, equity and foreign exchange markets. Considerable volatility in income should be expected from year to year. Future increases in the value of the GPFG will be affected by, among other things, transfers to/from the GPFG.

## **Income statement**

### **Total comprehensive income**

Norges Bank's total comprehensive income for 2021 shows a profit of NOK 23bn, compared with a profit of NOK 29bn in 2020. Net income from financial instruments was NOK 24bn in 2021, compared with NOK 30bn in 2020. Equity investments posted a gain of NOK 31bn, while fixed income investments posted a loss of NOK 7bn. Net income from financial instruments also includes a loss of NOK 0.3bn as

a result of foreign currency effects owing to a weaker krone. Foreign currency effects in 2020 resulted in a loss of NOK 0.5bn.

The GPFG's total comprehensive income amounted to NOK 1 551bn, comprising a gain on the portfolio of NOK 1 555bn net of management costs of NOK 4.6bn. Total comprehensive income was recognised against the GPFG's krone account at 31 December 2021. The return on the portfolio, after management costs reimbursed to Norges Bank have been deducted, is transferred directly to the krone account and thus does not affect Norges Bank's total comprehensive income or equity.

In accordance with the GPFG's management mandate, Norges Bank is reimbursed by the Ministry of Finance for its expenses related to the management of the GPFG up to a limit. The Bank was reimbursed in the amount of NOK 4.6bn in 2021, compared with NOK 5.3bn in 2020. Norges Bank also earns income from services provided to banks and the government and rent from external tenants. Income other than the reimbursement for the management of the GPFG totalled NOK 120m in 2021, compared with NOK 121m in 2020.

### **Operating expenses**

Operating expenses amounted to NOK 5.9bn in 2021, compared with NOK 6.5bn in 2020.

The decrease in expenses is primarily the result of a decrease in fees for external asset managers of the GPFG (NOK 0.3bn) and lower personnel expenses (NOK 0.3bn). Reduced fees for external asset managers reflect a lower excess return from external management and currency effects. Developments in personnel expenses primarily reflect lower expenses for performance pay. This is primarily related to a one-off effect resulting from a change in the accrual accounting method for performance pay. The change does not affect employee's earnings or payments.

NOK 4.6bn of the expenses in 2021 is related to the management of the GPFG, including personnel costs, custody and settlement services, IT expenses, analytical research services and fees for external asset managers.

## Equity

Norges Bank's equity at 31 December 2021 was NOK 289bn, compared with NOK 277bn at 31 December 2020. The Bank's equity consists of the Adjustment Fund and the Transfer Fund. At year-end 2021, the Adjustment Fund stood at NOK 267bn and the Transfer Fund at NOK 22bn. Norges Bank's equity was 34.7% of the balance sheet total, excluding the GPF's krone account, compared with 35.9% in 2020. The Executive Board deems that the Bank's equity is sufficient to fulfil the Bank's purpose (cf Section 3-11, Subsection 1, of the Central Bank Act).

## Distribution of total comprehensive income

The distribution of total comprehensive income follows the guidelines on the reserves and on the allocation of Norges Bank's profit, laid down by Royal Decree of 13 December

2019 pursuant to Section 3-11, Subsection 2, of the Central Bank Act.

Total comprehensive income shall be allocated to the Adjustment Fund until the Fund has reached 40% of the Bank's net foreign exchange reserves. Any surplus is allocated to the Transfer Fund. A third of the Transfer Fund is transferred annually to the Treasury.

In accordance with the guidelines, the following transfers and allocations will be made: Norges Bank's total comprehensive income of NOK 23bn is to be transferred as follows: NOK 20bn to the Adjustment Fund and NOK 3bn to the Transfer Fund. NOK 11bn will be transferred from the Transfer Fund to the Treasury.

## Norges Bank's Executive Board Oslo, 9 February 2022




**Øystein Olsen**  
Governor / Chair of the Executive Board



**Ida Wolden Bache**  
First Deputy Chair



**Øystein Børsum**  
Second Deputy Chair



**Karen Helene Ulltveit-Moe**



**Kristine Ryssdal**



**Arne Hyttnes**



**Hans Aasnæs**



**Nina Udnes Tronstad**



**Egil Herman Sjørusen**



**Mona Helen Sørensen**  
Employee representative



**Truls Oppedal**  
Employee representative

# Norges Bank's Monetary Policy and Financial Stability Committee

The Monetary Policy and Financial Stability Committee comprises the governor, the two deputy governors and two external members.

The external members are appointed by the King in the Council of State for terms of four years. The governor chairs the Committee and the two deputy governors are first and second deputy chairs.

The Committee had 21 meetings and considered 95 matters within its area of responsibility in 2021.

## [The Committee's work structure](#)

The Monetary Policy and Financial Stability Committee normally holds eight scheduled meetings a year, where policy rate decisions are made. Four of the meetings coincide with the publication of the Monetary Policy Report. The level of the countercyclical capital buffer is also set at these meetings.

The Committee's meeting schedule is primarily determined by the dates of the eight monetary policy meetings. Prior to the meetings that coincide with the publication of the Monetary Policy Report, the Committee meets three times. Prior to the meetings without a report, the Committee meets once.

In 2021, the Committee held 21 meetings and two one-day seminars not directly related to the monetary policy meetings. The Committee discussed the monetary policy strategy, the strategy for the countercyclical capital buffer, the Financial Stability Report and liquidity management, among other things. Norges Bank's monetary policy strategy, which was published in December 2021, is discussed on page 48.



Members of the Monetary Policy and Financial Stability Committee: Øystein Børsum, Jeanette Fjære-Lindkjenn, Ida Wolden Bache, Øystein Olsen and Ingvild Almås

Bank staff prepare and present relevant analyses and projections that provide the basis for the Committee's discussions and advises the Committee on policy decisions. To ensure that the discussion basis is as far as possible the same for all the Committee members, all have access to the same information and analyses provided by Bank staff.

The Committee is committed to transparent and clear external communication and seeks consensus on its assessments and decisions through in-depth discussion. The "Monetary policy assessment", published in connection with policy rate decisions, and the "Assessment of the countercyclical capital buffer requirement", published in connection with the buffer decisions, reflect the view of the

majority. Topics of particular concern to the members in the discussions are highlighted in the assessment. Members that disagree with the assessment of the majority may dissent, and dissenting views are published together with a brief written explanation in the minutes and in the assessment published at the same time as the rate decision. All of the Committee's decisions were unanimous in 2021. To underpin the Committee's form as a collegial committee, the Committee chair, the governor, normally speaks on behalf of the Committee. Other Committee members may issue statements by agreement with the Committee chair.



Press conference on 16 December.  
The policy rate was raised from 0.25 percent  
to 0.5 percent.





# Members of the Monetary Policy and Financial Stability Committee

## Øystein Olsen

Re-appointed Governor of Norges Bank and Chair of the Executive Board on 1 January 2017 for a second six-year term. Øystein Olsen has held this post since 1 January 2011.

## Ida Wolden Bache

Appointed Deputy Governor with particular responsibility for Norges Bank Central Banking Operations for the period 1 April 2020-31 March 2026. Ida Wolden Bache is First Deputy Chair of the Executive Board and the Monetary Policy and Financial Stability Committee.

## Øystein Børsum

Appointed Deputy Governor with particular responsibility for the management of the Government Pension Fund Global for the period 2 August 2021-1 August 2027. Øystein Børsum is Second Deputy Chair of the Executive Board and the Monetary Policy and Financial Stability Committee.



## Jeanette Fjære-Lindkjenn

Appointed Committee member for the period to 31 December 2023.

Jeanette Fjære-Lindkjenn is a fellow at Housing LAB, the national centre for housing research at Oslo Metropolitan University. She has previously worked for DNB Markets as a macroeconomist and for Norges Bank as an analyst. Jeanette Fjære-Lindkjenn holds a degree in economics from the University of Oslo.

## Ingvild Almås

Appointed committee member for the period to 31 December 2021.

Ingvild Almås holds a professorship at the Institute for International Economic Studies (IIES), Stockholm University, is Principal Investigator at the Norwegian School of Economics' FAIR centre and International Research Fellow at the Institute for Fiscal Studies (London), Centre for Economic Policy Research (CEPR), and CESifo. She previously held a professorship at NHH. She sits on the Scientific Advisory Board for the Max Planck Institute for Research on Collective Goods in Bonn, Germany and chairs the Portfolio Board for Welfare, Culture and Society at the Research Council of Norway. Ingvild Almås is also on the Nobel Symposium Committee. She has been a chief editor of the Scandinavian Journal of Economics and an associate editor of a number of journals. Ingvild Almås holds a BA in economics from the University of Oslo and a PhD in economics from the NHH Norwegian School of Economics.



# Annual Report of the Monetary Policy and Financial Stability Committee for 2021

Conditions in the Norwegian economy started to return to normal in the course of 2021, and the Monetary Policy and Financial Stability Committee decided in autumn 2021 to raise the policy rate gradually. The Committee was given decision-making responsibility for the countercyclical capital buffer (CCyB) and also adopted a monetary policy strategy.

The Monetary Policy and Financial Stability Committee is responsible for the conduct of monetary policy and is tasked with promoting financial stability.

The Committee reduced the policy rate to 0% in spring 2020. The aim was to dampen the economic downturn caused by the Covid-19 pandemic. In the course of 2021, conditions in the Norwegian economy started to normalise, and from autumn 2021, the policy rate was gradually raised again, first to 0.25% in September and then to 0.5% in December.

The Committee adopted a monetary policy strategy in December 2021. The strategy describes how the Committee interprets the monetary policy mandate and sets a framework for the Committee's assessments of how monetary policy will respond to various shocks.

The CCyB rate was reduced from 2.5% to 1% early in the pandemic in 2020. On the advice of the Committee in June 2021, the Ministry of Finance decided to increase the CCyB rate to 1.5%, effective from 30 June 2022. On 10 September 2021, Norges Bank was given decision-making responsibility for the CCyB and formal advisory responsibility for the systemic risk buffer. Norges Bank took the first decision to change the CCyB rate under the new regime in December 2021. The rate was set at 2%, effective from 31 December 2022.

## Monetary policy

### Global economy

Global economic growth stalled in winter 2020/2021 in the wake of rising infection rates and tighter Covid-related restrictions in many countries through autumn 2020. The pace of vaccination picked up through spring 2021, and Norway's main trading partners gradually eased restrictions. Together with lower infection rates, this contributed to high GDP growth. Growth was particularly strong in household purchases of goods and services.

The rise in trading partner economic activity continued through summer. Low infection rates in many European countries contributed to strong growth in 2021 Q3, and aggregate trading partner GDP was above the pre-Covid level. In autumn, infection rates increased to record-high levels in several European countries and tighter restrictions were introduced. Towards the end of the year, the new Omicron variant created considerable uncertainty about the economic outlook.

Goods demand has risen sharply during the pandemic. At the same time, the pandemic and Covid-related restrictions have led to production and distribution delays. In combination, the result has been long delivery times, higher freight rates and substantial price rises for some goods and services. Together with higher prices for energy, raw materials and electronic components, this has weighed on trading partner economic growth and has contributed to a sharp rise in headline consumer price inflation in several key

trading partners. Towards the end of 2021, the 12-month rise in the consumer price index (CPI) moved up to over 7% in the US and 5% in the euro area. Underlying inflation also picked up considerably.

The rise in inflation and prospects that it would remain elevated ahead pushed up policy rate expectations among Norway's trading partners through 2021. During autumn, several central banks announced or started tapering asset purchase programmes introduced in 2020. The Bank of England raised Bank Rate in December. Towards the end of 2021, market rates implied expectations that Norway's main trading partners would raise their policy rates in the course of 2022. Long-term government bond yields also rose somewhat in 2021, from very low levels.

The upswing in economic activity contributed to a marked rise in equity indexes through the year. At the end of 2021, trading partner equity indexes were at an appreciably higher level than before the pandemic. Risk premiums in money and bond markets declined through winter and spring 2021 and remained close to historically low levels thereafter.

Global oil consumption rose in pace with the global economic recovery, and oil prices rose sharply at the start of 2021. Oil spot prices were close to USD 70 per barrel in March, about the same as before the pandemic. OPEC+ decided to continue their production restrictions, which pushed up oil prices. Oil prices rose further through 2021 and peaked at just above USD 80. After news emerged of the Omicron variant, oil prices fell markedly at the end of November and were about USD 75 per barrel at end-2021. Oil futures prices suggested slightly lower oil prices in the years ahead.

The economic recovery pushed up gas prices considerably in the course of 2021. In addition, weather conditions resulted in high demand and lower electricity production. Gas supplies were also reduced by limited gas imports from Russia to Europe.

### Financial conditions in Norway

The krone exchange rate fluctuated considerably through 2021, but for the year as a whole, changes as measured by the import-weighted index I-44 were relatively small. Generally, the exchange rate appreciated when oil prices rose and uncertainty about the world economic outlook receded and depreciated when oil prices fell and uncertainty, for example related to infection rates, increased.

In 2020, Norges Bank implemented a range of measures to improve liquidity in the money and foreign exchange markets. Tighter Covid-related restrictions at the start of the year did not lead to materially increased bond and money market risk premiums. As market conditions improved, Norges Bank's extraordinary liquidity measures were gradually phased out. No extraordinary F-loans were offered to banks through 2021. The last extraordinary F-loans outstanding matured in August. The relaxation of the collateral requirements for banks' loans from Norges Bank was also discontinued. The risk premium in three-month Nibor declined in the period to summer 2021, before rising somewhat through autumn in line with lower structural liquidity in the banking system. Bond risk premiums declined gradually through the year as a result of the reopening of society and declining risk premiums in other countries.

### Norwegian economy

The Covid-19 outbreak and the measures to contain it led to a severe downturn in the Norwegian economy in 2020. To dampen the downturn, the Monetary Policy and Financial Stability Committee reduced the policy rate from 1.5% to 0% in spring 2020, and Norges Bank implemented a range of measures to improve liquidity in money and foreign exchange markets.

The Norwegian economy started to recover further out in 2020 and mainland GDP growth picked up. After the turn of the year 2020/2021, higher infection rates and tighter restrictions dragged on activity, and the decline in unemployment came to a halt. In 2021 Q1, mainland GDP fell. The decline was most pronounced in services particularly

affected by Covid-related restrictions, such as cultural events, hotels, restaurants, transport and some retail trade segments.

Infection rates slowed in Norway as spring progressed, and the pace of vaccination accelerated. The authorities gradually eased Covid-related restrictions through spring, summer and autumn. In pace with reopening, activity picked up considerably, particularly in the service industry segments that were most affected by the restrictions. In June, mainland GDP returned to its pre-pandemic level. Activity continued to pick up through autumn, before higher infection rates and the reintroduction of restrictions put a brake on the recovery towards the end of the year.

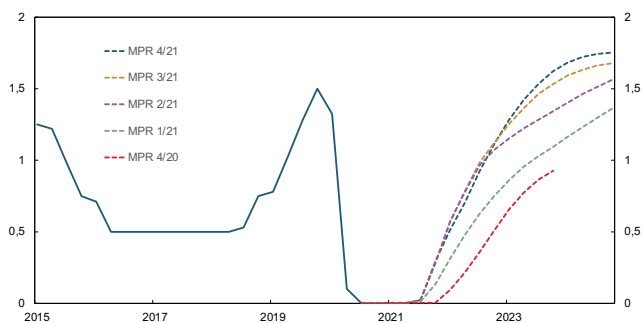
As activity picked up, many furloughed workers returned to work and unemployment fell sharply. The improvement in the labour market continued until the end of 2021, when unemployment was close to pre-pandemic levels. A number of Regional Network contacts reported a sharp rise in capacity utilisation and production constraints due to labour shortages and disruptions in global supply chains. Towards

the end of 2021, new restrictions contributed to a considerable rise in the number of furlough notices, indicating that unemployment would increase somewhat ahead.

The Committee's assessment was that capacity utilisation in the economy increased through 2021 and reached a normal level in autumn. Towards the end of the year, the output gap was estimated to be positive, but the Committee's assessment of the outlook implied that the output gap would narrow somewhat in the short term.

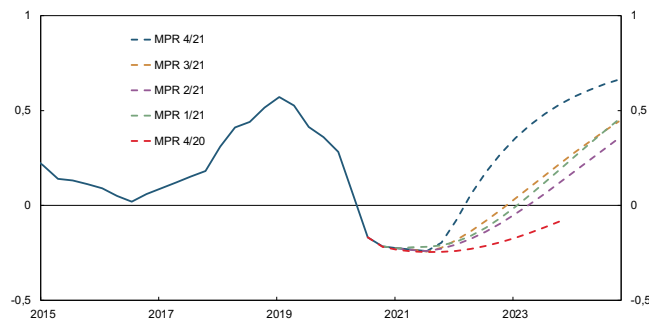
Forceful fiscal measures were introduced during the pandemic to dampen the consequences of Covid-19 and the measures to contain it. As economic conditions normalised in 2021, most of the support measures were gradually phased out. When restrictions were reintroduced at end-2021, additional fiscal support measures were also implemented. The Government's wage support scheme for firms affected by the restrictions was expected to curb the rise in unemployment somewhat.

**Chart 1** Policy rate. Projections at different times. Percent. 2015 Q1 – 2024 Q4



Source: Norges Bank

**Chart 2** International money market rates among trading partners. 2015 Q1 – 2024 Q4



Sources: Refinitiv Datastream and Norges Bank

Housing market activity was high through 2021. At the start of the year, high demand and limited housing supply pushed up house price inflation considerably, reflecting low residential mortgage rates and homebuyers' preference for spending a higher share of income on housing. From spring onwards, house price inflation was more moderate, partly owing to expectations of higher lending rates.

Higher energy prices led to a substantial increase in 12-month CPI inflation towards the end of 2020 and into 2021. After inflation declined through spring, a renewed rise in energy prices pushed up 12-month CPI inflation again. Electricity prices increased markedly during autumn and contributed to a further rise in inflation. In December, 12-month CPI inflation was 5.3%. Annual CPI inflation for 2021 was 3.5%, which considerably reduced real disposable income. Electricity and fuel futures prices indicated that 12-month energy price inflation would moderate after the turn of the year and that CPI inflation could be somewhat lower into 2022. Longer-term inflation expectations appear to remain anchored close to the 2% target.

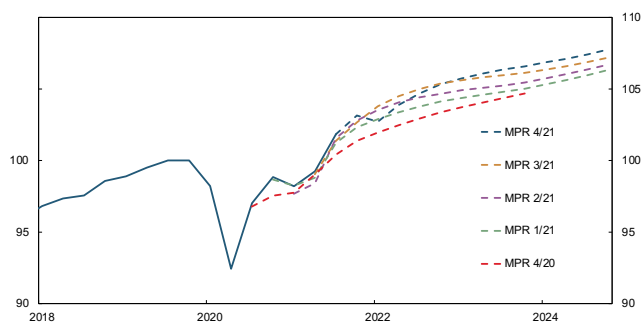
Underlying inflation, as measured by the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE), slowed gradually from summer 2020. In summer and autumn 2021, 12-month CPI-ATE inflation was about 1%. Towards the end of the year, the rise in prices picked up for both imported goods and domestic goods and services. In December, 12-month CPI-ATE inflation was 1.8%. The 12-month rise in other indicators of underlying inflation in the last months of 2021 was somewhat higher than CPI-ATE inflation. Annual CPI-ATE inflation was 1.7% in 2021.

According to Statistics Norway, annual wage growth was 3.5% in 2021, which is somewhat higher than the estimate given at the end of the year.

### Monetary policy trade-offs

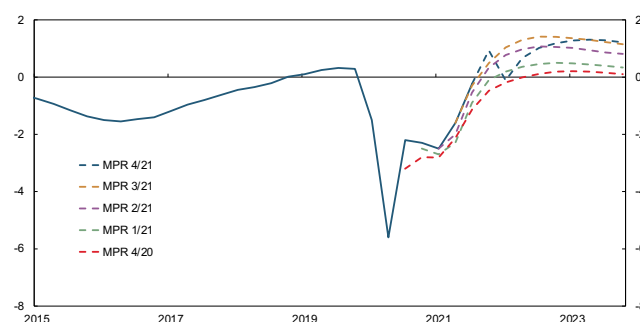
The operational target of monetary policy is annual consumer price inflation of close to 2% over time. Inflation targeting shall be forward-looking and flexible so that it can contribute to high and stable output and employment and to counteracting the build-up of financial imbalances.

**Chart 3** GDP for mainland Norway. Index. 2019 Q4 = 100. 2018 Q1 – 2024 Q4



Sources: Statistics Norway and Norges Bank

**Chart 4** Estimated output gap. Percent. 2015 Q1 – 2024 Q4



Source: Norges Bank

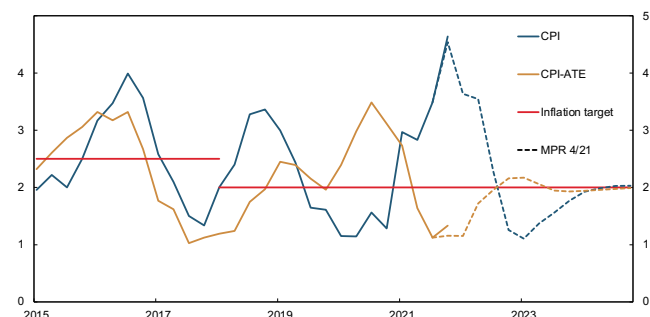
The policy rate was reduced to 0% in spring 2020. In its discussions of the monetary policy trade-offs through 2021, the Committee gave weight to the economic situation, with the Norwegian economy in the midst of a severe downturn, and low interest rates contributing to a more rapid return to more normal output and employment levels. The rapid recovery in economic activity has likely mitigated the risk that the downturn will have a more prolonged impact on the economy. As the economy normalised through the year and the labour market improved, the Committee assessed that there was no longer a need for the same degree of monetary accommodation.

A stronger krone and moderate wage growth resulted in underlying inflation that was below target in 2021. Increased global inflation, high freight rates and signs of rising wage growth lifted projections for inflation ahead further out in the year. The Committee gave weight to the consideration of stabilising inflation around the target somewhat further out, which suggested raising the policy rate towards a more normal level.

In its discussion of the balance of risks, the Committee members were conscious of the considerable uncertainty regarding the evolution of the pandemic. Towards the end of 2021, there was considerable uncertainty about the new Omicron variant and the duration of the containment measures that would be necessary. The Committee also gave weight to the risk of a build-up of financial imbalances, particularly in the first half of the year when house price inflation was still high. The Committee also judged that capacity constraints in the economy and persistent global price pressures might lead to higher-than-expected wage and price inflation.

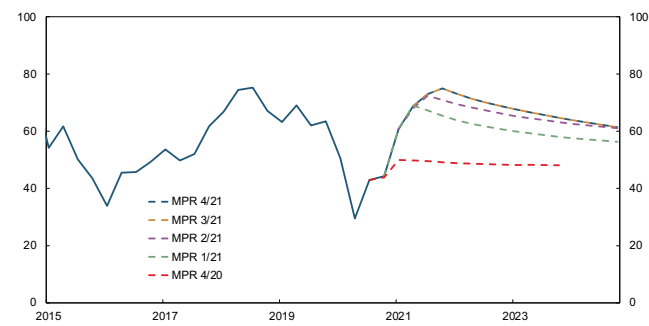
The policy rate path was gradually revised up through the first half of 2021. The rate paths in both March and June indicated that the first rate hike would occur in the latter half of 2021. At the meeting in September, the policy rate was increased from zero to 0.25%. The policy rate path was also revised up further, indicating a further policy rate increase in December.

**Chart 5** Consumer prices. Projections in MPR 4/21. Four-quarter change. Percent. 2015 Q1 – 2024 Q4



Sources: Statistics Norway and Norges Bank

**Chart 6** Oil prices. Spot and futures prices. USD per barrel. 2015 Q1 – 2024 Q4



Source: Refinitiv Datastream

At the December meeting, the policy rate was increased to 0.5%, while the policy rate path was little changed. The projections in the December 2021 *Monetary Policy Report* implied a gradual rise in the policy rate to around 1.75% over the coming years. With such a rate path, there were prospects that underlying inflation would be close to target in the course of 2022. Capacity utilisation was projected to fall in the near term but remain above a normal level in the years ahead.

#### Financial stability and the decision basis for the countercyclical capital buffer

The countercyclical capital buffer (CCyB) was reduced from 2.5% to 1% early in the pandemic in 2020. On the advice of the Committee in June 2021, the Ministry of Finance decided to increase the CCyB rate to 1.5%, effective from 30 June 2022. On 10 September 2021, Norges Bank was given decision-making authority for the CCyB and formal advisory responsibility for the systemic risk buffer. The systemic risk buffer is intended to address long-term systemic risk, while the purpose of the CCyB is to enhance banks' resilience in periods when financial imbalances are building up or have built up. These two buffer requirements constitute a substantial portion of banks' total capital requirements. The Committee sets the CCyB rate each quarter and will advise on the systemic risk buffer at least every other year, beginning in 2022.

Prior to the outbreak of the pandemic, the Committee's assessment was that imbalances were no longer building up. House price inflation had been moderate for several years, and household debt ratios had levelled off. During the pandemic, residential and commercial property prices increased sharply, and household credit growth picked up. In the latter half of 2021, the rise in property prices was more moderate, partly owing to higher expected lending rates. The Committee's assessment was that the consideration of financial imbalances suggested a higher CCyB rate and that banks had the capital and liquidity to maintain credit supply. The Committee decided to increase the CCyB rate to 2% with effect from 31 December 2022.

The Committee expected that the rate would be increased to 2.5% in the first half of 2022, taking effect one year later.

In *Financial Stability Report 2021*, the Norwegian financial system was assessed as having weathered the pandemic well. The gradual reopening of society has, along with government support measures, helped to keep bank losses low. Financial system vulnerabilities in Norway persist, but have been met by measures to increase resilience, including capital and liquidity requirements for banks and credit standard requirements. At the same time, the risk of shocks, particularly from abroad, constitutes a threat to financial stability. In the *Report*, the uncertainty regarding the further evolution of the pandemic was assessed as having diminished in 2021 compared with 2020. Norwegian banks are resilient and have ample loss-absorbing capacity.

The Committee still considers high household debt to be the main structural vulnerability in the Norwegian financial system. Household leverage is high both historically and compared with other countries. High household debt in Norway reflects conditions such as elevated house prices and a large proportion of home ownership.

The Committee is concerned about the impact of climate change and the transition to a low-carbon economy, which will affect all segments of society, including the financial system. An abrupt transition could entail a risk to financial stability. The transition to lower greenhouse gas emissions and new regulations entails a transition risk for the Norwegian economy in the years ahead. Within their mandates, central banks and financial supervisory authorities can promote financial stability by ensuring that all financial risks are backed by sufficient capital and by contributing to the inclusion and communication of climate risk in financial sector risk assessments and financial reporting.

## Norges Bank's monetary policy strategy

In December 2021, Norges Bank's Monetary Policy and Financial Stability Committee adopted a monetary policy strategy.

The strategy describes the Committee's interpretation of the monetary policy mandate and provides a framework for the Committee's assessment of how monetary policy will respond to different shocks. The strategy is summarised below and is published in full on Norges Bank's website.

The operational target of monetary policy is annual consumer price inflation of close to 2% over time. Inflation targeting shall be forward-looking and flexible so that it can contribute to high and stable output and employment and to counteracting the build-up of financial imbalances.

### Low and stable inflation

When setting the policy rate, Norges Bank aims to stabilise inflation, as measured by the annual rise in the consumer price index (CPI), around the 2% target. Provided there is confidence in low and stable inflation, variations in inflation around the target are not likely to engender any significant economic costs. How quickly the Bank seeks to return inflation to target will depend on the shocks that have occurred and whether there are conflicts between achieving the inflation target and the other monetary policy considerations. In interest rate setting, the bank gives weight to avoiding large and persistent deviations from the inflation target, whether above or below the target.

### High and stable output and employment

Monetary policy can contribute to stabilising output and employment around the highest level consistent with price stability over time.

The economic costs of cyclical fluctuations are asymmetrical. High unemployment involves direct costs to both society and those unable to find employment. Very low unemployment, on the other hand, does not involve any direct costs, only potential indirect costs in the form of excessively high wage and price inflation. The Bank will therefore not aim to quickly close a positive output gap as long as there are prospects that inflation will remain within a range close to 2% and there are no signs of financial imbalances accumulating.

By preventing downturns from becoming deep and protracted, monetary policy can contribute to keeping unemployment from becoming entrenched at a high level so that the average level of employment over time is as high as possible.

### Mitigating the build-up of financial imbalances

If there are signs that financial imbalances are building up, the consideration of maintaining high and stable output and employment may in some situations suggest keeping the policy rate somewhat higher than otherwise. This can to some extent mitigate the risk of a severe downturn further out. Nevertheless, the regulation and supervision of financial institutions are the most important tools for cushioning shocks to the financial system.

### Response pattern

The policy rate influences inflation and the real economy with a lag, and the effects are uncertain. To reduce the risk of monetary policy contributing to economic instability, Norges Bank will normally respond less forcefully to shocks than if there had not been uncertainty about the transmission of monetary policy. Furthermore, the policy rate is normally changed gradually to make monetary policy more predictable and to reduce the risk of undesirable financial market volatility and unexpected reactions from households and firms. In situations where the risk of particularly adverse outcomes is pronounced, or if there is no longer confidence that inflation will remain low and stable, it may be appropriate to react more forcefully than normal in interest rate setting.



Norges Bank's Monetary Policy and Financial Stability Committee  
Oslo, 9 February 2022



**Øystein Olsen**  
Governor / Chair of the Executive Board



**Ida Wolden Bache**  
First Deputy Chair



**Øystein Børsum**  
Second Deputy Chair



**Ingvild Almås**



**Jeanette Fjære-Lindkjenn**



# 3 Sustainability and corporate social responsibility

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Through its management of the Government Pension Fund Global, Norges Bank is a major investor in global capital markets.

# Mission and sustainability strategy

Our work on sustainability and corporate social responsibility is essential for the fulfilment of our mission in line with legislation and society's needs.

Norges Bank's mission is to promote economic stability in Norway and manage the assets in the Government Pension Fund Global (GPFG) with the objective of achieving the highest possible return within the limits of acceptable risk. Norges Bank is committed to maintaining high ethical standards, respecting human rights, being socially responsible and complying with applicable laws and regulations.

Through its management of the GPFG, Norges Bank is a major investor in global capital markets. The Bank can exert most influence on environmental and social conditions and anti-corruption through its responsible investment activities. The Bank engages in responsible management of the GPFG and the foreign exchange reserves through for instance dialogue with the companies in the investment portfolio, voting at general meetings and the exclusion of companies on the basis of established guidelines.

## Sustainability strategy

Norges Bank's sustainability strategy is divided into three main areas with specified objectives for each area. The full strategy plan can be found on Norges Bank's website.

## Climate change and the environment

- We are committed to reducing emissions from our own operations in line with the goals of the Paris Agreement.
- We will assess and manage climate-related and environmental risks in investment management to promote long-term value creation and be a global leader in responsible investment.
- We will work to improve our understanding about how climate change affects economic developments and stability.

## Society and social conditions

- We will promote a culture of diversity, inclusion and equal opportunities.
- We will promote professional development so that staff enjoy their jobs, feel challenged and have the expertise to meet the challenges of the future.
- We will promote human rights and labour rights through our procurement and supply chain management processes.

## Governance, ethics and culture

- We will enable our staff and partners to make sustainable choices.
- We will report on our work to promote sustainability in line with best practice.
- We will support the development of standards for well-functioning markets, good corporate governance and responsible business conduct.

## Reporting in accordance with Section 3-3c of the Accounting Act

Norges Bank is subject to Section 3-3c of the Accounting Act. We are required to "report what the undertaking does to integrate human rights, labour rights, equality and non-discrimination, social conditions, environmental considerations and anti-corruption work into its business strategies in its day-to-day operations and in relation to its stakeholders". The Bank fulfils this requirement through this report.

The report follows the same structure as the sustainability strategy: climate change and the environment, governance, ethics and culture, and society and social conditions.



# Climate change and the environment

Climate change and mitigation measures affect the economy and the financial system and therefore also influence how we work on our core tasks.

## Work on climate change and climate risk at Norges Bank

Global warming is leading to more extreme weather and gradually rising sea levels. The Paris Agreement aims to limit global warming to below 2°C, and preferably no more than 1.5°C. To achieve this, emissions must be substantially reduced. Norway aims to reduce its greenhouse gas emissions by 55% from the 1990-level by 2030 and to be a low-carbon society by 2050. In order to achieve these goals, the economy must be restructured, which requires policy measures, preference changes and investment in technology.

Climate risk refers to risks brought by future physical climate change and transition risks that may occur as we move towards a low-carbon society. Climate risk has long been on the agenda in the management of the GPFG. In recent years, other areas of the Bank have carried out analyses of the impact of climate change on macroeconomic developments and financial stability. Nevertheless, there is still a great deal we do not know about the economic and financial implications of a changing climate. Going forward, strengthening our expertise on climate-related issues will be in focus across all the Bank's tasks and mandates.

The most widely recognised framework for climate risk reporting has been prepared by the Task Force on Climate-related Financial Disclosures (TCFD). The TCFD was appointed by the G20 countries' Financial Stability Board in 2016 and submitted its recommendations in 2017. The recommendations specify how organisations should work

with and report on climate risk and governance. Norges Bank supports the intention of the recommendations and believes that the framework can contribute to more universal and consistent reporting across jurisdictions. Based on the TCFD, the Network for Greening the Financial System (NGFS) has prepared recommendations for central banks. Norges Bank contributed to this work.

In connection with the annual UN Climate Change Conference (COP26), Norges Bank published a statement presenting the Bank's ambitions for its climate-related work.

## Work on climate change and climate risk in central banking operations

A good understanding of how climate change and the transition to a low-carbon society affect the economy and the financial system is an important premise for central banks to be able to conduct monetary policy and promote financial stability in a sound manner.

The NGFS is a network for central banks and supervisory authorities, and Norges Bank became a member in 2018. The network provides a forum for sharing experiences and best practices, performs analyses and designs methods for managing environmental and climate risk relevant to the financial authorities and the financial sector. Norges Bank will continue its close cooperation with international organisations such as the NGFS, BIS, IMF and other central banks to strengthen our common understanding of the macroeconomic effects of climate change.

In 2021, Norges Bank organised a [Nordic workshop](#), “Climate change and central banking – a Nordic perspective”, to share views and experience on how central banks can work with climate-related issues.

### **Climate change and monetary policy**

Measures to reduce greenhouse gas emissions will affect the structure of the economy and thereby the monetary policy stance. In addition, the increased global frequency of extreme weather events generated by climate change may also affect the Norwegian economy and make monetary policy trade-offs more demanding. The policy rate is not suitable as an instrument to mitigate the effects of climate change, but in periods of structural changes and considerable uncertainty owing to climate-related changes, it may be even more important for monetary policy to contribute to price stability and stability in the real economy.

Norges Bank is working to increase our understanding of how climate-related changes affect the Norwegian economy and monetary policy.<sup>1</sup> In 2021, we explored how enterprises in our Regional Network are affected by climate-related changes<sup>2</sup> and analysed the effect of the climate transition on mainland investment.<sup>3</sup> As the climate transition is largely an energy transition, we have also devoted special attention to energy market analysis.<sup>4</sup>

### **Climate risk and financial stability**

An important part of Norges Bank’s mission is to promote a robust financial system.

A rapid and abrupt restructuring could involve a risk to financial stability. The transition to lower greenhouse gas emissions and new regulation entails transition risk for the Norwegian economy in the years ahead. High-emission firms will have the greatest need for restructuring, and banks with large exposures to these firms will thus be most vulnerable to transition risk. Analyses published by Norges Bank in 2021 show that Norwegian banks’ direct exposure to firms vulnerable to higher carbon prices is moderate.

Banks are also exposed to physical climate risk in that exposures can suffer losses as a result of damage. Damage can also affect the value of collateral used to secure a loan. Analyses of real estate held by banks as collateral show that Norwegian banks’ exposure to “known” physical climate risk is low. However, the consequences of future climate change may be far more wide-reaching than is now assumed. Banks should take such risk into account when assessing new exposures.

Going forward, Norges Bank will continue its work to conduct quantitative assessments of climate risk for Norwegian banks and participate in international efforts to develop new reporting requirements. Norges Bank also participates in the NGFS’s workstream on financial stability.

For more information, see the [Financial Stability Report 2021](#).

### **Climate risk in investment management**

#### **Climate risk and the Government Pension Fund Global**

The GPFG’s exposure to climate risk derives from the potential impact of climate change on the GPFG’s investments, and how companies and authorities take climate change into account and adapt to it. Managing climate risk is part of the responsible management of the GPFG. This is further described in the section “Responsible management of the Government Pension Fund Global”.

Through contributions to the establishment of standards, investors’ expectations and active ownership, Norges Bank seeks to ensure that the companies in the portfolio are well equipped to manage climate transition risks and opportunities. Over the past two years, Norges Bank has been in dialogue with companies that collectively account for about 54% of the GPFG equity portfolio’s carbon footprint. By divesting from particularly high-emission companies, Norges Bank has reduced its exposure to climate risk.

Norges Bank has analysed the carbon footprint of the companies in the portfolio since 2015. The analysis provides insight into the level of carbon emissions from portfolio companies. The analysis can also shed light on risks and

<sup>1</sup> See box in [Monetary Policy Report 1/21](#).

<sup>2</sup> See Brekke, Eger and Erlandsen (2021). (In Norwegian only.)

<sup>3</sup> See box in [Monetary Policy Report 2/21](#).

<sup>4</sup> See Winje (2021), Naug and Winje (2021) and boxes in [Monetary Policy Report 3/21](#) and [Monetary Policy Report 4/21](#).





opportunities across industries. Greenhouse gas emission reporting still varies in frequency and quality and many companies still do not report emissions data.

Based on the GPFG's percentage holdings in each company, total emissions for the GPFG's equity portfolio amounted to 90m tonnes of CO<sub>2</sub>-equivalents in 2021. Emissions from the companies in the GPFG's equity portfolio were 2% lower than in 2020 and 5% lower than for the benchmark index.

The companies in the GPFG's equity portfolio released about 140 tonnes of CO<sub>2</sub>-eq per million USD in revenue. This is referred to as the equity portfolio's carbon intensity. In 2021, it was 4% lower than for the benchmark index.

The difference in estimated carbon intensity between the portfolio and the benchmark index can mainly be attributed to the GPFG's investments in industrials and utilities, which have a lower carbon intensity than the companies in the benchmark index.

The bond portfolio's carbon intensity is 23% lower than the carbon intensity of the benchmark index. This is mainly because carbon intensity for the industrial companies in the GPFG's portfolio is lower than for the industrials in the benchmark index.

As a large, global and diversified investor, Norges Bank benefits from the interaction across markets, the portfolio and the companies. At market level, Norges Bank supports the TCFD framework and promotes sustainability reporting

in line with recognised standards such as the Sustainability Accounting Standards Board and the Global Reporting Initiative. At the portfolio level, Norges Bank reviews its overall exposure and assesses whether the Bank should divest from companies with particularly high risk, within the limits of the mandate. At company level, Norges Bank follows up whether company boards of directors conduct adequate supervision of climate-related risks and opportunities and companies' climate plans.

#### **Property management**

Real estate investments have a longer time horizon than most of the GPFG's other investments. Both rapid onset events such as extreme weather events and more gradual changes such as rising sea levels and flooding can damage the buildings Norges Bank invests in, directly through damage to or closure of buildings or indirectly through negative effects such as higher insurance premiums or altered settlement patterns.

In all the cities where the GPFG has real estate investments, local authorities have legislated specific short- and long-term emission reduction targets. To manage regulatory risk, we measure the emissions from our unlisted real estate investments and work to reduce these emissions. Many of our tenants are international companies aiming to reduce their greenhouse gas emissions. This may motivate them to seek premises in energy-efficient buildings with low emissions. At the end of 2020, 82% of the buildings in our unlisted real estate portfolio had a green building certification.

Going forward, Norges Bank has three clear ambitions for the GPFG's unlisted real estate portfolio: (i) continue to be a global leader in responsible investing, (ii) to increase the share of renewable energy used in the Bank's buildings, and (iii) to prepare Norges Bank's buildings to achieve long-term zero emission goals by working continuously to reduce emissions in the real estate portfolio.

To measure improvement in the management of the real estate portfolio, Norges Bank uses tools such as the global norm for sustainable real estate management, the Global Real Estate Sustainability Benchmark (GRESB). In 2021, the GPFG's real estate portfolio achieved a total score of 84/100, compared with 79/100 in 2020, and outperformed comparable investment portfolios also reporting to the GRESB by 6%.

Another tool is the Carbon Risk Real Estate Monitor (CRREM), which has published emission pathways up to 2050 consistent with the Paris Agreement for various real estate markets. Norges Bank uses this tool to compare the GPFG's real estate portfolio's emissions with the CRREM's emission pathways. For new investments, the Bank also measures historical energy consumption and compares the building's emissions with the CRREM's emission pathways before a decision is made to buy a new building.

#### Climate risk in the foreign exchange reserves

The foreign exchange reserves consist of a fixed income portfolio and an equity portfolio totalling about NOK 600bn. The main purpose of the fixed income portfolio is to ensure that the foreign exchange reserves are sufficiently liquid for Norges Bank to fulfil monetary policy objectives. The fixed income portfolio therefore consists exclusively of sovereign bonds issued by low-risk countries that are deemed to be sufficiently liquid to fulfil the purpose of the foreign exchange reserves. Climate-related issues will therefore have little impact on the composition of the fixed income portfolio.

The Executive Board has decided that the equity portfolio will be managed according to the same principles and strategies for responsible investment as the equity investments in the GPFG.

Based on the percentage holdings in each company, total emissions for the foreign exchange reserves' equity portfolio

amounted to 0.8m tonnes CO<sub>2</sub>-eq in 2021. Carbon intensity, ie emissions in tonnes of CO<sub>2</sub>-eq per million USD in revenue, was 115 tonnes of CO<sub>2</sub>-eq per million USD in 2021.

Norges Bank has divested from a total of 58 companies in the foreign exchange reserves' equity portfolio based on environmental, social and governance risk assessments. An additional 42 companies were excluded from the foreign reserves' benchmark index and 10 companies were put under observation based on ethical guidelines. No new decisions of this kind were made in 2021.

#### Impact of Norges Bank's physical operations on the climate and the environment

##### Carbon accounts

Norges Bank prepares annual carbon accounts for the operation of its own offices. In 2021, several new sources and locations were added. The carbon accounts for previous years have therefore been revised.

Norges Bank's carbon accounts include direct emissions from the use of fossil fuels (Scope 1), indirect emissions from purchases of electricity and heat (Scope 2) and other indirect sources of emissions from purchased goods and services (Scope 3).

**Chart 7** Carbon emissions from Norges Bank's physical operations, in CO<sub>2</sub>-equivalents by source in 2021

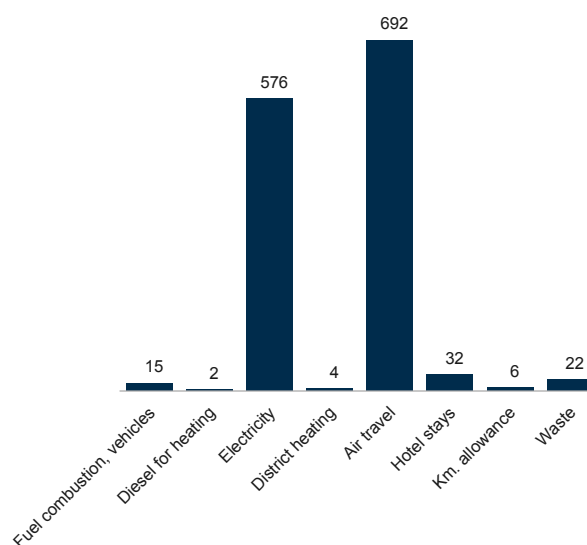


Chart 7 shows emissions in 2021 by emission source. The largest source of emissions was air travel, accounting for 51% of total emissions. Office electricity consumption accounted for 43% of total emissions.

In 2021, Norges Bank's greenhouse gas emissions came to of 1 349 tonnes CO<sub>2</sub>-eq. This is an increase of 4% since 2020 and corresponds to 1.4 tonnes CO<sub>2</sub>-eq per employee.

The decrease in emissions from 2019 to 2020 is largely related to the Covid-19 pandemic. Travel was still limited in 2021, which contributed to keeping Norges Bank's carbon footprint low compared with 2019.

Norges Bank aims to reduce emissions in line with the ambitions of the Paris Agreement and will work systematically on emission mitigation and reduction measures.

The most important ongoing emission mitigation measures are still the use of video conferencing rather than air travel, the replacement of ventilation units and other technical installations with more energy-efficient alternatives and expanding environmental requirements for all relevant procurements.

A number of climate-related and environmental measures have been implemented in recent years. Recycling has increased with the introduction of centralised recycling stations in office areas. More meeting rooms are now equipped for video conferencing. Disposable food and drink containers have been replaced by greener options at Norges Bank's head office and the largest offices abroad.

The goal is to further develop the carbon accounts over time by including an increasing number of sources, such as emissions from the operation of data centres. Norges Bank requires data centres to be constructed and operated in an eco-friendly manner to ensure efficient resource utilisation and use of renewable sources.

#### Eco-lighthouse

Norges Bank is certified under the Eco-lighthouse certification scheme<sup>5</sup>. The certification applies to the operation of the Bank's head office at Bankplassen 2 in Oslo and provides access to tools for measuring and improving the Bank's environmental performance.

Norges Bank's physical operations at the Oslo office will be re-certified during the first quarter of 2022, and new criteria for banking and finance developed by Eco-Lighthouse will be included.

**Table 2** Annual carbon accounts for Norges Bank for 2019, 2020 and 2021.

GHG emissions, in tonnes of CO <sub>2</sub> equivalents		2019	2020	2021	Change from 2020–2021
Direct emissions (scope 1)	Fuel combustion, vehicles	20	27	15	-42%
	Diesel for heating	1	3	2	-16%
Indirect emissions, energy (scope 2)	Electricity	772	649	576	-11%
	District heating	4	2	4	156%
Indirect emissions, other (scope 3)	Air travel	8 378	571	692	21%
	Hotel stays	450	20	32	63%
	Km. allowance	11	6	6	10%
	Waste	31	24	22	-11%
<b>Total GHG emissions</b>		<b>9 667</b>	<b>1 300</b>	<b>1 349</b>	<b>4%</b>

<sup>5</sup> See the Eco-Lighthouse certification scheme ([eco-lighthouse.org](https://eco-lighthouse.org))

The most widely recognised framework for climate-risk reporting has been developed by the Task Force on Climate-related Financial Disclosures (TCFD). The TCFD was set up by the G20's Financial Stability Board in 2016 and submitted its recommendations in 2017. The recommendations specify the information that should be disclosed within four areas: governance, strategy, risk management, and metrics and targets. Norges Bank supports the intention of the recommendations and considers that the framework will promote more universal and consistent reporting across jurisdictions. The following section presents an overview of Norges Bank's status for 2021 in relation to the recommendations in the TCFD framework.

## Governance

TCFD requirement: Disclose the organisation's governance around climate-related risks and opportunities, including the role of the Board and management.

Norges Bank's Executive Board has primary responsibility for the strategy process related to climate change and climate risk. Themes related to climate change and the Norwegian economy are discussed by the Monetary Policy and Financial Stability Committee. Norges Bank also has a reference group for climate change and sustainability that is chaired by a deputy governor. The reference group has a key advisory role in the design of the Bank's climate change and sustainability strategy. The strategy, first approved by the Executive Board in 2018, was revised in 2021 to include a broader strategy for sustainability. The new strategy will be integrated into Norges Bank's governance system, implemented by the various departments and specified in action plans.

The Executive Board of Norges Bank has laid down principles for the responsible management of the GPFG, has oversight over the GPFG's strategy and reviews the annual reporting on responsible management.

The Ministry of Finance has established guidelines for the observation and exclusion of companies from the GPFG based on companies' products or conduct. The Council on Ethics, an independent body established by the Ministry of Finance, and Norges Bank are responsible for following up on these guidelines. Norges Bank's Executive Board decides which companies to observe or exclude from the GPFG based on recommendations from the Council on Ethics. By not investing in such companies, we reduce the Bank's exposure to unacceptable risk, including climate risk.

The Executive Board has established a preparatory and advisory ownership committee for matters pertaining to the GPFG's responsible investment activities and decisions regarding observation and exclusion. The same principles and process for responsible investment management are applied in the management of the equity portfolio of the foreign exchange reserves.

## Strategy

TCFD requirement: Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses and strategy.

Norges Bank's sustainability strategy sets out how the Bank will assess and manage climate-related and environmental risks in its investment management in order to promote long-term value creation and be a global leader in responsible investment management. Climate change is one of many risk factors affecting the management of the GPFG and the foreign exchange reserves. The GPFG is a broadly diversified and market-weighted portfolio and will generally have the same financial climate risk profile as the underlying markets and sectors it is invested in. The GPFG also has dedicated environment-related investment mandates.

Norges Bank's investments will be well positioned to face climate change, and the Bank will integrate climate and environmental considerations further in the investment process. Norges Bank places particular weight on developing strategies to analyse and manage climate risk and on being a driving force for effective reporting standards for climate risk.

The strategy also calls for an increased understanding of the effects of climate change on economic developments and stability and for the further development of analyses examining climate-related impacts.

## Risk management

TCFD requirement: Disclose how the organisation identifies, assesses and manages climate-related risks.

In 2021, Norges Bank continued its efforts to increase its understanding of climate risk in the organisation. A suite of complementary tools is used to identify and assess climate risk to which the GPFG is exposed. An assessment of climate change as a financial risk to the GPFG was presented in a paper published in August.

The GPFG's equity portfolio has been stress-tested against the Paris Agreement goals. Using tools such as the Climate Value-at-Risk MSCI-tool, climate scenarios have been constructed for temperature rises of 1.5°C, 2°C and 3°C in the period to 2080. When today's equity portfolio is stress-tested against these scenarios, we find that the point estimates for long-term losses are between 1% and 9%, or between NOK 100bn and NOK 800bn, respectively, given the current value of the GPFG. There is considerable uncertainty surrounding each of the point estimates, and actual outcomes may be very different. More detailed information can be found in the *Responsible Investment Government Pension Fund Global* report.

The carbon footprint of the GPFG and the carbon intensity of investments are estimated annually and carbon emission profiles for all the portfolio companies are analysed. In 2021, for instance, 1 500 analyses were conducted of the reporting by portfolio companies in climate-exposed

industries to assess whether these companies were equipped to manage climate risk. For more detailed information, see the section on responsible investment in the GPFG.

Climate risk is discussed in the *Financial Stability Report 2021*, which presents a quantitative assessment of Norwegian banks' climate risk. Borrowers that are not resilient to climate change and the transition to a low-carbon economy pose a risk to the banking sector. Norwegian banks must be prepared for the potential impact of climate change and climate policy measures on their exposures.

## Metrics and targets

TCFD requirement: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Norges Bank has measured and published the carbon footprint of the GPFG's equity portfolio since 2015. We follow the TCFD's recommendations for asset managers when we calculate the GPFG's carbon footprint and the carbon footprint of the foreign exchange reserves equity portfolio. As the understanding of the implications of climate change for financial investments develops further, the GPFG will explore how specific climate-related targets can contribute to the efficient management of these risks. For more information, see the section on responsible management of the GPFG and the responsible investment report.

Norges Bank follows up and measures carbon emissions from its own physical operations. For more details, see Norges Bank's carbon accounts on page 11.



# Corporate governance, ethics and culture

Norges Bank is committed to maintaining high ethical standards, respecting human rights and being socially responsible. The Executive Board has laid down ethical principles for the Bank's employees and principles for responsible investment.

## Responsible business conduct

Norges Bank's Executive Board has laid down ethical principles designed to foster a common attitude towards ethical issues among all Norges Bank's employees. The principles state that the Bank must maintain a high level of ethical standards, respect human rights, be socially responsible and comply with applicable laws and regulations. The rules include employees' own-account trading, activities outside the bank, gifts, and loyalty to the bank in general.

The Ministry of Finance has laid down its own rules on impartiality for members of Norges Bank's Executive Board and members of the Monetary Policy and Financial Stability Committee. The Executive Board has adopted its own supplementary rules on, among other things, impartiality and restrictions on own-account trading for the external members of these two bodies.

Norges Bank has zero tolerance for all forms of corruption. An anti-corruption framework and programme have been established that includes executive-level support, risk management, ethical rules, processing of whistleblower reports, procurement procedures, background checks of staff and suppliers, financial reporting and systematic training and controls. In 2021, 519 of NBIM's operational support employees took part in training focused on handling conflicts of interest and anti-corruption. There were no confirmed incidents related to corruption in 2021.

Norges Bank attaches considerable importance to training and raising awareness of the most important ethical risk

areas. Measures include one-to-one training and introductory courses on dilemma training, annual tests and confirmation of test completion from all employees, and a dedicated training programme for all new employees.

The Executive Board has laid down principles for internal whistleblowing on misconduct at Norges Bank. Whistleblowing procedures have been established so that Bank staff and employees of the Bank's suppliers can report unethical or illegal behaviour anonymously. All whistleblowers are to be treated in an appropriate manner, in accordance with the case processing rules for whistleblowing and external and internal whistleblowing requirements, and without the risk of retaliation against the whistleblower. In 2021, two whistleblowing cases were reported.

## Responsible management of the Government Pension Fund Global (GPF)

The GPF is a responsible investor. The Executive Board has laid down principles for responsible investment management at Norges Bank. The objective of the management of the GPF is to achieve the highest possible return within the limits of acceptable risk. Responsible investment management supports the GPF's objective in two ways: first, by promoting long-term value creation, and second, by reducing the financial risk associated with the environmental and social practices of the portfolio companies.

The management mandate requires work on responsible investment to be integrated into the management of the GPF. The GPF's mission is to safeguard and develop

financial assets for future generations. The GPFG's long-term return depends on sustainable growth, well-functioning markets and good corporate governance. The Bank's work on responsible investment can be divided into three main areas: the market, the portfolio and the companies.

### **Market**

The GPFG is a global fund. It owns a small part of more than 9 000 listed companies worldwide and relies on global solutions to solve common challenges such as climate change.

Norges Bank contributes to the development of relevant international standards. The Bank participates in consultations and has regular contact with international organisations and regulators in the most important markets. In 2021, Norges Bank participated in 14 public consultations related to responsible investment management. All consultation responses are published on the GPFG's website [www.nbim.no](http://www.nbim.no). The consultations concern important issues such as good corporate governance, climate-related reporting and responsible business conduct.

Norges Bank supports initiatives where companies or investors join forces to find common standards for sustainable business conduct. Such initiatives work best when several companies in one industry or value chain face the same challenge.

Since 2008, Norges Bank has formulated clear expectations of portfolio companies on how they address relevant global challenges in their operations and how boards of directors should establish appropriate strategies, control functions and reporting procedures. Expectations form the basis for dialogue with the companies, and the companies' work is measured against these expectations on an annual basis. In 2021, Norges Bank presented new expectations on how companies should take biodiversity and sustainable use of ecosystems into account in their business activities. Expectations concerning climate change and children's rights were also updated through the year. As part of Norges Bank's work on nature-related issues and biodiversity, NBIM became a member of the Taskforce on Nature-related Financial Disclosures (TNFD) in 2021. The TNFD was launched in June 2021 as an industry initiative aimed at

developing a framework for reporting and managing nature-related risks.

In addition, Norges Bank published a new position paper on board diversity. Diversity gives the board of a company other perspectives and different approaches that can contribute to better decisions. Board diversity can also strengthen the credibility of the company. The board should have a formal nomination process to identify potential candidates who can contribute to diversity. Boards where each gender is not represented by at least 30% should consider setting targets for gender diversity and report on progress towards this goal.

### **Portfolio**

Norges Bank assesses corporate governance and sustainability in order to gain a better understanding of risks and opportunities in the GPFG's investments. The Bank monitors how the portfolio is exposed to risks and identifies industries and companies for further follow-up.

Norges Bank encourages companies to move from words to numbers in their reporting to provide a better understanding of financial opportunities and risks. Performing analyses requires relevant, comparable and reliable data on environmental, social and governance conditions. The Bank analyses carbon emissions from companies in the portfolio and various climate scenarios for the GPFG.

Norges Bank annually assesses companies' reporting on governance structure, strategy, risk management and objectives based on the GPFG's published expectations of portfolio companies. Norges Bank completed a total of 4 196 such assessments in 2021, comprising 1 500 assessments of reporting on climate change, 701 on human rights, 500 on children's rights, 500 on water management, 250 on anti-corruption and on sustainable use of marine resources, 268 on deforestation, 200 on tax and 27 on biodiversity.

The companies assessed accounted for 75.8% of the equity portfolio's market value at the end of the year. Companies with poor or limited reporting are contacted and encouraged to improve their reporting by, among other things, participating in established reporting initiatives. In 2021, letters were sent to 110 companies about their reporting across the expectation areas.



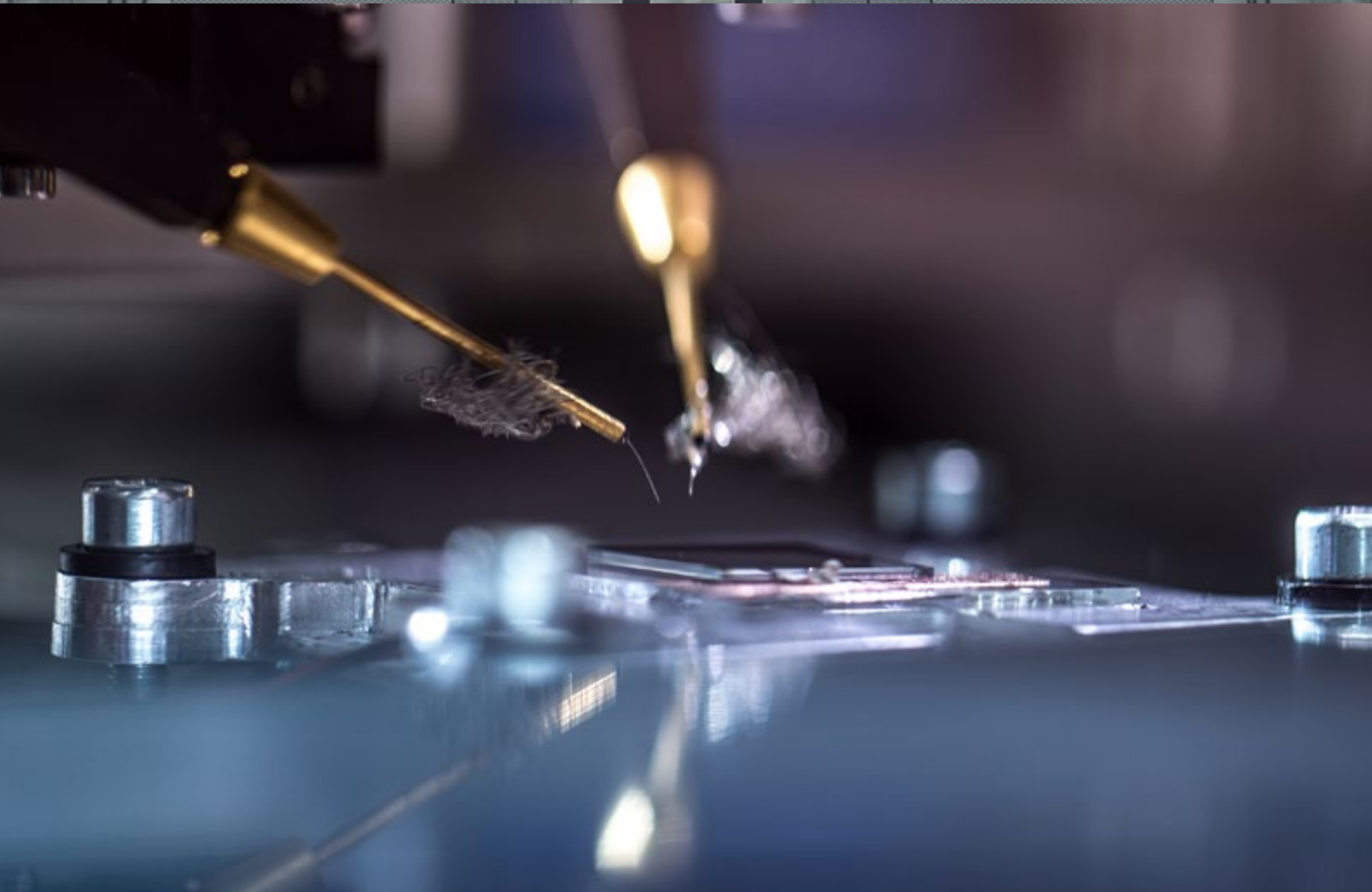
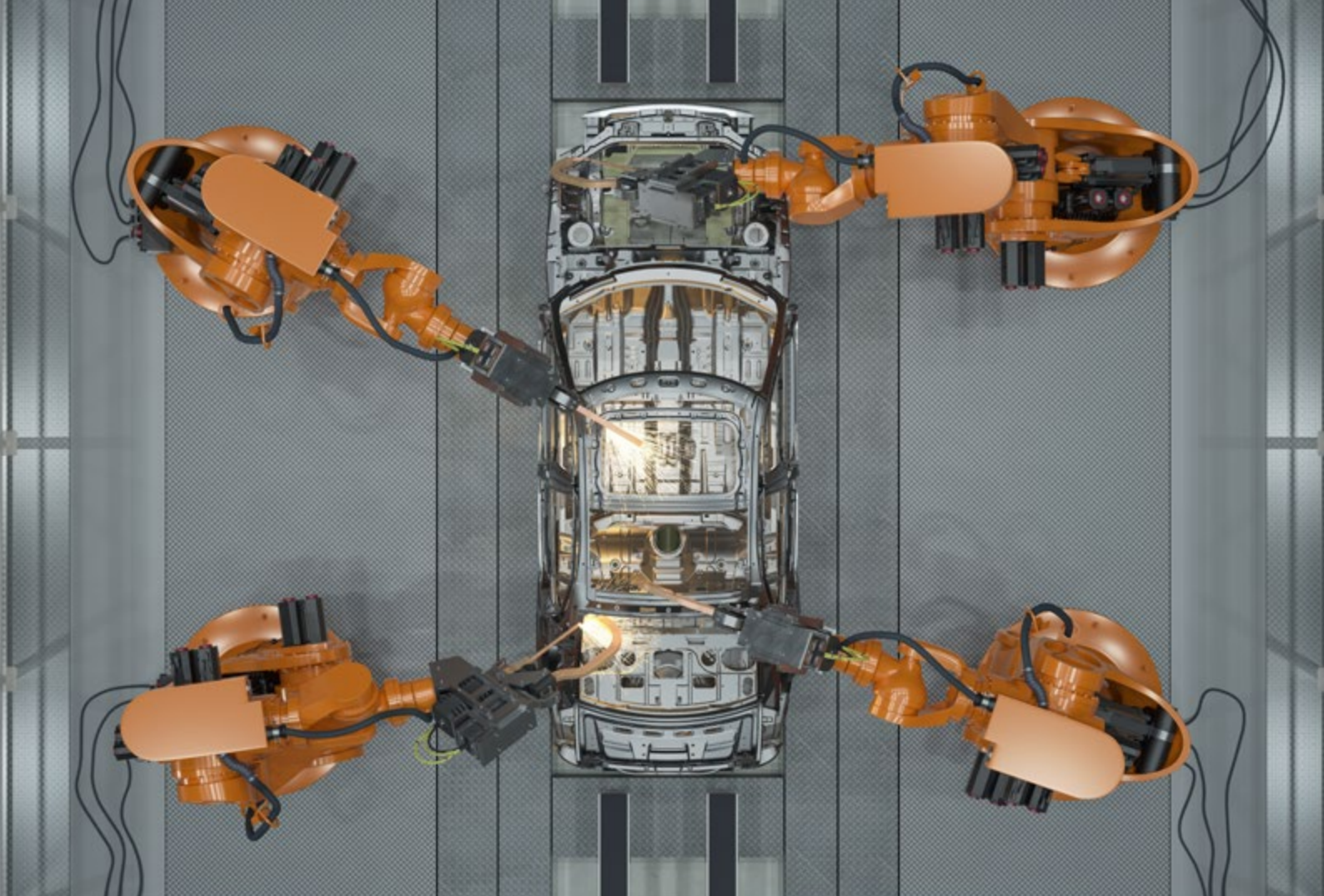
A larger improvement was observed on average among the companies contacted about poor sustainability reporting in 2021 than among those that were not contacted. The companies contacted improved on average by 11.9 percentage points. Overall, the companies improved by 4.7 percentage points. The companies that improved most were contacted about climate change, human rights and the sustainable use of marine resources and those that improved least were contacted about water management, tax and transparency. Overall, an improvement was observed in 64.9% of the companies contacted.

Norges Bank has three main approaches to identifying and managing risks associated with environmental, social and governance issues in the portfolio. The first is pre-screening companies due to enter the GPF's benchmark index for equities. The second is continuous monitoring of companies in the portfolio through daily analyses of news reports, as well as more in-depth thematic analyses of specific markets and sectors. The third approach is conducting annual due diligence on the portfolio companies, assessing them against the expectations Norges Bank sets for sustainability.



Norges Bank assesses corporate governance and sustainability to gain a better understanding of risks and opportunities in the GPF's investments.

Carine Smith Ihenacho, Chief Governance and Compliance Officer at Norges Bank Investment Management.



When Norges Bank identifies high-risk companies, further analyses are conducted to assess whether dialogue should be initiated with the company, the Bank's voting should be changed, or whether the company should be considered for risk-based divestment.

In emerging markets, the GPFG can also benefit from external managers' in-depth knowledge of the markets, industries and companies in which the GPFG is invested. This is especially important as it can often be more difficult to obtain relevant company data in emerging markets.

Norges Bank identifies long-term investment opportunities by analysing companies' activities and impacts on the climate and the environment and sees potential in companies that contribute to a greener economy. These investments can have positive ripple effects for other companies and society as a whole, such as lower emissions, lower energy costs and more efficient use of resources. Companies producing such technology will be able to take advantage of changes in demand and market regulation. The GPFG invests in such companies for instance through environmental mandates that are managed internally.

At year-end 2021, the GPFG had invested NOK 107.7bn in shares in 86 companies through the environmental mandates. This resulted in a return of 21.6% in 2021. Since the GPFG's inception in 2010, the annualised return on equity investments has been 10.4%.

The GPFG invests in three main types of environmental activity, and at least 20% of a company's operations must be in one of these in order for the company to be included in the GPFG's environmental investment universe: 1) low-carbon energy and alternative fuels, 2) clean energy and energy efficiency and 3) natural resource management.

Norges Bank can divest from companies in order to limit the GPFG's exposure to unacceptable risk. This applies in particular to activities that inflict substantial costs on other companies and society as a whole and that are therefore not sustainable in the long term. Risk-based divestment may be appropriate if the GPFG considers that the company poses particularly high long-term risk, if the GPFG's investments are not substantial and if active ownership is not regarded as an appropriate tool.

In 2021, Norges Bank divested from 52 companies following risk assessments related to environmental, social and governance issues. The GPFG has divested from a total of 366 companies since 2012. Risk-based divestments have contributed positively to the cumulative return on equity investments by about 0.44 percentage point, or 0.02 percentage point annually, since 2012.

## Companies

As a long-term investor, the GPFG is in regular dialogue with the largest companies to promote good corporate governance and responsible business conduct. The GPFG held a total of 2 628 meetings with 1 163 companies and had written contact with 486 companies in the portfolio in 2021. The size of the GPFG's investments provides access to board members, senior executives and specialists in the companies. The GPFG is interested in understanding how companies are governed and how they address key sustainability issues. In addition to meetings, the GPFG also communicates with portfolio companies in writing.

Voting is one of the most important tools the GPFG has as a shareholder to safeguard the GPFG's assets. At the end of 2021, the GPFG held a stake in 9 338 companies worldwide.

Norges Bank voted on 116 525 matters at 11 601 general meetings in 2021. The GPFG voted in line with the board's recommendation in 95.2% of matters and 72.9% of general meetings. This was on a par with the Bank's voting in 2020. The GPFG aims to be consistent and predictable in its voting at companies' general meetings so that the voting decisions made can be explained with reference to the GPFG's principles and so that companies can understand why the GPFG votes as it does. The voting guidelines are publicly available.

In 2021, the GPFG began publishing its vote five days before general meetings. The GPFG's voting intentions are available on the website, [www.nbim.no](http://www.nbim.no). Users can search for individual companies or download the full dataset of the GPFG's votes since 2013 and get daily updates on voting intentions five days before a company's general meeting.

The Ministry of Finance has laid down guidelines for the observation and exclusion of companies from the GPFG based on the companies' products or conduct. The Council on Ethics and Norges Bank are responsible for following up these guidelines. The Council on Ethics is an independent body established by the Ministry of Finance. Decisions concerning the observation and exclusion of companies from the GPFG are made by Norges Bank's Executive Board, based on recommendations from the Council on Ethics. By not investing in such companies, the GPFG reduces its exposure to unacceptable risks that could undermine the GPFG's credibility. In 2021, Norges Bank excluded 12 companies, placed three new companies under observation and decided to exercise active ownership in the case of one company. In addition, the Bank revoked the exclusion of five companies and ended the observation of four companies. Further details on responsible investment can be found in the Bank's *Responsible Investment Report*.



# Society and social conditions

Norges Bank's employees are the heart of the organisation. The Bank aims to have a working environment of mutual respect, where it is safe to share and challenge each other's views and where there are equal opportunities for everyone.

Norges Bank works systematically to attract and recruit top candidates from leading national and international institutions. The Bank promotes continuous career development, including through targeted courses and study programmes. To further develop the organisation, the Bank aims to achieve gender balance and to actively make use of the advantages provided by a high degree of diversity in the workforce.

At year-end 2021, Norges Bank had 940 permanent employees. Of these, 519 were in Norges Bank Investment Management (NBIM), 264 in Norges Bank Central Banking Operations (NBCBO) and 150 in Norges Bank Administration (NBA). In addition, seven employees worked at the Office of the Supervisory Council. The Bank has employees from a total of 33 nations and offices in Oslo, London, New York, Singapore and Shanghai.

## Equality and diversity

Norges Bank aims to be recognised as a leading institution in its fields of expertise and believes that increased diversity and inclusion make us better. We believe that diversity promotes a wider range of perspectives, increased creativity and better decisions.

The Bank seeks diversity in the form of knowledge, experience and perspectives by hiring across nationalities, gender, age, background and education. In order to strengthen this work, a diversity and inclusion initiative was established across the Bank's operational areas in 2020. Collaboration with external organisations and networks provides a valuable exchange of experience and the

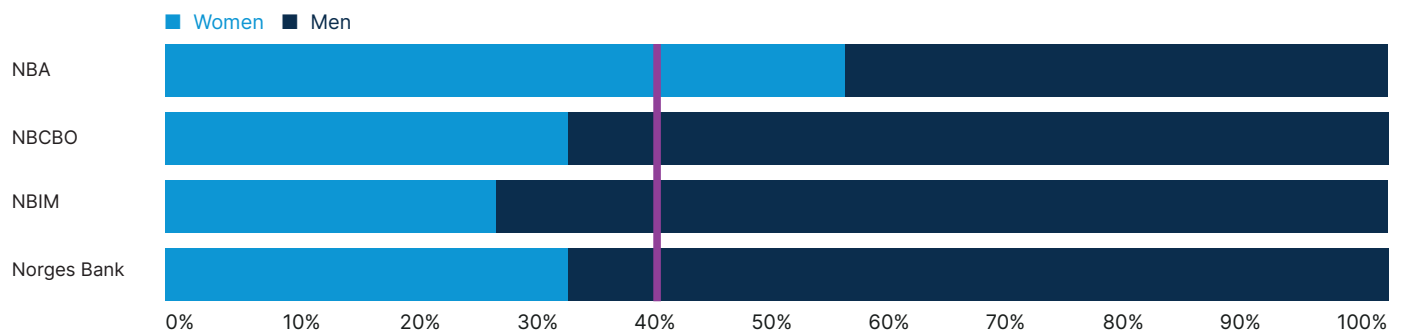
opportunity to learn from the best. Various activities and initiatives focusing on diversity and inclusion are undertaken annually, including celebrating International Women's Day and Pride, as well as events in connection with World Mental Health Day.

The main areas for measures to promote diversity are reputation management, recruitment, career development, flexibility and the working environment.

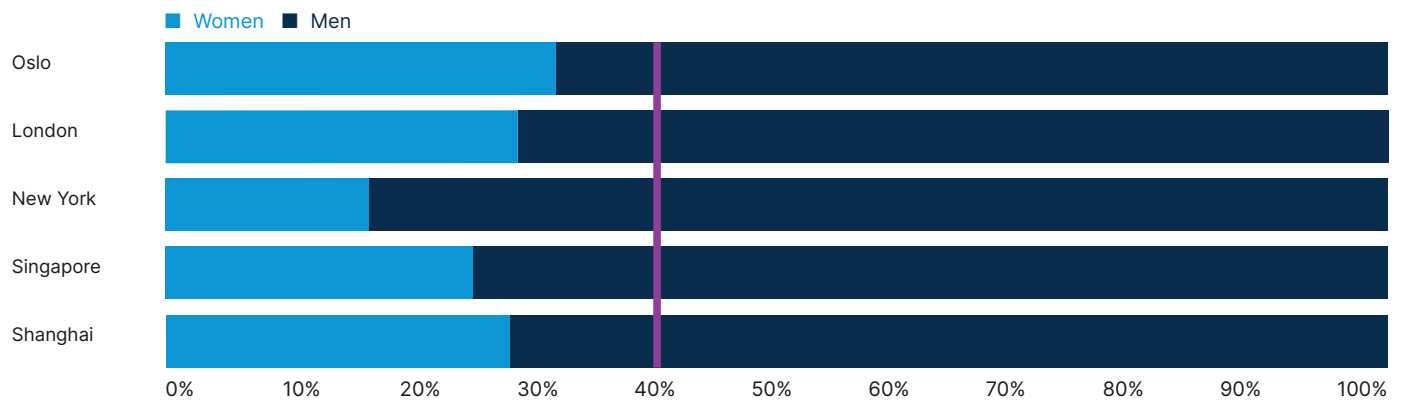
The Bank works systematically to ensure greater diversity in the recruitment process, both among participants in the process and the candidates invited for interview. Job advertisements are designed to attract more diverse candidates, and external recruitment agencies are required to comply with diversity recruiting requirements. Checkpoints have also been established in the hiring process to ensure that applicants are treated on an objective and fair basis, as well as guidelines for wage determination and wage reporting to ensure gender equality.

In 2021, the Bank worked to raise its profile among students and school pupils through the Knowledge Centre and through corporate presentations and lectures, with a particular focus on technology students. Through the Norges Bank Teaching Initiative and NBIM Teach, Bank staff give series of lectures in economics and finance at universities. In addition, a nationwide case competition is held annually for students interested in macroeconomics and the central bank's core tasks. This contributes to increased understanding of and interest in the Bank's tasks

## Gender balance by operational area



## Gender balance by office



and builds public trust. The Bank pursues a conscious strategy to highlight the important role played by female staff in the Bank by ensuring that they are well represented at all events.

In 2021, NBIM re-established its graduate program and established a summer internship program. These attract a wide range of employees. For 2021, the proportion of women offered a place on these programmes was 67% for the graduate program and 40% for the internship program. All employees who participated in the selection process for the programmes were given training in diversity awareness in recruitment.

Norges Bank works systematically to achieve gender balance and to bring the share of each gender to at least 40% in the Bank as a whole. The share of women in Norges Bank at year-end 2021 was 34%, an increase from 33% in 2020 and 32% in 2019.

The proportion of female staff in NBIM was 27%, an increase from 25% in 2020. In recent years, efforts have been made to increase the proportion of women in NBIM. In 2021, 42% of new hires were women, which shows that the strategic work to promote gender balance in recruitment has yielded results.

As part of the Bank's efforts to strengthen the gender balance, Norges Bank signed the Women in Finance Charter in 2021, whose purpose is to increase the proportion of women in leading positions in Norway's financial sector. Then Deputy Governor, now Governor, Ida Wolden Bache is the Bank's representative. By signing the Charter, Norges Bank has committed to:

- setting internal targets for gender balance in leadership and senior positions
- selecting one member of the management team to have dedicated responsibility for gender balance and inclusion
- publishing status and progress reports on the Bank's website
- having an ambition for progress towards the targets to be reflected in leadership remuneration.

### **Salary and compensation schemes**

The Executive Board sets the limits for the Bank's pay and compensation schemes and monitors how they are put into practice. The wage level is expected to be competitive, but not industry-leading.

Salaries are set on an individual basis and reflect the position holder's level of responsibility, tasks, qualifications, experience and performance. Tables 3 to 5 show the Bank's breakdown of the gender balance, fixed salaries and total pay in different job categories at the end of 2021 for permanent employees at the head office. All employees involved in investment decisions are eligible for performance pay irrespective of gender. For data protection reasons, there must be at least five of each gender in a job category to be able to publish pay data. There are too few women in the top categories at NBIM to publish pay data. In the service category, there are too few men. The tables do not include performance pay as there are too few women with performance pay in each category.

Tables 3 to 5 show that there is variation across the operational areas and job categories. Differences in salary between women and men at the executive level, particularly in NBIM, largely reflect the predominance of men in investment management positions. These positions generally offer higher salaries in the market. The differences in pay between men and women at the senior level, particularly in investment management, partly reflect the shorter seniority of women in executive positions. The gender balance reflects the fact that fewer women than men apply for executive positions in the Bank and for positions in the financial sector in general. At the end of the year, the gender balance for the two lowest job categories was in line with the targets in all parts of the Bank. The Bank will step up its efforts to promote women in middle management positions and its efforts to recruit female candidates from the external market.

**Table 3** Gender balance and salaries in different job categories at Norges Bank.

Norges Bank	Median fixed salary		Share of employees		Wage gap – women's pay as percentage of men's pay
	Men	Women	Men	Women	
Department Director	1 686 000	1 573 000	76%	24%	93%
Head of Section	1 410 000	1 258 000	68%	32%	89%
Special Advisor	1 204 000	1 080 000	71%	29%	91%
Senior Advisor	945 000	900 000	65%	35%	95%
Advisor	700 000	707 000	51%	49%	101%
Executive Officer	713 000	718 000	47%	53%	101%





**Table 4** Gender balance and salaries in different job categories in Norges Bank Central Banking Operations and Norges Bank Administration.

NBCBO and NBA	Median fixed salary		Share of employees		Wage gap – women's pay as percentage of men's pay
	Men	Women	Men	Women	
Department Director	1 511 000	1 502 000	74%	26%	99%
Head of Section	1 166 000	1 187 000	60%	40%	102%
Special Advisor	1 081 000	1 076 000	63%	37%	100%
Senior Advisor	886 000	845 000	58%	42%	95%
Advisor	647 000	669 000	42%	58%	103%
Executive Officer	713 000	718 000	47%	53%	101%

**Table 5** Gender balance and salaries in different job categories in Norges Bank Investment Management.

NBIM Oslo	Median fixed salary		Share of employees		Wage gap – women's pay as percentage of men's pay
	Men	Women	Men	Women	
Head of Section	1 525 000	1 450 000	76%	24%	95%
Special Advisor	1 355 000	1 175 000	86%	14%	92%
Senior Advisor	1 000 000	975 000	73%	27%	99%
Advisor	745 000	745 000	62%	38%	100%



Norges Bank wants to ensure that our colleagues enjoy their jobs, feel challenged and have the relevant expertise to meet the challenges of the future.

### Career development

The Bank works to raise awareness among managers of the importance of ensuring variation in background and experience among employees and giving employees challenging tasks that qualify them for more senior positions. In order to achieve the desired gender balance and retain female staff in the organisation, the Bank is working to ensure equal opportunities for career development, especially in investment and technology. Promotions are discussed in management groups to ensure diversity and equal treatment across areas.

The Bank has a scheme whereby employees gain experience by working temporarily in other departments or locations in Norges Bank, or at other central banks and relevant institutions, to allow employees to gain experience from similar organisations nationally and internationally.

### Flexibility

Norges Bank has increased its focus on flexible workdays to make it more attractive for employees to take on new roles at a higher level. In 2021, a trial scheme was introduced offering staff the opportunity to work from home for up to two days a week. The Bank also facilitates a gradual transition to retirement when requested by an employee and can engage retired staff on a temporary basis, thereby retaining experienced staff and allowing them to continue to participate in working life after retirement.

Norges Bank offers gender-neutral parental leave of 16 weeks on top of 10 weeks of maternity leave for employees at all the Bank's offices abroad. This is a broader scheme than is required by law in the countries where the Bank has offices.

Table 6 shows the share of temporary employees, employees on parental leave and part-time employees in Oslo.

In 2021, Norges Bank has worked with the trade unions to update agreements and harmonise the working conditions in the Bank in line with Strategy 2022 – One Bank. In this year's collective wage negotiations, Norges Bank, the Finance Sector Union of Norway and non-unionised employees in NBA negotiated a revised agreement, which entails changes in working hours (37.5 hours excluding the lunch break) and wages. Similar terms were agreed on by the Federation of Norwegian Professional Associations and non-unionised staff in NBCBO in autumn.

### Health, safety and the environment

Norges Bank aims to have a positive and inclusive working environment characterised by a spirit of cooperation. We want to ensure that our colleagues enjoy their jobs, feel challenged and have the relevant expertise to meet the challenges of the future. The Bank conducts an annual staff survey and shorter pulse surveys as necessary to measure employee engagement, well-being and health, as well as to identify discrimination and undesirable behaviour.

Owing to the Covid pandemic, most of Norges Bank's employees worked from home for some of the time in 2021. Norges Bank took steps to provide solid support for employees and managers in a challenging situation. With flexibility and good IT solutions, this arrangement has continued to work well. The Bank's health service has provided ergonomics support for those working from home in order to reduce the risk of musculoskeletal disorders. The Bank also offers a wide range of fitness activities and has

**Table 6** Share of employees in Oslo in temporary positions, on parental leave or working part-time.<sup>1</sup>

	Men	Women
Temporary employees	3.1%	2.9%
Part-time employees	0.6%	1.1%
Average number of weeks of parental leave	13	18

<sup>1</sup>Figures show the average number of weeks of parental leave taken in 2021 and not the total weeks of leave taken by the individual employee.

provided facilities to enable employees to cycle to work. In the ongoing upgrade of the head office, the focus is on improving the indoor climate and increasing flexibility.

The Bank's safety representatives carry out the important work of safeguarding the interests of employees in matters relating to the working environment. The safety representatives are consulted in the planning and follow-up of measures relevant to the working environment.

Five workplace accidents or injuries directly relating to work at Norges Bank's office premises or conference and holiday

facilities were reported in 2021, none of which needed to be reported to the Norwegian Labour Inspection Authority as occupational injuries.

#### **Sickness absence and inclusion in the workplace (IA)**

Sickness absence at the Bank remained stable at a low level of 1.7% in 2021. This is stable compared with 2020. The IA agreement for 2019–2022 now covers all workplaces in Norway and underpins the efforts to prevent sickness absence. The Bank has continued its policy of additional self-certified sick leave for employees, in line with IA Agreement guidelines. The Bank accommodates employees



needing adaptations to their workstations and has throughout the pandemic urged employees to contact the Bank's health service to obtain other accommodations than normally provided in the Bank's offices in order to prevent sickness absence resulting from remote working. The Bank accommodates older employees to enable them to extend their professional careers in line with national objectives.

In the staff survey for 2021, there was a particular focus on the psychosocial working environment and factors that contribute to a positive and inclusive working environment. For employees and managers in the New York office, a mandatory course on bullying and harassment is conducted annually.

The Working Environment Committee, which consists of representatives of both management and employees, assesses the working environment and the climate of cooperation at the Bank as positive.

### Working with the trade unions

Norges Bank's management has close contact with the trade unions at the Bank. Forums for discussion include the Co-determination and Personnel Committee, the Bank's Working Environment Committee and regular contact meetings. Two employee representatives attend Executive Board meetings when administrative matters are on the agenda.

In 2021, the Confederation of Vocational Unions (YS) and the Employers' Association Spekter negotiated a new main agreement on behalf of the Bank and its employees. A new point in the agreement states that to promote sustainable development, climate- and environment-related measures in the Bank will be included in the cooperation between the Bank and the unions.

This means that Norges Bank must involve and discuss measures to promote sustainable development in the Bank with the trade unions and employees. In addition, environmental accounts must be submitted to the union representatives.

### Responsible procurement and supply chain management

Norges Bank procured goods and services totalling approximately NOK 3.9bn in 2021. The largest procurement categories are external management services, IT system development and operation, and goods and services related to the operation of offices. This places a responsibility on Norges Bank as a responsible procurer. It is important that the Bank takes an active role in all its procurements to promote respect for human rights and the environment in its supply chain.

Norges Bank is subject to public procurement regulations and is responsible for specifying requirements for wage and working conditions pursuant to the regulations relating to wage and working conditions in public contracts. Suppliers and any subcontractors must upon request be able to document compliance with wage and working conditions. In 2021, 26 controls were carried out among the Bank's suppliers. One violation was found, where the wages paid were lower than the negotiated minimum. The wage was subsequently corrected by the supplier. The Public Procurement Act includes a requirement that limits the number of tiers in the supply chain for procurement from sectors with a high incidence of work-related crime, such as construction and cleaning services. Norges Bank accepts no more than two tiers of subcontractors. All suppliers with access to the Bank's premises or systems are responsible for ensuring that personnel performing services or work for Norges Bank are aware of the ethical rules.

Norges Bank also wants a responsible and sustainable supply chain and sets environmental requirements for procurements where relevant.

The management of the GPF requires specific insight into markets around the world. In emerging markets, the GPF mostly uses external managers. Sustainability risk is inherently higher in some of these markets. Managers are required to take environmental, social and governance factors into account in their investment activities. This is followed up as part of the GPF's annual assessment of managers. In addition, managers' approach to corporate social responsibility is assessed as part of the selection process.

Based on common procurement guidelines, Norges Bank further developed a comprehensive framework for supply chain management across the Bank in 2021. This will be implemented in 2022 and may contribute to even better assessment and follow-up of existing and new suppliers.

## Cooperation and initiatives

### International cooperation

Norges Bank engages in extensive international cooperation. In addition to formalised international cooperation, Norges Bank has regular contact with the Nordic central banks, the European Central Bank and other central banks for information- and knowledge-sharing.

In its management of the GPF, Norges Bank supports initiatives whereby companies or investors join forces to find common standards for sustainable business conduct. Such initiatives work best when many companies in a particular industry or value chain face the same challenges. Our initiatives look at challenges such as supply chain management and reporting.

We support and initiate research projects to understand and contribute to better market standards. We work with academic institutions to learn from the latest research and obtain analyses that may be relevant to our investment strategy, our risk analyses and ownership. In 2021, we supported two research projects about climate risk and three projects on corporate governance and ownership structure. We initiated a pilot project headed by Saphira Rekker at the University of Queensland Business School to compare the different methods used to measure long-term transition risk related to climate change.

### International Monetary Fund (IMF)

Norges Bank manages Norway's rights and obligations related to Norway's participation in the IMF. The governor of Norges Bank is the Norwegian government's representative on the IMF's highest decision-making body, the Board of Governors. The main source of financing for IMF loans is member countries' quotas, which all member countries are obligated to pay to the IMF. Norges Bank has a standing obligation to make foreign exchange available in an amount equivalent to Norway's quota to finance IMF lending. Norges Bank also makes foreign exchange reserves available to the IMF in the form of agreed drawing rights. By agreement,

Norges Bank advises the Ministry of Finance on Norway's position on matters submitted to the IMF's Executive Board.

### Technical assistance for the Bank of Mozambique

Norges Bank has since 2017 provided technical assistance for the Bank of Mozambique with the aim of modernising the central bank's functions. The assistance covers all aspects of central banking and is provided in collaboration with the IMF and funded by the Ministry of Foreign Affairs.

### Bank for International Settlements (BIS)

Norges Bank is co-owner of the BIS, whose main task is to foster cooperation among central banks. The BIS provides banking services for central banks, prepares analyses and statistics and organises meetings and discussions between member central banks. The governor of Norges Bank regularly takes part in BIS meetings. In 2021, the BIS Innovation Hub Nordic Centre was established in Stockholm, a collaboration between the BIS and the central banks of Sweden, Norway, Denmark and Iceland. The centre will focus in particular on analysing financial innovations important to central banks.

### Network for Greening the Financial System (NGFS)

Norges Bank has been a member of the NGFS since December 2018. The NGFS is a network for central banks and supervisory authorities that aims to increase knowledge about how financial authorities and the financial sector can take climate risk and the environment into account.

### Participation in EU supervisory work

Norges Bank is a member of the European Systemic Risk Board (ESRB) but without the right to vote. The ESRB identifies and analyses threats to financial stability in the EU and seeks to limit systemic risk by providing recommendations on good policy and issuing warnings about adverse developments. Norges Bank also participates without voting rights at the meetings of the European Banking Authority, the European regulatory authority for banking supervision.

### Financial Stability Board (FSB)

Norges Bank's executive management, the Ministry of Finance and Finanstilsynet participate in the FSB's Regional Consultative Group for Europe, which is a group for the exchange of information and views between European countries within and outside the G20. The FSB is a G20

body that prepares analyses and assessments of financial conditions to be included in the various G20 processes.

#### **Nordic-Baltic cooperation on financial market issues**

Norges Bank participates in the Nordic-Baltic Macroprudential Forum (NBMF) and in the Nordic-Baltic Stability Group (NBSG). In the NBMF, central banks and supervisory authorities discuss issues related to systemic risk and cross-border banking in the region. The NBSG's main task is to strengthen crisis management preparedness in order to deal with cross-border threats to financial stability in the region. The Nordic finance ministries also participate in this group.

#### **A transparent central bank**

Norges Bank is committed to being a transparent central bank. Broad knowledge of the Bank's work, tasks and responsibilities is important for building public trust. The ambition is to be transparent about the management of the GPFG within the limits set by a prudent implementation of the management mandate. Norges Bank has extensive contact with all parts of society.

Talks and lectures were given priority throughout 2021. The executive management and experts in their field in the GPFG and the central bank have given a number of digital lectures for different target groups.

Particular efforts were made to reach students and younger target groups. In addition, the Bank visits all the regions of Norway every year. The Bank participated once again in KÅKÅnomics, an annual Nordic economics festival held in Stavanger. And the Bank was represented for the first time at Arendalsuka, an annual week of events for leaders in politics and business, the media and the public held in Arendal, with events related to the GPFG, NBCBO and the Knowledge Bank.

Through the Norges Bank website and the NBIM website, the Bank seeks to communicate clearly and accessibly with both the Norwegian people and international target groups. Norges Bank always strives to share information of potential interest to the general public and publishes a number of reports and publications on topics within the fields of economics and finance. In 2021, Norges Bank began publishing the GPFG's votes five days before companies' general meetings. The Bank does this to be transparent about its preferences as owner and for markets to gain a better understanding of the Bank's views.

Social media and the Norges Bank blog are an important part of Norges Bank's transparency strategy. The Bank further strengthened the use of such channels in 2021 and is now reaching out to younger target groups and professionals.

Norges Bank's research department is a link between the Bank and academia. Researchers at Norges Bank had extensive contact with researchers from universities and other central banks in 2021 through joint research projects and presentations of ongoing work at national and international conferences and seminars. In 2021, researchers at Norges Bank had 16 articles approved for publication in peer-reviewed journals.

The Norwegian Finance Initiative (NFI) was established by Norges Bank to promote financial economics research and education. The NFI presents an award for best master's thesis and awards a publication bonus for outstanding research to faculty members in financial economics, as well as offering a PhD scholarship program and co-funding professorships. The programme was renamed the Norges Bank Academic Programme in 2022 and now provides support within both macroeconomics and financial economics.

## Verification

Norges Bank's auditor, Deloitte AS, has carried out an independent review of the information on responsible investment management and the effects of climate change (for more information, see page 197).





# 4 Financial statements and balance sheet

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# Main points

Net income from financial instruments

NOK 25bn 2021

NOK 30bn 2020

Foreign exchange gains/losses

NOK-0.3bn 2021

NOK-0.5bn 2020

Profit/loss, GPFG

NOK 1 551bn 2021

NOK 1 122bn 2020

Profit/loss, GPFG transferred to the krone account

NOK-1 551bn 2021

NOK-1 122bn 2020

Other income

NOK 4.8bn 2021

NOK 5.4bn 2020

- of which management fee, GPFG

NOK 4.6bn 2021

NOK 5.3bn 2020

Operating expenses

NOK-5.9bn 2021

NOK-6.5bn 2020

- of which management costs, GPFG

NOK-4.6bn 2021

NOK-5.3bn 2020

Total comprehensive income

NOK 23bn 2021

NOK 29bn 2020

Transfer to the Treasury

NOK 11bn 2021

NOK 15bn 2020

# Costs for Norges Bank's primary tasks

Norges Bank allocates costs to its primary tasks. The purpose of this allocation is to identify the costs associated with these tasks and help to make operations cost-effective.

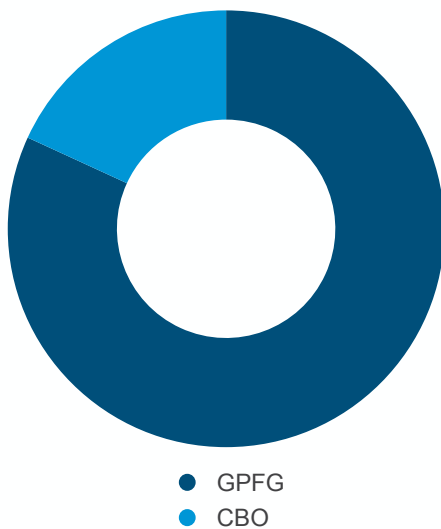
Costs are allocated to these primary tasks:

1. Management of the Government Pension Fund Global (GPFG)
2. Monetary policy
3. Financial stability
4. Management of the foreign exchange reserves
5. Banknotes and coins
6. Settlement services for banks
7. Government debt management
8. The Treasury single account system

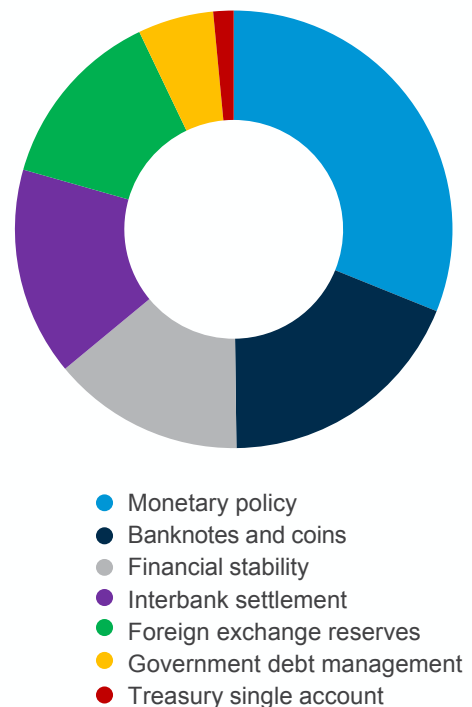
The costs for the Bank's primary tasks include direct and indirect costs. Common costs are allocated based on an assessment of cost drivers. The size of the allocation key represents the best estimate of actual resource use.

The Bank's total operating expenses in 2021 were NOK 5 859m. Management of the GPFG was by far the most resource-intensive task and accounted for NOK 4 640m or 79% of the Bank's total costs. Costs for Norges Bank's other primary tasks amounted to NOK 1 219m.

Costs by primary task



Costs by primary task in Central Banking Operations (CBO)



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# Income statement

Amounts in NOK millions	Note	2021	2020
<b>Net income/-expense from financial instruments</b>			
Net income/-expense from:			
-Equities	3	30 980	18 070
-Bonds	3	-6 536	12 618
-Financial derivatives		-131	591
-Secured lending	9	-27	-10
-Secured borrowing	9	-	-40
Interest income and expense from deposits in banks		8	-30
Interest income from lending to banks	18	86	206
Interest expense on deposits from banks and the Treasury	18	-19	-973
Net interest income from the IMF	17	177	57
Tax expenses	3	-25	-45
Other financial income/-expenses		-4	-1
<b>Net income/-expense from financial instruments before foreign exchange gains/losses</b>		<b>24 509</b>	<b>30 443</b>
Foreign exchange gains/-losses	8	-303	-499
<b>Net income/-expense from financial instruments</b>		<b>24 206</b>	<b>29 944</b>
<b>Management of the Government Pension Fund Global (GPFG)</b>			
Total comprehensive income, GPFG	20	1 550 628	1 122 356
Withdrawn from/-transferred to the krone account of the GPFG	20	-1 550 628	-1 122 356
<b>Other operating income</b>			
Management fee, GPFG	13	4 640	5 305
Other operating income	15	120	121
<b>Total other operating income</b>		<b>4 760</b>	<b>5 426</b>
<b>Operating expenses</b>			
Personnel expenses	12	-1 799	-2 084
Other operating expenses	15	-3 860	-4 178
Depreciation, amortisation and impairment losses	14	-200	-219
<b>Total operating expenses</b>		<b>-5 859</b>	<b>-6 481</b>
<b>Profit/-loss for the period</b>		<b>23 107</b>	<b>28 889</b>
<b>Statement of comprehensive income</b>			
Profit/-loss for the period		23 107	28 889
Change in actuarial gains/-losses	11	-114	-65
<b>Total comprehensive income</b>		<b>22 993</b>	<b>28 824</b>

# Balance sheet

Amounts in NOK millions	Note	31 Dec. 2021	31 Dec. 2020
<b>Assets</b>			
<b>Financial assets</b>			
Deposits in banks		49 628	24 920
Secured lending	9,10	27 007	18 340
Unsettled trades		325	888
Equities	4	117 715	114 931
Equities lent	4,9,10	4 454	4 600
Bonds	4	467 667	448 105
Financial derivatives		26	12
Claims on the IMF	17	117 325	71 081
Lending to banks	18	45 101	80 168
Other financial assets	13	377	5 683
<b>Total financial assets</b>		<b>829 625</b>	<b>768 728</b>
<b>Net value, GPFG</b>	<b>20</b>	<b>12 340 085</b>	<b>10 908 457</b>
<b>Non-financial assets</b>			
Pensions	11	293	155
Non-financial assets	14	2 010	2 119
<b>Total non-financial assets</b>		<b>2 303</b>	<b>2 274</b>
<b>Total assets</b>		<b>13 172 013</b>	<b>11 679 459</b>

Amounts in NOK millions	Note	31 Dec. 2021	31 Dec. 2020
<b>Liabilities and equity</b>			
<b>Financial liabilities</b>			
Secured borrowing	9,10	28	23
Unsettled trades	9,10	22 197	14 383
Financial derivatives		5	10
Other financial liabilities		4 003	2 942
Liabilities to the IMF	17	98 044	53 925
Deposits from banks	18	23 372	52 807
Deposits from the Treasury	18	344 142	313 131
Notes and coins in circulation	16	39 745	41 006
<b>Total financial liabilities</b>		<b>531 536</b>	<b>478 227</b>
<b>Deposits in krone account, GPFG</b>	<b>20</b>	<b>12 340 085</b>	<b>10 908 457</b>
<b>Other liabilities</b>	<b>19</b>	<b>11 688</b>	<b>15 956</b>
<b>Total liabilities</b>		<b>12 883 309</b>	<b>11 402 640</b>
<b>Equity</b>		<b>288 704</b>	<b>276 819</b>
<b>Total liabilities and equity</b>		<b>13 172 013</b>	<b>11 679 459</b>



Oslo 9 February 2022



**Øystein Olsen**  
(Governor/Chair)



**Ida Wolden Bache**  
(Deputy Chair)



**Øystein Børsum**  
(Deputy Chair)



**Karen Helene Ulltveit-Moe**



**Kristine Ryssdal**



**Arne Hyttnes**



**Hans Aasnæs**



**Nina Udnnes Tronstad**



**Egil Herman Sjørus**



**Mona Helen Sørensen**  
(Employee representative)



**Truls Oppedal**  
(Employee representative)

# Statement of cash flows

Amounts in NOK millions, inflows (+)/outflows (-)	2021	2020
<b>Operating activities</b>		
Receipts of dividend from equities	2 341	2 674
Receipts of interest from bonds	4 809	6 208
Net receipts of interest and fee from secured lending and borrowing	25	18
Receipts of dividend, interest and fee from holdings of equities and bonds	7 175	8 900
Net cash flow from purchase and sale of equities	26 022	23 808
Net cash flow from purchase and sale of bonds	-32 285	-25 527
Net cash flow financial derivatives	719	1 672
Net cash flow related to deposits in banks	180	564
Net cash flow secured lending and borrowing	-487	-1 332
Net cash flow related to other expenses, other assets and other liabilities	-9 096	-13 272
Net cash flow related to other financial assets and other financial liabilities	5 991	-85 292
Net cash flow to/-from the Treasury	-89 143	-171 364
Inflow from the Norwegian government to the GPFG	-78 846	-5 032
Withdrawals by the Norwegian government from the GPFG	199 000	301 800
Management fee received from the GPFG	10 481	4 312
<b>Net cash flow from operating activities</b>	<b>39 711</b>	<b>39 237</b>
<b>Investing activities</b>		
Net cash flow related to non-financial assets and liabilities	-81	-38
<b>Net cash flow from investing activities</b>	<b>-81</b>	<b>-38</b>
<b>Financing activities</b>		
Cash flow to the Treasury from the Transfer Fund	-15 169	-19 706
<b>Net cash flow from financing activities</b>	<b>-15 169</b>	<b>-19 706</b>
<b>Net change in cash</b>		
Deposits in banks at 1 January	24 920	17 230
Net increase/-decrease of cash in the period	24 461	19 493
Net foreign exchange gains and losses on cash	247	-11 803
<b>Deposits in banks at 31 December</b>	<b>49 628</b>	<b>24 920</b>

## Accounting policy

The statement of cash flows has been prepared in accordance with the direct method. Major classes of gross payments are presented separately, with the exception of specific transactions primarily arising from the purchase and sale of financial instruments, which are shown net.

Transfers between the GPFG and the Norwegian government are classified as a financing activity in the statement of cash flows in the GPFG's financial statements. In Norges Bank's financial statements, transfers are classified as operating activities, since Norges Bank is the manager of the GPFG.

# Statement of changes in equity

Amounts in NOK millions	Adjustment Fund	Transfer Fund	Total equity
1 January 2020	223 751	39 413	263 164
Total comprehensive income	22 730	6 094	28 824
31 December 2020 before transfer to the Treasury	246 481	45 507	291 988
Transferred to the Treasury	-	-15 169	-15 169
<b>31 December 2020</b>	<b>246 481</b>	<b>30 338</b>	<b>276 819</b>
1 January 2021	246 481	30 338	276 819
Total comprehensive income	20 007	2 986	22 993
31 December 2021 before transfer to the Treasury	266 488	33 324	299 812
Transferred to the Treasury	-	-11 108	-11 108
<b>31 December 2021</b>	<b>266 488</b>	<b>22 216</b>	<b>288 704</b>

## Accounting policy

The statement of changes in equity for Norges Bank has been prepared in accordance with IAS 1 Presentation of Financial Statements.

Norges Bank's equity comprises an Adjustment Fund and a Transfer Fund. The Adjustment Fund comprises the Bank's restricted equity, and the Transfer Fund comprises the basis for transfers to the Treasury. Norges Bank's capital is governed by the Guidelines for provisions and allocations of Norges Bank's profit or loss laid down on 13 December 2019, pursuant to Section 3-11, Sub-section 2, of the Central Bank Act.

# Notes

# Financial reporting

# Note 1 General information

## 1. Introduction

Norges Bank is Norway's central bank. The Bank is a separate legal entity and is owned by the state. The Bank's main office is at Bankplassen 2, Oslo, Norway.

Norges Bank shall promote economic stability and manage substantial assets on behalf of the nation. The aim of central banking operations is to promote stability in the economy. The Bank conducts monetary policy, monitors financial stability, promotes robust and efficient payment systems and financial markets and manages Norway's foreign exchange reserves.

Norges Bank manages the Government Pension Fund Global (GPF) on behalf of the Ministry of Finance in accordance with Section 3, second paragraph, of the Government Pension Fund Act and the management mandate for the GPF issued by the Ministry of Finance.

The GPF shall support government saving to finance future expenditure and underpin long-term considerations relating to the use of Norway's petroleum revenues. The Norwegian Parliament has established the legal framework in the Government Pension Fund Act, and the Ministry of Finance has formal responsibility for the fund's management. The Executive Board of Norges Bank has delegated day-to-day management of the GPF to Norges Bank Investment Management (NBIM).

The Ministry of Finance has placed funds for investment in the GPF in the form of a Norwegian krone deposit with Norges Bank (the krone account). Norges Bank manages the krone account in its own name by investing the funds in an investment portfolio consisting of listed equities, bonds, real estate and infrastructure for renewable energy. The GPF is invested in its entirety outside of Norway.

Transfers are made to and from the krone account in accordance with the management mandate. When the Norwegian State's petroleum revenue exceeds the use of petroleum revenue in the fiscal budget, deposits will be made into the krone account. In the opposite situation, withdrawals will be made. Transfers to and from the krone account lead to a corresponding change in Owner's capital.

For further information about the management mandate for the GPF, Norges Bank's governance structure and risk management see Note 20.9 Investment risk.

Norges Bank is not exposed to financial risk from its management of the GPF. The return on the portfolio, less the management fee to Norges Bank, is transferred in its entirety to the krone account and does not affect total comprehensive income or equity in Norges Bank. The investment portfolio under management is equal to the amount on deposit in the krone account at the time in question, less the accrued management fee. This is presented on a separate line as an asset in Norges Bank's balance sheet, and the krone account is presented as a liability in the same amount to the Ministry of Finance.

## 2. Approval of the financial statements

The annual financial statements of Norges Bank for 2021 were approved by the Executive Board on 9 February 2022 and approved by the Supervisory Council on 23 February 2022. The annual financial reporting for the GPF is an excerpt of Norges Bank's financial reporting and is included in Norges Bank's annual financial statements as Note 20.

# Note 2 Accounting policies

This note describes accounting policies, significant estimates and accounting judgements that are relevant to the financial statements as a whole. Additional accounting policies, significant estimates and accounting judgements are included in the respective statements and notes.

## Significant estimates and critical accounting judgements

The preparation of the financial statements involves the use of uncertain estimates and assumptions relating to future events that affect the reported amounts for assets, liabilities, income and expenses. Estimates are based on historical experience and reflect management's expectations about future events. Actual outcomes may deviate from estimates. The preparation of the financial statements also involves the use of judgement when applying accounting policies, which may have a significant impact on the financial statements.

In cases where there are particularly uncertain estimates or accounting judgements, this is described in the respective notes.

### 1. Basis of preparation

In accordance with the Regulation on the financial reporting of Norges Bank (the Regulation), which has been laid down by the Ministry of Finance, the financial reporting of the GPFG is prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, subject to the additions and exemptions specified in the Accounting Act and the Regulation. The annual financial statements are prepared with a closing date of 31 December, and are presented in Norwegian kroner (NOK), rounded to the nearest million. Rounding differences may occur.

### 2. Changes in accounting policies, including new and amended standards and interpretations, in the period

Accounting policies applied are consistent with the policies applied in the previous accounting year. There are no new or amended IFRS standards and interpretations that have become effective for the accounting year beginning on 1 January 2021 that have had any material effect on the Bank's financial statements.

### 3. New and amended standards and interpretations effective from 2022 or later

Issued IFRS standards, changes in existing standards and interpretations issued with effective dates from 2022 or later are expected to be immaterial or not applicable for the Bank's financial reporting at the time of implementation.

### 4. Accounting policies for the financial statements as a whole

#### 4.1 Financial assets and liabilities

##### Recognition and derecognition

Financial assets and liabilities are recognised in the balance sheet upon becoming a party to the instrument's contractual provisions.

Financial assets are derecognised when the contractual rights to the cash flows expire, or when the financial assets and substantially all the risks and rewards of ownership are transferred. See Note 9 Secured lending and borrowing and

Note 20.13 Secured lending and borrowing for details on transferred assets that are not derecognised.

Financial liabilities are derecognised when the obligation is extinguished, i.e. when the obligation specified in the contract is discharged, cancelled or expires.

Purchase or sale of a financial asset where the contractual terms require settlement in accordance with normal market conditions, is recognised on the trade date.

##### Classification and measurement

Financial assets are classified based on the business model used for managing the assets and their contractual cash flow characteristics. The investment portfolio of the GPFG is managed in accordance with the management mandate issued by the Ministry of Finance, the investment mandate issued by the Executive Board of Norges Bank and investment strategies issued by the management of Norges Bank Investment Management. These mandates and strategies, including the risk management strategies, entail that financial assets are managed and evaluated on a fair value basis. The financial assets in the GPFG are therefore measured at fair value through profit or loss, except for Management fee receivable which is not part of the investment portfolio. Management fee receivable is measured at amortised cost. The same applies to Norges Bank's foreign exchange reserves. The foreign exchange reserves are managed in accordance with the principles issued by the Executive Board and are managed and their performance evaluated on a fair value basis. Other financial assets are measured at amortised cost.

Financial liabilities are measured at amortised cost, except for financial liabilities designated as at fair value through profit or loss. This applies to financial liabilities integrated into the foreign exchange reserves that are managed and their performance evaluated on a fair value basis. For the GPFG, financial liabilities, except for Management fee payable, are integrated into the investment portfolio that is

managed and evaluated on a fair value basis, and are therefore designated at fair value through profit or loss. Management fee payable is measured at amortised cost.

Financial derivatives are measured at fair value through profit or loss.

#### **Impairment**

For financial assets classified as measured at amortised cost, an allowance for expected credit losses is recognised. Expected credit losses are estimated per loan and are based on the loan's exposure at default, probability of default and loss given default. The recognised amount comprises expected credit losses within the 12 months after the reporting date. In the event of a substantial increase in credit risk, an expected loss allowance is recognised over the expected life of the asset.

#### **4.2 Subsidiaries**

Investments in real estate and infrastructure for renewable energy are made through subsidiaries of Norges Bank, which are exclusively established as part of the management of the fund. The subsidiaries are controlled by the GPFG. Control over an entity exists when the GPFG is exposed to or has rights to variable returns from its involvement in the entity and is able to influence those returns through its power over the entity. For further information, see Note 20.16 Interests in other entities.

The GPFG is an investment entity in accordance with IFRS 10 Consolidated financial statements. IFRS 10 defines an investment entity and introduces a mandatory exemption from consolidation for investment entities.

#### **Subsidiaries measured at fair value through profit or loss**

Subsidiaries that invest in real estate or infrastructure for renewable energy through ownership interests in other entities, are investment entities. These subsidiaries are measured at fair value through profit and loss in accordance with the principles for financial assets, as described in Section 4.1 above. Subsidiaries that invest in real estate are presented in the balance sheet as Unlisted real estate. Subsidiaries that invest in infrastructure for renewable energy are presented in the balance sheet as Unlisted infrastructure. See Note 20.6 Unlisted real estate and Note 20.7 Unlisted infrastructure for renewable energy for supplementing policies.

#### **Consolidated subsidiaries**

Subsidiaries that perform investment-related services, and which are not investment entities themselves, are consolidated. Consolidated subsidiaries do not own, neither directly nor indirectly, investments in real estate or infrastructure for renewable energy.

### Accounting judgement

The GPFG is an investment entity based on the following:

- a) It obtains funds from the Norwegian government, a related party and its sole owner, and delivers professional investment services, being the management of the fund, to the Norwegian government,
- b) It commits to the Norwegian government that its business purpose is to invest solely for capital appreciation and investment income,
- c) It measures and evaluates returns for all its investments exclusively on a fair value basis.

An investment entity shall have a strategy that defines the time horizon for the realisation of investments. The GPFG has a very long time horizon. After an overall assessment, it has been concluded that the GPFG meets the criteria in the definition of an investment entity.

# Note 3 Income/expense from equities and bonds

## Accounting policy

The following accounting policies apply to the respective income and expense elements:

Dividends are recognised when the dividends are formally approved by the shareholders' meeting or comparable responsible party.

Interest income is recognised in profit or loss when the interest is earned. Interest expense is recognised in profit or loss as incurred.

Realised gain/loss primarily represents amounts realised when assets or liabilities have been derecognised. Average acquisition cost is assigned at derecognition. Realised gain/loss includes transaction costs, which are expensed as incurred. Transaction costs are defined as all costs directly attributable to the completed transaction. For investments in equities and bonds, these normally include commission fees and stamp duties.

Unrealised gain/loss represents changes in fair value for the period for the related balance sheet line item that are not attributable to the aforementioned categories.

Withholding tax, after deduction of refunded amounts, is recognised at the same time as the related dividend. Refundable withholding tax is recognised in the balance sheet as a receivable under Other assets.

**Table 3.1** Income/expense from equities

Amounts in NOK millions	2021	2020
Dividends	2 363	2 689
Realised gain/-loss	17 225	12 326
Unrealised gain/-loss	11 392	3 055
<b>Income/-expense from equities before foreign exchange gains/losses</b>	<b>30 980</b>	<b>18 070</b>

**Table 3.2** Income/expense from bonds

Amounts in NOK millions	2021	2020
Interest	4 625	5 962
Realised gain/-loss	1 242	41
Unrealised gain/-loss	-12 403	6 615
<b>Income/-expense from bonds before foreign exchange gains/losses</b>	<b>-6 536</b>	<b>12 618</b>

## Tax expense

Norges Bank is exempt from income tax on its operations in Norway but is liable to taxes in some other jurisdictions. Tax expense comprises income tax that will not be refunded under local tax rules or tax treaties to Norges Bank. This pertains primarily to withholding tax on dividends related to the foreign exchange reserves' equity investments.

Tax expense for 2021 was NOK 24.9m, compared with NOK 45.2m in 2020.

Japan and Germany are the markets with the highest tax expense, amounting to NOK 10.8m and NOK 9.2m, respectively. Norway's tax treaties with these countries entail a tax rate of 15 percent. Tax expense in other respects refers to smaller amounts divided among several other jurisdictions.

Accounting policies for taxation are further detailed in Note 20.10 Tax.



# Note 4 Holdings of equities and bonds

## Accounting policy

Investments in equities and bonds are measured at fair value through profit or loss. Earned dividends and interest are presented in the balance sheet on the same line as the underlying financial instrument and are specified in Tables 4.1 and 4.2 for equities and bonds, respectively. The balance sheet line Equities includes investments in depository receipts (GDRs/ADRs) and units in listed funds. Lent equities are presented separately.

Financial derivatives are measured at fair value through profit or loss. Variation margin for listed futures is regarded as settled, and values are presented in the balance sheet as Deposit in banks. Norges Bank does not apply hedge accounting, and no financial instruments are therefore designated as hedging instruments.

For further information on fair value measurement, see Note 6 Fair value measurement.

Changes in fair value for the period are recognised in the income statement and specified in Note 3 Income/expense from equities and bonds.

**Table 4.1** Equities

Amounts in NOK millions	31 Dec. 2021		31 Dec. 2020	
	Fair value including dividends	Accrued dividends	Fair value including dividends	Accrued dividends
Equities	122 169	73	119 531	84
<b>Total equities</b>	<b>122 169</b>	<b>73</b>	<b>119 531</b>	<b>84</b>
Of which equities lent	4 454	-	4 600	-

**Table 4.2** Bonds

Amounts in NOK millions	31 Dec. 2021			31 Dec. 2020		
	Nominal value <sup>1</sup>	Fair value including accrued interest	Accrued interest	Nominal value <sup>1</sup>	Fair value including accrued interest	Accrued interest
Bonds	460 136	467 667	1 343	427 683	448 105	1 527
<b>Total bonds</b>	<b>460 136</b>	<b>467 667</b>	<b>1 343</b>	<b>427 683</b>	<b>448 105</b>	<b>1 527</b>

<sup>1</sup> Nominal values have been translated into NOK at the closing rate at the balance sheet date. The nominal value comprises the face value of the instrument or principal.

Bonds in Norges Bank's balance sheet are in their entirety associated with management of the foreign exchange reserves. Norges Bank issues government debt and enters into financial contracts in the area of government debt

management in the name of the Ministry of Finance. Transactions related to government debt management are recognised in the government accounts and not in Norges Bank's balance sheet.

### Bank for International Settlements (BIS)

The Bank for International Settlements (BIS) acts as a bank for central banks, and its mission is to serve central banks in their pursuit of monetary and financial stability by fostering international cooperation in those areas.

The BIS is a limited liability company owned by central banks. Norges Bank has 8 000 voting shares (with a face value of SDR 5 000) in the BIS. In addition, a further 564

non-voting shares (with a face value of SDR 5 000) were purchased in 2005, for a total of 8 564 shares.

When the shares were issued, the BIS required payment of only 25 percent of the share capital, with the remaining 75 percent committed capital not recognised in the balance sheet.

Shares in the BIS and dividend received from the BIS, as shown in Table 4.3, are also included as part of equities in Table 4.1 and dividends in Table 3.1, respectively.

**Table 4.3** Shares in the BIS

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Shares in the BIS	200	200
Share capital in the BIS not paid, not recognised	397	397
Dividend received from the BIS	56	-

## Note 5 Foreign exchange reserves

The foreign exchange reserves are to be available for use in foreign exchange market transactions or as part of the conduct of monetary policy, with a view to promoting financial stability and to meet Norges Bank's international commitments. The foreign exchange reserves are divided into a fixed income portfolio, an equity portfolio and a petroleum buffer portfolio. The fixed income portfolio and petroleum buffer portfolio are managed by Norges Bank Markets and ICT. The equity portfolio is managed by NBIM. See further discussion in Note 7 Investment risk.

The petroleum buffer portfolio is intended to receive the government's cash flow from petroleum activities in foreign currency and any transfers to and from the GPF. The purpose of the portfolio is to provide for an appropriate management of the government's need for converting foreign currency and NOK.

See Note 8 Currency for a specification of the foreign exchange reserves' currency breakdown.

Tables 5.1 and 5.2 show income statements and balance sheets, respectively, for the foreign exchange reserves by portfolio. Since the foreign exchange reserves are presented as they are operationally managed by Norges Bank, there may be minor differences between this presentation and presentation under the IMF definition of foreign exchange reserves.

**Table 5.1** Foreign exchange reserves by portfolio

Amounts in NOK millions	Portfolios			Total foreign exchange reserves	2021	
	Equities	Fixed Income	Petroleum buffer		Other	Total
<b>Income statement</b>						
Net income/-expenses from:						
- Equities	30 924	-	-	30 924	56	30 980
- Bonds	-	-6 536	-	-6 536	-	-6 536
- Financial derivatives	-59	-72	-	-131	-	-131
- Secured lending	19	-18	-28	-27	-	-27
- Secured borrowing	-	-	-	-	-	-
Interest income and expense from deposits in banks	-	-1	9	8	-	8
Interest income from lending to banks	-	-	-	-	86	86
Interest expense on deposits from banks and the Treasury	-	-	-	-	-19	-19
Net interest income from the IMF	-	-	-	-	177	177
Tax expense	-25	-	-	-25	-	-25
Other financial income/-expenses	-	-	-1	-1	-3	-4
<b>Net income/-expense from financial instruments before foreign exchange gains/losses</b>	<b>30 859</b>	<b>-6 627</b>	<b>-20</b>	<b>24 212</b>	<b>297</b>	<b>24 509</b>
Foreign exchange gains/-losses	244	-1 464	923	-297	-6	-303
<b>Net income/-expense from financial instruments</b>	<b>31 103</b>	<b>-8 091</b>	<b>903</b>	<b>23 915</b>	<b>291</b>	<b>24 206</b>

Amounts in NOK millions	Portfolios			Total foreign exchange reserves	2020	
	Equities	Fixed Income	Petroleum buffer		Other	Total
<b>Income statement</b>						
Net income/-expenses from:						
- Equities	18 070	-	-	18 070	-	18 070
- Bonds	-	12 618	-	12 618	-	12 618
- Financial derivatives	-22	613	-	591	-	591
- Secured lending	27	-37	-	-10	-	-10
- Secured borrowing	-	-	-	-	-40	-40
Interest income and expense from deposits in banks	-	-31	-	-31	1	-30
Interest income from lending to banks	-	-	-	-	206	206
Interest expense on deposits from banks and the Treasury	-	-	-	-	-973	-973
Net interest income from the IMF	-	-	-	-	57	57
Tax expense	-45	-	-	-45	-	-45
Other financial income/-expenses	1	28	-28	1	-2	-1
<b>Net income/-expense from financial instruments before foreign exchange gains/losses</b>	<b>18 031</b>	<b>13 191</b>	<b>-28</b>	<b>31 194</b>	<b>-751</b>	<b>30 443</b>
Foreign exchange gains/-losses	395	5 341	-5 696	40	-539	-499
<b>Net income/-expense from financial instruments</b>	<b>18 426</b>	<b>18 532</b>	<b>-5 724</b>	<b>31 234</b>	<b>-1 290</b>	<b>29 944</b>

**Table 5.2** Foreign exchange reserves by portfolio

Amounts in NOK millions	Portfolios			Total foreign exchange reserves	31 Dec. 2021	
	Equities	Fixed income	Petroleum buffer		Other	Total
<b>Balance sheet</b>						
<b>FINANCIAL ASSETS</b>						
Deposits in banks	41	9 142	40 111	49 295	333	49 628
Secured lending	28	7 198	19 781	27 007	-	27 007
Unsettled trades	21	303	-	325	-	325
Equities	117 515	-	-	117 515	200	117 715
Equities lent	4 454	-	-	4 454	-	4 454
Bonds	-	467 667	-	467 667	-	467 667
Financial derivatives	3	2	21	26	-	26
Claims on the IMF	-	-	-	-	117 325	117 325
Lending to banks	-	-	-	-	45 101	45 101
Other financial assets	52	-	-	52	325	377
<b>Total financial assets</b>	<b>122 114</b>	<b>484 313</b>	<b>59 913</b>	<b>666 340</b>	<b>163 284</b>	<b>829 625</b>
<b>FINANCIAL LIABILITIES</b>						
Secured borrowing	28	-	-	28	-	28
Unsettled trades	-	6 758	15 439	22 197	-	22 197
Financial derivatives	-	5	-	5	-	5
Other financial liabilities	130	-	1 381	1 511	2 492	4 003
Liabilities to the IMF	-	-	-	-	98 044	98 044
Deposits from banks	-	-	-	-	23 372	23 372
Deposits from the Treasury	-	-	-	-	344 142	344 142
Notes and coins in circulation	-	-	-	-	39 745	39 745
<b>Total financial liabilities</b>	<b>158</b>	<b>6 763</b>	<b>16 820</b>	<b>23 741</b>	<b>507 795</b>	<b>531 536</b>
<b>Net foreign exchange reserves</b>	<b>121 956</b>	<b>477 550</b>	<b>43 093</b>	<b>642 599</b>		

Amounts in NOK millions	Portfolios			Total foreign exchange reserves	31 Dec. 2020	
	Equities	Fixed income	Petroleum buffer		Other	Total
<b>Balance sheet</b>						
<b>FINANCIAL ASSETS</b>						
Deposits in banks	32	9 955	14 636	24 623	297	24 920
Secured lending	23	11 187	7 130	18 340	-	18 340
Unsettled trades	13	875	-	888	-	888
Equities	114 731	-	-	114 731	200	114 931
Equities lent	4 600	-	-	4 600	-	4 600
Bonds	-	448 105	-	448 105	-	448 105
Financial derivatives	1	7	4	12	-	12
Claims on the IMF	-	-	-	-	71 081	71 081
Lending to banks	-	-	-	-	80 168	80 168
Other financial assets	34	-	-	34	5 649	5 683
<b>Total financial assets</b>	<b>119 434</b>	<b>470 129</b>	<b>21 770</b>	<b>611 333</b>	<b>157 395</b>	<b>768 728</b>
<b>FINANCIAL LIABILITIES</b>						
Secured borrowing	23	-	-	23	-	23
Unsettled trades	-	10 342	4 041	14 383	-	14 383
Financial derivatives	-	2	8	10	-	10
Other financial liabilities	805	-	227	1 032	1 910	2 942
Liabilities to the IMF	-	-	-	-	53 925	53 925
Deposits from banks	-	-	-	-	52 807	52 807
Deposits from the Treasury	-	-	-	-	313 131	313 131
Notes and coins in circulation	-	-	-	-	41 006	41 006
<b>Total financial liabilities</b>	<b>828</b>	<b>10 344</b>	<b>4 276</b>	<b>15 448</b>	<b>462 779</b>	<b>478 227</b>
<b>Net foreign exchange reserves</b>	<b>118 606</b>	<b>459 785</b>	<b>17 494</b>	<b>595 885</b>		

# Note 6 Fair value measurement

## Accounting policy

All assets and liabilities presented as Equities, Bonds, Financial derivatives, Secured lending and borrowing and Deposits in banks are measured at fair value through profit or loss in the balance sheet.

Fair value, as defined by IFRS 13 Fair Value Measurement, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

## 1. Introduction

Fair value for the vast majority of assets and liabilities is based on quoted market prices or observable market data. If the market is not active, fair value is established by using standard valuation techniques. Estimating fair value may be complex and require the use of judgement, in particular when observable inputs are not available. The valuation risk addressed by the control environment at Norges Bank, which is responsible for fair value measurement.

## 2. The fair value hierarchy

All securities in the foreign exchange reserves are measured at fair value. The securities have been classified in the fair value hierarchy presented in Table 6.1. The classification is determined by

- Level 1 comprises assets that are valued on based on unadjusted quoted prices in active markets and are considered to have very limited valuation uncertainty. An active market is a market in which transactions take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

- Assets and liabilities classified as Level 2 are valued using models with inputs that are either directly or indirectly observable. Inputs are considered observable when they are developed using market data reflecting actual events or transactions.
- Assets classified as Level 3 are valued using models with considerable use of unobservable inputs. Unobservable inputs are inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset.

An overview of models and valuation techniques with their respective observable and unobservable inputs, categorised by type of instrument, is provided in Section 4 of this note.

## Significant estimate

Level 3 investments consist of instruments measured at fair value that are not traded or quoted in active markets. Fair value is determined using valuation techniques that use models with significant use of unobservable inputs. A considerable degree of judgement is applied in determining the assumptions that market participants would use when pricing the asset or liability, when observable market data are not available.

**Table 6.1** Foreign exchange reserves investments by level of valuation uncertainty

Amounts in NOK millions	Level 1		Level 2		Level 3		Total	
	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020
Equities	121 474	118 810	495	521	-	-	121 969	119 331
Bonds	457 621	444 776	10 046	3 329	-	-	467 667	448 105
Financial derivatives (assets)	26	12	-	-	-	-	26	12
Financial derivatives (liabilities)	-5	-10	-	-	-	-	-5	-10
Other <sup>1</sup>	-	-	52 942	28 447	-	-	52 942	28 447
<b>Total</b>	<b>579 116</b>	<b>563 588</b>	<b>63 483</b>	<b>32 297</b>	<b>-</b>	<b>-</b>	<b>642 599</b>	<b>595 885</b>
<b>Total (percent)</b>	<b>90.1%</b>	<b>94.6%</b>	<b>9.9%</b>	<b>5.4%</b>	<b>-</b>	<b>-</b>	<b>100%</b>	<b>100%</b>

<sup>1</sup> Other comprises other assets and liabilities limited to money market instruments, including reverse repurchase agreements, deposits in banks, short-term borrowing, unsettled trades and other assets and liabilities..

The majority of foreign exchange reserves is associated with low valuation risk and are classified as Level 1. At year-end 2021, 99.6 percent of equity holdings and 97.9 percent of bond holdings are classified as Level 1, and valuation is thus based on quoted market prices. The valuation uncertainty

for the foreign exchange reserves increased somewhat compared with year-end 2020. This is due to somewhat lower activity volume for some bonds and an increase in money market instruments in the petroleum buffer portfolio.

## Accounting policy

Transfers between levels in the fair value hierarchy are deemed to take place at the beginning of the reporting period.

### 3. Movements between levels in the hierarchy

There have been no substantial movements between levels in the fair value hierarchy.

### 4. Valuation techniques

Norges Bank has defined hierarchies for which price sources are to be used for valuation. Holdings that are included in the benchmark indices are normally valued in accordance with the index providers' prices, while the remaining holdings of equities and bonds are valued almost exclusively using prices from other reputable external price providers. For equities and derivatives traded in active markets (Level 1), the close price is used. For bonds traded in active markets, the bid price is generally used.

The next section sets out the valuation techniques used for equities and bonds classified as Level 2 in the fair value hierarchy.

#### Equities (Level 2)

Equities that are valued based on models with observable inputs provided by vendors are classified as Level 2 in the fair value hierarchy. These holdings are not traded in active

markets and include listed shares in companies where trading has been suspended. The valuation models take into account various observable market inputs, such as the price of comparable equity quotes, last traded price and volume..

#### Bonds (Level 2)

Bonds classified as Level 2 are valued based on observable market inputs from comparable issues, in addition to direct indicative or binding quotes. These holdings usually consist of less liquid bonds than those classified as Level 1, i.e. where there is not an activity volume for binding trades and a low activity volume for indicative price quotes at the measurement date.

### 5. Control environment

The control environment for fair value measurement is organised around a formalised and documented valuation policy and guidelines, which are supported by work and control procedures. The portfolios managed by Norges Bank Markets and ICT contain only liquid government securities, where valuation risk is very low. Any questions are discussed by a separate management committee.

The valuation environment has been adapted in accordance with market standards and established practices for valuation. This is implemented in practice in the form of daily valuation of all holdings. These processes are scalable to market changes and are based on internal and external data solutions.

All holdings and investments are generally valued by external, independent price providers. They have been chosen on the basis of analyses performed by the Norges Bank units responsible for valuation.

Price providers are monitored on an ongoing basis through regular discussions, controls and price challenges for individual securities. For a large portion of holdings, prices from independent price providers are based on quoted market prices. For holdings that are not sufficiently liquid for valuation to be based on quoted prices, widely accepted models are used. Observable inputs are used where possible, but in some cases, owing to illiquid markets, unobservable inputs are used.

The valuation process is subject on a daily basis to numerous controls by the valuation departments. Controls are based on defined thresholds and sensitivities, which are monitored and adjusted in accordance with prevailing market conditions. At each month-end, more extensive controls are performed to ensure valuation in accordance with fair value.

In NBIM, valuation memos and reports are prepared at each quarter-end, documenting the results of the controls performed and the most important sources of uncertainties in the valuations.

The NBIM investment meeting, which includes NBIM's leader group, meets every quarter prior to the publication of the financial reporting. The committee reviews the documentation, discusses major pricing issues and approves the valuation.

## 6. Other investments

Norges Bank holds equity investments other than the foreign exchange reserves. These are investments undertaken by Norges Bank in its role as Norway's central bank of Norway to preserve Norway's international obligations in this area. The obligations involve long-term commitments that do not have economic gain as an objective and are not, by their nature, financial investments. The shares in the Bank for International Settlements (BIS) are valued at NOK 200m and would have been allocated to Level 3 in the fair value hierarchy. Valuation is uncertain owing to a lack of activity in the market. These shares are valued using models that use a substantial degree of non-observable inputs.

## 7. Classification of financial instruments

Financial assets are classified in three measurement categories: fair value through profit or loss (designated or mandatory), fair value through other comprehensive income (OCI) and amortised cost. The measurement category is determined at initial recognition of the asset.

Financial obligations shall generally be measure at amortised cost, except for financial derivatives measured at fair value through profit or loss.



**Table 6.2** Classification of financial instruments

Amounts in NOK millions	Fair value through profit or loss		Amortised cost	31 Dec. 2021
	Designated	Mandatory		Total
<b>FINANCIAL ASSETS</b>				
Deposits in banks	49 295	-	333	49 628
Secured lending	27 007	-	-	27 007
Unsettled trades	325	-	-	325
Equities	117 715	-	-	117 715
Equities lent	4 454	-	-	4 454
Bonds	467 667	-	-	467 667
Financial derivatives	-	26	-	26
Claims on the IMF	-	-	117 325	117 325
Lending to banks	-	-	45 101	45 101
Other financial assets	52	-	325	377
<b>Total financial assets</b>	<b>666 515</b>	<b>26</b>	<b>163 084</b>	<b>829 625</b>
<b>FINANCIAL LIABILITIES</b>				
Secured borrowing	28	-	-	28
Unsettled trades	22 197	-	-	22 197
Financial derivatives	-	5	-	5
Other financial liabilities	1 511	-	2 492	4 003
Liabilities to the IMF	-	-	98 044	98 044
Deposits from banks	-	-	23 372	23 372
Deposits from the Treasury	-	-	344 142	344 142
Notes and coins in circulation	-	-	39 745	39 745
<b>Total financial liabilities</b>	<b>23 736</b>	<b>5</b>	<b>507 795</b>	<b>531 536</b>

Amounts in NOK millions	Fair value through profit or loss			31 Dec. 2020
	Designated	Mandatory	Amortised cost	Total
<b>FINANCIAL ASSETS</b>				
Deposits in banks	24 624	-	296	24 920
Secured lending	18 340	-	-	18 340
Unsettled trades	888	-	-	888
Equities	114 931	-	-	114 931
Equities lent	4 600	-	-	4 600
Bonds	448 105	-	-	448 105
Financial derivatives	-	12	-	12
Claims on the IMF	-	-	71 081	71 081
Lending to banks	-	-	80 168	80 168
Other financial assets	34	-	5 649	5 683
<b>Total financial assets</b>	<b>611 522</b>	<b>12</b>	<b>157 194</b>	<b>768 728</b>
<b>FINANCIAL LIABILITIES</b>				
Secured borrowing	23	-	-	23
Unsettled trades	14 383	-	-	14 383
Financial derivatives	-	10	-	10
Other financial liabilities	1 032	-	1 910	2 942
Liabilities to the IMF	-	-	53 925	53 925
Deposits from banks	-	-	52 807	52 807
Deposits from the Treasury	-	-	313 131	313 131
Notes and coins in circulation	-	-	41 006	41 006
<b>Total financial liabilities</b>	<b>15 438</b>	<b>10</b>	<b>462 779</b>	<b>478 227</b>

# Note 7 Investment risk

The foreign exchange reserves are held for the purpose of crisis management and shall be used as part of the conduct of monetary policy with a view to promoting financial stability and to meeting Norges Bank's international commitments. The aim of the management of the foreign exchange reserves is to attain the highest possible return within established limits. The foreign exchange reserves are divided into an equity portfolio, a fixed income portfolio and the petroleum buffer portfolio.

## 1. Organisation

The Executive Board has the overarching responsibility for risk management at Norges Bank and has established principles for risk management in Central Banking Operations, including financial risk. The Executive Board also lays down the overarching principles for the management of Norges Bank's foreign exchange reserves, including strategic asset allocation, benchmark indexes, investment universe and overarching risk measures.

The Risk and Investment Committee is a preparatory and advisory body to strengthen and improve the Executive Board's work related to investment strategy and risk limits for the foreign exchange reserves.

The Governor is responsible for the management of the foreign exchange reserves. The Governor has operationalised the Executive Board's principles in guidelines issued for the management for the equity portfolio, fixed income portfolio and petroleum buffer portfolio. Operational responsibility for management has been delegated to NBIM and Norges Bank Markets and ICT, respectively, with supplemental guidelines.

The division of roles and responsibilities in the risk management system is organised along three lines of defence. The first line of defence comprises the operational risk management and control activities that are performed by the operating units. The second line of defence comprises the central risk management and compliance functions, which are tasked with advising and supporting the operating units. Their task is to challenge the assessments of the first line of defence and ensure that the first line of defence performs adequate controls. The third line of defence is the internal audit function. Internal audit is placed under the Executive Board, independently of the administration, and shall assess whether risk management and compliance function as required.

## 2. Framework

The composition of the foreign exchange reserves and associated risk depends primarily on the strategic equity allocation and the portfolios' benchmark indexes, which are both defined by the Executive Board. The strategic equity allocation of the total equity and fixed income portfolio is 20 percent.

The benchmark index for the equity portfolio is a tax-adjusted version of the FTSE ALL World Developed Market Index,

limited to euro area countries, the US, UK, Japan, Canada, Australia, Switzerland, Sweden and Denmark. The equity portfolio may be invested in cash deposits and equities listed on a regulated and recognised exchange.

The benchmark index for the fixed income portfolio is a market-weighted index of all nominal government bonds with a residual maturity of between one month and 10 years issued by France, Germany, Japan, China, the UK and the US. The fixed income portfolio may be invested in cash deposits and in Treasury bills and government bonds issued by the countries in the benchmark index.

No benchmark index has been set for the petroleum buffer portfolio. The purpose of the portfolio is to provide for an appropriate management of the government's need for converting foreign currency and NOK and for any transfers to and from the GPFG. The petroleum buffer portfolio is invested in short-term fixed income instruments.

Through management of the foreign exchange reserves, Norges Bank is exposed to various types of financial risk, including market risk, credit risk and counterparty risk. For the management of the foreign exchange reserves, risk management is defined as the management of these risks. The units with operational responsibility for management have the responsibility for managing risk in accordance with current principles and guidelines.

## 3. Risk management process

Norges Bank employs several measurement methodologies, processes and systems to control investment risk. Robust and widely accepted risk management systems and processes are complemented by internally developed measurement methods and processes.

## 4. Market risk

Market risk is defined as the risk of loss or a change in the market value of the portfolio, or parts of the portfolio, as a result of changes in the equity, fixed income or foreign exchange market, including changes in credit premiums.

Continuous monitoring, measurement and assessment of market risk are performed along multiple dimensions. Combining different and complementary risk measures provides a better insight into the portfolios' risk profile. Norges Bank measures both absolute and relative risk for the investments in the portfolios.

### Allocation by country and currency

The foreign exchange reserves primarily contain investments in sovereign bonds and listed companies. In accordance with the investment management framework, the investments are allocated to several countries and currencies. The following tables show investments broken down by region, currency and industry.

**Table 7.1** Foreign exchange reserves allocation by asset class and region/sovereign issuer

Amounts in NOK millions		31 Dec. 2021		31 Dec. 2020	
		Market value in percent	Market value	Market value in percent	Market value
<b>Equity portfolio</b>					
Equities	Americas	72%	87 306	69%	81 335
	Europe	19%	23 105	20%	23 997
	Asia and Oceania	9%	11 545	11%	13 274
<b>Total equity portfolio</b>		<b>100%</b>	<b>121 956</b>	<b>100%</b>	<b>118 606</b>
<b>Fixed income portfolio</b>					
Bonds	US	49%	235 087	48%	224 700
	France	18%	87 762	18%	84 496
	Germany	15%	71 144	15%	68 413
	UK	7%	32 919	8%	34 734
	Japan	7%	31 736	8%	33 823
	China	2%	9 019	0%	1 938
<b>Total bonds</b>		<b>98%</b>	<b>467 667</b>	<b>97%</b>	<b>448 104</b>
Deposits		2%	9 883	3%	11 681
<b>Total fixed income portfolio</b>		<b>100%</b>	<b>477 550</b>	<b>100%</b>	<b>459 785</b>
<b>Petroleum buffer portfolio</b>					
Deposits	Americas	54%	23 192	73%	12 746
	Europe	46%	19 901	27%	4 748
<b>Total petroleum buffer portfolio</b>		<b>100%</b>	<b>43 093</b>	<b>100%</b>	<b>17 494</b>
<b>Total foreign exchange reserves</b>		<b>100%</b>	<b>642 599</b>	<b>100%</b>	<b>595 885</b>

**Table 7.2** Equity portfolio by industry

Amounts in NOK millions	31 Dec. 2021		31 Dec. 2020 <sup>1</sup>	
	Market value	Share	Market value	Share
Technology	30 608	25%	26 404	22%
Consumer discretionary	19 505	16%	19 861	17%
Industrials	16 200	13%	16 605	14%
Financials	16 005	13%	15 467	13%
Health care	15 627	13%	15 663	13%
Consumer goods	6 848	6%	7 444	6%
Basic materials	3 767	3%	4 168	3%
Telecommunications	3 744	3%	4 443	4%
Real estate	3 487	3%	3 147	3%
Energy	3 222	3%	2 987	3%
Utilities	2 885	2%	3 058	3%
Cash	58	0%	-641	-1%
<b>Total equity portfolio</b>	<b>121 956</b>	<b>100%</b>	<b>118 606</b>	<b>100%</b>

<sup>1</sup> In 2021, FTSE changed its ICB sector classification. Comparative amounts have been restated to conform with current period presentation.

**Table 7.3** Foreign exchange reserves 10 largest holdings of equities

31 Dec. 2021			
Amounts in NOK millions	Sector <sup>1</sup>	Market value	Share <sup>2</sup>
Apple Inc	Technology	5 612	4.6%
Microsoft Corp	Technology	5 185	4.3%
Alphabet Inc	Technology	3 452	2.8%
Amazon.com Inc	Consumer discretionary	2 958	2.4%
Tesla Inc	Consumer discretionary	1 747	1.4%
Meta Platforms Inc	Technology	1 635	1.4%
NVIDIA Corp	Technology	1 440	1.2%
Berkshire Hathaway Inc	Financials	1 132	0.9%
UnitedHealth Group Inc	Health care	964	0.8%
JPMorgan Chase & Co	Financials	952	0.8%
<b>Total</b>		<b>25 077</b>	<b>20.6%</b>

31 Dec. 2020			
Amounts in NOK millions	Sector <sup>1</sup>	Market value	Share <sup>2</sup>
Apple Inc	Technology	5 265	4.4%
Microsoft Corp	Technology	4 097	3.5%
Amazon.com Inc	Consumer services	3 398	2.9%
Alphabet Inc	Technology	2 551	2.2%
Facebook Inc	Technology	1 614	1.4%
Tesla Inc	Consumer goods	1 299	1.1%
Berkshire Hathaway Inc	Financials	1 093	0.9%
Johnson & Johnson	Health care	1 023	0.9%
JPMorgan Chase & Co	Financials	948	0.8%
Visa Inc	Financials	903	0.8%
<b>Total</b>		<b>22 191</b>	<b>18.7%</b>

<sup>1</sup> In 2021, FTSE changed its ICB sector classification. Comparative amounts have been restated to conform with current period presentation.

<sup>2</sup> Market value's percentage share of the equity portfolio's total market value.

### Foreign exchange rate risk

Foreign exchange rate risk is the risk that the value of financial instruments will change owing to movements in foreign exchange rates. Norges Bank has, primarily through the foreign exchange reserves, invested in securities issued and traded in currencies other than NOK. Consequently, the value of these investments is exposed to foreign exchange rate risk. See Note 8 Currency for further information.

### Interest rate risk

A substantial portion of the foreign exchange reserves is invested in sovereign bonds issued by the US, Germany, France, the UK, Japan and China. The value of fixed income instruments is affected by changes in interest rates in these

countries. The investments' interest rate sensitivity is measured by modified duration. At year-end, modified duration was 3.83 percent for the fixed income portfolio. In isolation, this means that a 1 percent fall in yields corresponds to a 3.83 percent rise in bond prices. By comparison, modified duration at year-end 2020 was 3.86.

### Volatility and correlation risk

Norges Bank uses models to quantify the risk of value changes associated with the foreign exchange reserves. This is measured by the standard deviation of the return and is usually referred to as volatility. Absolute volatility provides an estimate of how much the portfolio value can be expected to change in the course of a year, given the

current portfolio composition. In two out of three years, portfolio return is expected to deviate from the estimate. Expected volatility can be expressed in terms of the portfolio's absolute risk or relative risk. Relative volatility (tracking error) provides an indication of how much the portfolio is expected to fluctuate compared with its benchmark index. In accordance with the Executive Board's principles for management of the foreign exchange reserves, the maximum expected relative volatility is set at 50 basis points for the equity and fixed income portfolios, respectively. This implies that the relative return on the portfolios is expected to lie within the range of  $\pm 50$  basis points in two out of three years.

The risk models make it possible to estimate the risk in a portfolio across asset classes, markets, currencies, securities and instruments. Risk is then expressed as a single numerical value, which takes into account the correlation between risk factors. The models use historical relationships, which provide reliable forecast in markets that are not experiencing substantial changes in volatility and correlation. Estimates will be less reliable in periods marked by significant market movements. Regular testing of the models is performed to validate the model's ability to estimate risk. Reported risk measures are annualised.

**Table 7.4** Portfolio risk

	Expected volatility							
	31 Dec. 2021	Min 2021	Max 2021	Avg. 2021	31 Dec. 2020	Min 2020	Max 2020	Avg. 2020
Equity portfolio	14.7%	14.6%	15.3%	15.1%	14.8%	10.6%	14.9%	13.5%
Fixed income portfolio	10.3%	9.1%	13.9%	10.9%	13.9%	6.4%	22.5%	13.1%

	Expected relative volatility, basis points							
	31 Dec. 2021	Min 2021	Max 2021	Avg. 2021	31 Dec. 2020	Min 2020	Max 2020	Avg. 2020
Equity portfolio	8	8	12	9	8	5	29	7
Fixed income portfolio	2	1	6	2	2	1	15	3

At year-end 2021, expected absolute volatility was measured at 14.7 percent for the equity portfolio and 10.3 percent for the fixed income portfolio. This means that yearly value fluctuations on the order of NOK 18bn and NOK 49bn, respectively, can be expected. At year-end 2020, the corresponding expected value fluctuations were NOK 18bn and NOK 64bn, respectively. At year-end 2021, expected relative volatility for the equity and fixed income portfolios was 8 and 2 basis points, respectively, compared with 8 and 2 basis points, respectively, at year-end 2020.

## 5. Credit risk

Credit risk is defined as the risk of loss due to an issuer being unable to meet its payment obligations.

The fixed income portfolio comprises only sovereign bonds issued by the US, Germany, France, the UK, Japan and China, all rated investment grade by external credit rating agencies. The credit risk of bond investments in the foreign exchange reserve is therefore regarded as low.

**Table 7.5** Bonds specified by sovereign issuer and credit rating

		31 Dec. 2021		31 Dec. 2020	
Amounts in NOK millions	Credit rating	Market value	Share	Market value	Share
US	AAA	235 087	50%	224 700	50%
Germany	AAA	71 144	15%	68 413	15%
France	AA	87 762	19%	84 496	19%
UK	AA-	32 919	7%	34 734	8%
China	A+	9 019	2%	1 938	0%
Japan	A	31 736	7%	33 823	8%
<b>Total bonds</b>		<b>467 667</b>	<b>100%</b>	<b>448 104</b>	<b>100%</b>

## 6. Counterparty risk

Counterparty risk is defined as the risk of loss due to a counterparty default on its obligations. Counterparty risk includes the risk associated with counterparty insolvency, settlement risk and custodial risk.

In the management of the foreign exchange reserves a large number of counterparties are used to limit concentration. Counterparty risk is primarily related to securities lending, reverse repurchase agreement, unsecured bank deposits, foreign exchange contracts and futures.

To reduce counterparty exposure, requirements have been set for the credit quality of counterparties. Norges Bank's counterparties usually have credit rating from several independent credit rating agencies. An internal credit evaluation can only be used as the basis for counterparty approval in instances when the counterparty risk is considered very low. Credit ratings of the Bank's counterparties are monitored and complemented by alternative credit risk indicators.

Counterparty risk is also reduced by setting exposure limits for individual counterparties. Netting agreements are in place for trades in currency contracts and reverse repurchase agreements, and there are collateral requirements for counterparty net positions with a positive market value. Minimum requirements have also been set relating to the credit quality, time to maturity and concentration of the collateral. Netting and collateral agreements are entered into for all counterparties approved for these types of trades. For securities lending transactions, a premium is added to the market value to reflect the position's volatility, and these positions are also adjusted for netting and actual collateral received and posted when determining net exposure. See Note 10 Collateral and offsetting for further information.

At year-end 2021, counterparty risk is regarded as low. Collateral has been posted in excess of the exposure in the open reverse repurchase agreements, and unsecured bank deposits almost exclusively comprise deposits with the Federal Reserve or with other central banks.

**Table 7.6** Counterparties<sup>1</sup> by credit rating

	Non brokers		Brokers	
	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020
AAA	3	3	-	-
AA	24	24	18	17
A	55	57	39	34
BBB	12	14	15	18
BB	2	2	9	5
B	-	1	4	5
<b>Total</b>	<b>96</b>	<b>101</b>	<b>85</b>	<b>79</b>

<sup>1</sup> Counterparties in the category "Brokers" are defined as equity and bond brokers and futures brokers. Counterparties in other transactions are classified as "excluding brokers". In cases where a counterparty is used for trading securities and for other transactions, the same counterparty will be included in both categories. As counterparties are counted per legal entity, several counterparties may be included per corporate group. Counterparties that are central banks are not included in the table.

## Leverage

Leverage may be used to ensure effective management of the investments in the equity portfolio, but not with the aim of increasing the economic exposure to risky assets. Leverage is the difference between total net exposure and the market value of the portfolio. There was no leverage in the portfolio at year-end 2021 and 2020.

## Sale of securities that Norges Bank does not own

The sale of securities that Norges Bank does not own is not permitted in the management of the foreign exchange reserves.

## 7. Liquidity risk

Liquidity risk is the risk of being unable to meet financial obligations at the agreed time. As a central bank, Norges Bank is not exposed to this type of liquidity risk in local currency. There is little or no liquidity risk associated with the Bank's liabilities, which are primarily in NOK. The majority of assets is held in foreign currency and are highly liquid financial instruments. They may be realised at short notice without a substantial change in value, and the liquidity risk associated with them is therefore regarded as low. Assets in foreign currency are regarded as sufficient for meeting foreign currency obligations.

## 8. Other risk

### Credit risk associated with lending to banks

Credit and counterparty risk associated with F-loans and intraday/overnight loans (D-loans) is managed by requiring collateral for such loans, in the form of securities pledged to Norges Bank. The total lending facility for banks is determined by collateral pledged to Norges Bank, F-deposits and deposits with the Scandinavian Cash Pool.

Norges Bank stipulates more detailed terms for pledging securities and fund units as collateral for loans in Norges Bank pursuant to Section 6 of the Regulation on the Access of Banks to Borrowing and Deposit Facilities in Norges Bank etc. The current guidelines have been issued in Norges Bank's Circular No. 4/2021 from August 2021. See Note 18 Loans and deposits for more information.

The rules for pledging collateral are intended to limit Norges Bank's risk associated with lending to banks and facilitate appropriate levels of bank borrowing. Risk is limited, since only high quality securities are eligible and since the loan value is lower than the market value of the collateral (haircut).

### Credit risk associated with loans to the IMF

Norges Bank's loans to the IMF are intended to bolster the IMF's general borrowing agreements. Norges Bank is not directly exposed to risk in the loan portfolio managed by the IMF. The IMF has never realised a loss on its loans under their general borrowing agreements. The IMF has preferred creditor status, which means that the IMF has priority over all other creditors. If the IMF should incur a loss on its loans, this will initially affect the IMF's own assets and, if necessary, paid-in subscriptions. Since all claims are against the IMF, Norway has no credit exposure to third countries in connection with these loans. In Norges Bank's assessment, the risk related to IMF loans is low, and no impairment losses have been recognised with regard to these loans.

### Expected credit losses

Assets measured at amortised cost are allocated on the reporting date to Stages 1, 2 or 3.

On initial recognition, assets are allocated to Stage 1. Stage 1 requires an estimation of a 12-month expected credit loss. The expected loss in Stage 1 reflects the entire loss on an asset weighted by the probability that the loss will occur in the next 12 months. On each reporting date, an assessment shall be made of whether the credit risk of a financial asset has increased significantly. If this is the case, the exposure must be moved to Stages 2 or 3. Stages 2 and 3 require estimation of an expected credit loss over the entire life of the exposure.

No loss provisions had been made for expected credit losses at year-end 2021 and 2020.

**Table 7.7** Expected credit loss

Amounts in NOK millions	31 Dec. 2021		31 Dec. 2020	
	Carrying amount	Expected credit loss	Carrying amount	Expected credit loss
Loans to and net claims on the IMF	19 281	-	17 156	-
Lending to banks	45 101	-	80 168	-
Other <sup>1</sup>	167	-	5 488	-
<b>Total</b>	<b>64 549</b>	<b>-</b>	<b>102 812</b>	<b>-</b>

<sup>1</sup> Primarily a receivable from the Ministry of Finance related to the management of the GPFG at year-end 2020. At year-end 2021 there was no receivable from the Ministry of Finance related to the management of the GPFG



# Note 8 Currency

## Critical accounting judgement

The management of Norges Bank has concluded that the Bank's functional currency is the Norwegian krone (NOK), since this is the dominant currency in the Bank's underlying activities. Owner's capital, in the form of the GPFG's krone account, is denominated in NOK and a share of the costs related to management of the GPFG are in NOK. Since the financial reporting for the GPFG constitutes a part of Norges Bank's financial statements, the judgement is that the GPFG's functional currency is also NOK. The investment portfolio's nominal return is reported internally and to the owner in NOK, while the percentage return is reported in NOK and in the currency basket specified in the management mandate issued by the Ministry of Finance. Furthermore, no single investment currency stands out as dominant in the asset management.

## Accounting policy

Foreign currency transactions are recognised in the financial statements using the exchange rate prevailing on the transaction date. Assets and liabilities in foreign currencies are translated into NOK using the exchange rate at the balance sheet date. The foreign exchange element, which is linked to realised and unrealised gains and losses on assets and liabilities, is disaggregated in the income statement and presented on a separate line, Foreign exchange gain/loss.

## Critical accounting judgement

Gains and losses on financial instruments are due to changes in the price of the instrument (before foreign exchange gains and losses) and changes in foreign exchange rates (foreign exchange gains and losses). The method for allocating total gains and losses in NOK to a security element and a foreign exchange element is described below. Different methods will result in different estimates.

### Foreign exchange element

Unrealised gains or losses due to changes in foreign exchange rates are calculated based on the original cost of the holding in local currency and the change in the foreign exchange rate from the time of purchase until the balance sheet date. If the holding has been purchased in a previous period, gains and losses recognised in the income statement in previous periods are deducted to arrive at the gain or loss for the current period. For realised gains or losses, the foreign exchange rate on the date of sale is used for calculating realised gains or losses, and previously recognised unrealised gains or losses for the holding are reversed in the current period.

### Security element

Unrealised gains or losses from changes in the security price are calculated based on the change in the instrument's price from the purchase date to the balance sheet date and the closing exchange rate at the balance sheet date. If the holding was acquired in a previous period, gains and losses recognised in the income statement in previous periods are deducted to arrive at the gain or loss from security prices for the current period. When the holding is sold, the holding's selling price is used for calculating realised gains or losses, and previously recognised unrealised gains or losses for the holding are reversed in the current period.

**Table 8.1** Foreign exchange reserves by currency

31 Dec. 2021						
Amounts in NOK millions	USD	EUR	GBP	JPY	Other	Total
<b>Financial assets</b>						
Deposits in banks	28 017	9 014	9 937	1 635	691	49 295
Secured lending	9 623	17 385	-	-	-	27 007
Unsettled trades	19	-	303	2	-	325
Equities	84 104	10 832	4 487	7 382	10 710	117 515
Equities lent	282	1 637	166	1 584	784	4 454
Bonds	235 087	158 906	32 919	31 736	9 019	467 667
Financial derivatives	-	20	2	-	3	26
Other financial assets	1	44	-	-	7	52
<b>Total financial assets</b>	<b>357 131</b>	<b>197 839</b>	<b>47 816</b>	<b>42 340</b>	<b>21 214</b>	<b>666 340</b>
<b>Financial liabilities</b>						
Secured borrowing	28	-	-	-	-	28
Unsettled trades	7 391	14 421	-	384	-	22 197
Financial derivatives	3	-	-	2	-	5
Other financial liabilities	1 480	-	-65	-	96	1 511
<b>Total financial liabilities</b>	<b>8 902</b>	<b>14 421</b>	<b>-65</b>	<b>386</b>	<b>96</b>	<b>23 741</b>
<b>Net foreign exchange reserves</b>	<b>348 229</b>	<b>183 418</b>	<b>47 881</b>	<b>41 954</b>	<b>21 118</b>	<b>642 599</b>

31 Dec. 2020						
Amounts in NOK millions	USD	EUR	GBP	JPY	Other	Total
<b>Financial assets</b>						
Deposits in banks	17 116	1 636	3 510	1 998	363	24 623
Secured lending	7 663	10 092	585	-	-	18 340
Unsettled trades	-	874	-	14	-	888
Equities	78 527	11 908	5 181	8 020	11 095	114 731
Equities lent	609	864	61	2 583	483	4 600
Bonds	224 700	152 909	34 734	33 824	1 938	448 105
Financial derivatives	10	-	-	1	1	12
Other financial assets	1	28	1	-	4	34
<b>Total financial assets</b>	<b>328 626</b>	<b>178 311</b>	<b>44 072</b>	<b>46 440</b>	<b>13 884</b>	<b>611 333</b>
<b>Financial liabilities</b>						
Secured borrowing	23	-	-	-	-	23
Unsettled trades	7 484	6 004	670	225	-	14 383
Financial derivatives	1	9	-	-	-	10
Other financial liabilities	635	240	37	7	113	1 032
<b>Total financial liabilities</b>	<b>8 143</b>	<b>6 253</b>	<b>707</b>	<b>232</b>	<b>113</b>	<b>15 448</b>
<b>Net foreign exchange reserves</b>	<b>320 483</b>	<b>172 058</b>	<b>43 365</b>	<b>46 208</b>	<b>13 771</b>	<b>595 885</b>

Total comprehensive income is affected by exchange rate movements. A 1 percent depreciation of NOK against all currency crosses will result in a positive impact on the

income statement of around NOK 6bn, and a corresponding negative impact on the income statement from a 1 percent appreciation of NOK.

**Table 8.2** Exchange rates

	31 Dec. 2021	31 Dec. 2020	Change <sup>1</sup>
US dollar	8.82	8.56	3%
Euro	10.03	10.48	-4%
Pound sterling	11.94	11.70	2%
Japanese yen	0.08	0.08	0%

<sup>1</sup> Percentage change in the exchange rate.

# Note 9 Secured lending and borrowing

Secured lending and borrowing comprises transactions in which securities or cash is transferred or received secured by other securities or cash. Transactions are carried out

under various agreements such as securities lending agreements and reverse repurchase agreements.

**Table 9.1** Income/expense from secured lending and borrowing

Amounts in NOK millions	2021	2020
Income/-expense from secured lending	-27	-10
Income/-expense from secured borrowing	-	-40
<b>Net income/-expense from secured lending and borrowing</b>	<b>-27</b>	<b>-50</b>

The purpose of secured lending and borrowing is to generate additional income from securities and cash holdings as a part of liquidity management and contributes to efficient market pricing. The share of securities lent shall

not exceed 20 percent of the equity portfolio's market value. Lending is governed by demand for the equities in the portfolio and market pricing. All lending is secured by sufficient collateral received.

## Accounting policy

### Income and expense from secured lending and borrowing transactions

Income and expenses from secured lending and borrowing transactions primarily comprise interest and net fees, which are recognised on a straight-line basis over the term of the agreement. This is presented in the income statement as Income/expense from secured lending and Income/expense from secured borrowing, respectively.

## Accounting policy

### Transferred financial assets

Securities lent to counterparties in connection with secured lending and borrowing are not derecognised when the agreement is entered into, as the derecognition criteria are not met. As the counterparty has the right to sell or pledge the security, the security is considered transferred. Transferred securities are presented on separate lines in the balance sheet, as Equities lent. During the lending period, the accounting for the underlying securities is in accordance with accounting policies for the relevant securities.

### Secured lending

Cash collateral posted to counterparties is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised in the balance sheet as an asset, Secured lending. This asset is measured at fair value.

### Secured borrowing

Cash collateral received is recognised as Deposits in banks together with a corresponding liability, Secured borrowing. This liability is measured at fair value.

### Collateral received in the form of securities

Collateral received in the form of securities through secured lending and borrowing transactions, where Norges Bank has the right to sell or pledge the security, is not recognised in the balance sheet, unless reinvested.

**Table 9.2** Lending associated with securities financing transactions

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Secured lending	27 007	18 340
Of which unsettled trades (liability)	18 857	10 409
<b>Secured lending excluding unsettled trades</b>	<b>8 150</b>	<b>7 931</b>
<b>Associated collateral in the form of securities (off-balance sheet)</b>		
Equities received as collateral	-	-
Bonds received as collateral	8 517	8 206
<b>Total security collateral received related to lending</b>	<b>8 517</b>	<b>8 206</b>

**Table 9.3** Transferred financial assets and secured borrowing

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
<b>Transferred financial assets</b>		
Equities lent	4 454	4 600
<b>Total transferred financial assets</b>	<b>4 454</b>	<b>4 600</b>
<b>Associated cash collateral, recognised as liability</b>		
Secured borrowing	28	23
Of which unsettled trades (assets)	-	-
<b>Secured borrowing excluding unsettled trades</b>	<b>28</b>	<b>23</b>
<b>Associated collateral in the form of securities (off-balance sheet)</b>		
Equities received as collateral	3 366	3 704
Bonds received as collateral	2 859	1 359
<b>Total security collateral received related to transferred financial assets</b>	<b>6 225</b>	<b>5 063</b>

Cash collateral received is reinvested in its entirety. No securities received as collateral were reinvested at year-end 2021 or 2020. Therefore, these securities are not recognised in the balance sheet.

# Note 10 Collateral and offsetting

## Accounting policy

### Cash collateral, OTC derivative transactions

Cash collateral posted in connection with OTC derivative transactions is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised in the balance sheet as Cash collateral posted. Cash collateral received in connection with OTC derivative transactions is recognised as Deposits in banks together with a corresponding liability, Cash collateral received. Both Cash collateral posted and Cash collateral received are measured at fair value.

### Offsetting

Financial assets and liabilities are not offset and presented net in the balance sheet, as the criteria in IAS 32 Financial Instruments: Presentation, are not met. Therefore, Table 10.1 does not include a column for amounts offset/netted in the balance sheet.

## 1. Collateral

The balance sheet lines Cash collateral posted and Cash collateral received are exclusively associated with OTC derivative transactions. In connection with secured lending and borrowing transactions, collateral will be posted or received in the form of securities or cash, see Note 9 Secured lending and borrowing for further information.

## 2. Offsetting

For various counterparties and transaction types, cash collateral will be both posted to and received from the same counterparty. Therefore, received cash collateral can be netted against posted cash collateral and vice-versa, as shown in Table 10.1. Table 10.1 shows an overview of financial assets and liabilities, the effects of legally enforceable netting agreements and related collateral to reduce credit risk. The columns Amount in the balance sheet

subject to netting shows the carrying amounts of financial assets and liabilities that are subject to legally enforceable netting agreements. These amounts are adjusted for effects of potential netting of recognised financial assets and liabilities, together with posted or received cash collateral, with the same counterparty. The remaining net exposure is presented in the column Amount after netting and collateral.

In the event of counterparty default, a collective settlement between Norges Bank and the bankruptcy estate could be performed for certain groups of instruments, irrespective of whether the instruments belong to the GPFG or Norway's foreign exchange reserves. Such cross nettings will be settled between these portfolios but are therefore not adjusted for in this table.

**Table 10.1** Assets and liabilities subject to netting agreements

31 Dec. 2021							
		Amounts subject to enforceable netting agreements					
Amounts in NOK millions	Gross amount as recognised in the balance sheet	Amount in the balance sheet not subject to enforceable netting agreements	Amount in the balance sheet subject to netting	Amount related to same counterparty	Cash collateral (recognised)	Security collateral (not recognised)	Amount after netting and collateral
<b>Assets</b>							
Secured lending	27 007	18 857	8 150	-	-	8 150	-
Financial derivatives	26	26	-	-	-	-	-
<b>Total</b>	<b>27 033</b>	<b>18 883</b>	<b>8 150</b>	<b>-</b>	<b>-</b>	<b>8 150</b>	<b>-</b>
<b>Liabilities</b>							
Secured borrowing	28	-	28	-	-	28	-
Financial derivatives	5	5	-	-	-	-	-
<b>Total</b>	<b>33</b>	<b>5</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>

31 Dec. 2020							
		Amounts subject to enforceable netting agreements					
Amounts in NOK millions	Gross amount as recognised in the balance sheet	Amount in the balance sheet not subject to enforceable netting agreements	Amount in the balance sheet subject to netting	Amount related to same counterparty	Cash collateral (recognised)	Security collateral (not recognised)	Amount after netting and collateral
<b>Assets</b>							
Secured lending	18 340	10 409	7 931	-	-	7 931	-
Financial derivatives	12	12	-	-	-	-	-
<b>Total</b>	<b>18 352</b>	<b>10 421</b>	<b>7 931</b>	<b>-</b>	<b>-</b>	<b>7 931</b>	<b>-</b>
<b>Liabilities</b>							
Secured borrowing	23	-	23	-	-	23	-
Financial derivatives	10	10	-	-	-	-	-
<b>Total</b>	<b>33</b>	<b>10</b>	<b>23</b>	<b>-</b>	<b>-</b>	<b>23</b>	<b>-</b>

# Note 11 Pension

## Accounting policy

Accounting treatment of pension and other benefit obligations is in accordance with IAS 19 Employee Benefits. Calculations for fund-based plans through Norges Bank's pension fund are based on actuarial assumptions regarding life expectancy, expected wage growth and adjustment of the National Insurance basic amount (G), among others. The net benefit obligation is the difference between the present value of the benefit obligation and the fair value of plan assets.

Plan assets are measured at fair value. Benefit obligations and plan assets are measured on the balance sheet date. Employers' National Insurance contributions are included. Pension expense is calculated on the basis of a straight-line attribution of benefit over the period of service and consists of the current service cost, less the return on plan assets. Recognised pension expense is presented in its entirety under the line Personnel expenses. Actuarial gains and losses are recognised in total comprehensive income.

Norges Bank has funded and unfunded pension and other benefit obligations. All significant funded and unfunded plans are included in the Bank's actuarial settlement. Norges Bank has a pension plan where the benefits are in line with the Norwegian Public Service Pension Fund and other comparable public sector pension plans. Pension benefits are subject to a life expectancy adjustment and are coordinated with benefits from the National Insurance scheme.

Norges Bank's funded pension benefit obligations are covered by Norges Bank's own pension fund, which is organised as a separate legal entity. Service credit for retirement benefits is generally earned for each year the employee is working up until age 70. Employees contribute 2 percent of their gross annual salary into the pension fund. Norges Bank's contributions are covered by cash payments or the premium fund.

**Table 11.1** Number of pension plan members (funded plan)

	31 Dec. 2021	31 Dec. 2020
Members drawing retirement benefits	932	950
Active members (including all those affected by restructuring)	751	758
Members who have left the Bank with vested rights	1 094	1 038
<b>Total number of pension plan members</b>	<b>2 777</b>	<b>2 746</b>

### 1. Norges Bank's benefit obligation

Norges Bank has funded pension plans associated with membership of Norges Bank's pension fund. In addition, the Bank has unfunded plans funded out of current income. These are special and allocated pensions, the unfunded portions of pensions for employees with salaries higher than 12 G earned after 1 January 2007, contractual early

retirement pensions calculated on the basis of an expected 15 percent take-up rate and early retirement pension and redundancy pay agreements related to restructuring. The benefit obligation related to restructuring is the present value of all agreements, including agreements with disbursements in 2021 or later.

## Significant estimate

Measurement of the present value of Norges Bank's pension benefit obligation requires determination of a number of economic and demographic assumptions. Changes in these assumptions may affect the pension expense and the pension benefit obligation recognised in the balance sheet. Norges Bank follows Norwegian Accounting Standards Board (NASB) guidelines in determining the economic assumptions. The guideline assumptions are assessed against actual conditions at Norges Bank before a decision is made to apply them.



**Table 11.2** Economic and demographic assumptions

	31 Dec. 2021	31 Dec. 2020
Discount rate	1.90%	1.70%
Interest rate on assets	1.90%	1.70%
Rate of compensation increase	2.75%	2.25%
Rate of pension increase	1.75%	1.25%
Increase in social security base amount (G)	2.50%	2.00%
Expected annual attrition	2% up to age 50, then 0	2% up to age 50, then 0
Payroll tax/social security tax	14.10%	14.10%
Mortality table	K2013BE	K2013BE
Disability table	KU	KU

**Table 11.3** Net liability recognised in the balance sheet

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
<b>Change in defined benefit obligation (DBO) incl. payroll tax</b>		
DBO at beginning of year	5 082	4 414
Service cost	198	139
Interest cost	85	102
Plan amendments	-	89
Payroll tax on employer contribution	-55	-14
Benefits paid	-142	-148
Remeasurement loss/-gain	529	500
<b>DBO at year-end</b>	<b>5 697</b>	<b>5 082</b>
<b>Change in plan assets</b>		
Fair value of assets at beginning of year	5 238	4 746
Interest income	83	103
Employer contribution incl. payroll tax	444	109
Payroll tax on employer contribution	-54	-14
Benefits paid	-135	-141
Remeasurement (loss) gain	415	435
<b>Fair value of assets at year-end</b>	<b>5 991</b>	<b>5 238</b>
Pension scheme not recognised in the actuarial calculation	1	1
<b>Net amount recognised in the balance sheet</b>	<b>-293</b>	<b>-155</b>

**Table 11.4** Specification of funded and unfunded plans

Amounts in NOK millions	31 Dec. 2021			31 Dec. 2020		
	Funded plan	Unfunded plans	Total	Funded plan	Unfunded plans	Total
Accrued benefit obligations	5 472	226	5 698	4 873	210	5 083
Plan assets	-5 991	-	-5 991	-5 238	-	-5 238
<b>Net benefit obligation/-net plan assets</b>	<b>-519</b>	<b>226</b>	<b>-293</b>	<b>-365</b>	<b>210</b>	<b>-155</b>

**Table 11.5** Allocation of plan assets for funded plan

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Bonds	2 957	2 693
Equities	2 283	1 893
Real estate fund	751	652
<b>Total</b>	<b>5 991</b>	<b>5 238</b>

## 2. Pension expense for employees in Norway

Pension expense includes current service cost, interest expense and expected return on plan assets.

Expenses relating to employees associated with NBIM are covered in their entirety by the management fee and amounted to NOK 98.8m in 2021 and NOK 101.9m in 2020.

The change in the unfunded plans is included in the overall pension expense.

**Table 11.6** Pension expense

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Service cost incl. interest and payroll tax	198	139
Administration cost incl. payroll tax	5	5
Effect of plan amendments incl. payroll tax	-	89
<b>Service cost and cost of benefit changes</b>	<b>203</b>	<b>233</b>
Net interest cost/-income incl. payroll tax	-3	-6
<b>Net periodic pension cost</b>	<b>200</b>	<b>227</b>
<b>Other comprehensive income (OCI) in the period</b>		
Remeasurement loss/-gain - change in discount rate	-202	545
Remeasurement loss/-gain - change in other economic assumptions	527	-
Remeasurement loss/-gain - change in mortality table	-	-
Remeasurement loss/-gain - change in other demographic assumptions	-	-
Remeasurement loss/-gain - experience adjustments, DBO	204	-45
Remeasurement loss/-gain - experience adjustments, assets	-452	-471
Investment management cost	37	36
<b>OCI losses/-gains in the period</b>	<b>114</b>	<b>65</b>

### 3. Sensitivity analysis

The sensitivity analysis has been prepared in the light of possible changes in the assumptions expected to have the most pronounced effect on the pension obligation: the

discount rate and general wage growth. The other actuarial assumptions are kept unchanged in the sensitivity analysis.

**Table 11.7** Sensitivity analysis

31 Dec. 2021				
	Discount rate	General wage growth	ABO pensioners / DBO other <sup>1</sup>	Change <sup>2</sup>
Assumptions at 31 Dec. 2021	1.90%	2.75%	5 697	I/A
Discount rate + 0.5 percentage points	2.40%	2.75%	5 172	-9.22%
Discount rate - 0.5 percentage points	1.40%	2.75%	6 307	10.71%
General wage growth + 0.5 percentage points	1.90%	3.25%	5 898	3.53%
General wage growth - 0.5 percentage points	1.90%	2.25%	5 511	-3.26%

<sup>1</sup> Amounts in NOK millions.

<sup>2</sup> Percentage change in the pension benefit obligation.

### 4. Pension plans for locally employed staff of foreign offices

Locally employed staff at Norges Bank's offices in London, New York and Singapore have a defined-contribution pension plan in accordance with local provisions in addition to what has been established by the authorities. As employer, Norges Bank contributes up to 10 percent of fixed salary for employees in London, up to 8 percent of fixed salary for employees in New York, and up to 20 percent of fixed salary for employees in Singapore to the plans in line with market practice. The plans are managed externally,

within rules determined by Norges Bank. Locally employed staff at Norges Bank's offices in Shanghai have no pension plan beyond what has been established by the authorities. This is in line with market practice. Recognised expenses for the plans in London, New York, Singapore and Shanghai amounted to NOK 34.8m in 2021 and NOK 35.4m in 2020. The cost of pension plans for locally employed staff of offices outside of Norway is presented under Other personnel expenses in Table 12.1.

# Note 12 Personnel expenses

## Accounting policy

Pay comprises all types of remuneration to the Bank's own employees and is expensed as earned. Ordinary pay may be either a fixed salary or hourly wages and is earned and disbursed on an ongoing basis. Holiday pay is earned on the basis of ordinary pay and is normally disbursed during the holiday months of the subsequent year. Performance-based pay is earned and calculated on the basis of various performance targets and is disbursed in subsequent years (See separate discussion in the section on the salary system).

Payroll tax is calculated and expensed for all pay-related expenses and normally paid in arrears every other month. Pensions are earned under separate rules (see Note 11 Pension).

### 1. Salary system

Norges Bank's Executive Board sets the limits for the Bank's salary and remuneration schemes and monitors how they are put into practice. The Bank's salary system is based on individual assessments and is subject to agreements with the unions representing Bank employees. There is a separate system of individually determined salaries at NBIM.

Salary levels at Norges Bank are to be competitive, but not market-leading. Norges Bank employs external consultants to perform annual comparisons of salary levels with other employers. The Executive Board has a Remuneration Committee comprising three of the external members and one employee representative. The Committee contributes to thorough and independent discussion of matters pertaining to the salary and remuneration schemes.

The Executive Board sets a salary cap for executive management in Central Banking Operations (CBO) and salary bands for senior executives at NBIM. The Governor determines annual salary for executive managers and others in CBO who report to the Governor, as well as for the CEO of NBIM within the band set by the Executive Board. Salaries for other senior executives at NBIM are determined by the CEO of NBIM in accordance with the salary bands set by the Executive Board.

#### Performance-based pay

Norges Bank's Executive Board lays down the principles for NBIM's salary system. The leader group receive only a fixed salary.

In addition to a fixed salary, employees of NBIM whose work directly involves investment decisions, and certain other NBIM employees, may be entitled to performance-based pay. Performance-based pay is calculated on the basis of the performance of the GPF, group and individual measured against set targets. Accrued performance-based pay is paid over several years. 50 percent is paid the year after it is accrued, and the other 50 percent is held back and paid over the following three years. The amount held back is

adjusted for the return on the GPF. For employees with performance base pay above 100 percent of fixed salary, 40 percent is paid the year after it is accrued, and other 60 percent is held back and paid over the following three years. Performance-based pay is capped at 100 percent of fixed salary for employees in Norway. For a limited number of employees at international offices, the cap may be up to 200 percent of fixed salary. Employees receiving performance-based pay earned on average 76 percent of the total limit for 2021, based on performance over several years.

At year-end 2021, 216 employees of NBIM received performance-based pay, 12 of whom were employed by subsidiaries. Their total upper limit for performance-based pay was NOK 425m.

The remuneration scheme is reviewed annually. In addition, Norges Bank Internal Audit conducts an independent review of compliance with rules and guidelines for remuneration. The review in 2021 confirmed that the implementation of the remuneration scheme for 2020 was in compliance with the rules. The remuneration scheme for employees of NBIM follows the rules in the Securities Fund Regulation, in line with the mandate of the Ministry of Finance. There were no material changes to the remuneration scheme in 2021.

Employees of CBO whose work directly involves investment decisions for the foreign exchange reserves may be entitled to performance-based pay. Performance-based pay is calculated on the basis on performance measured against set targets for the management of the foreign exchange reserves. Accrued performance-based pay is paid over several years. 60 percent is paid the year after it is accrued, and the other 40 percent is held back and paid over the following three years. The maximum bonus payment per year may not exceed the fixed salary.

Ten employees had a performance-based pay agreement in 2021. Employees receiving performance-based pay earned on average 14 percent of the total limit for 2021.

**Table 12.1** Personnel expenses

Amounts in NOK millions	2021	2020
Salary and fees <sup>1</sup>	1 259	1 512
Employer's social security contributions	164	178
Pension expense, see Note 11 Pension	200	227
Other personnel expenses	176	167
<b>Personnel expenses</b>	<b>1 799</b>	<b>2 084</b>

<sup>1</sup> In 2021 costs are reduced by NOK 273m due to a one-off accounting adjustment following a change in the method for accruing performance-based pay.

**Table 12.2** Number of employees/FTEs

	31 Dec. 2021	31 Dec. 2020
Number of employees	940	925
Number of FTEs	938	922

## 2. Benefits to governing bodies

### Supervisory Council

Total remuneration paid in 2021 was NOK 1 051 430. Of this amount, fixed remuneration was NOK 904 100.

Remuneration rates for 2021 were set by the Storting as from 1 January 2020 (cf Recommendation 54 S (2019-2020)).

The remaining NOK 147 430 is other remuneration for attending meetings, including for lost earnings. Total remuneration paid in 2020 was NOK 1 117 331.

With regard to remuneration to the director of the Office of the Supervisory Council and other expenses, see the Supervisory Council's report to the Storting for 2021.

**Table 12.3** Remuneration to the Supervisory Council and the Permanent Committee

2021			
Amounts in NOK	Total remuneration per member	Supervisory Council	The Permanent Committee
Chair	165 200	66 100	99 100
Deputy chair	110 200	44 100	66 100
Three members of the Permanent Committee	99 200	33 100	66 100
10 members of the Supervisory Council	33 100	33 100	-

2020			
Amounts in NOK	Total remuneration per member	Supervisory Council	The Permanent Committee
Chair	165 200	66 100	99 100
Deputy chair	110 200	44 100	66 100
Three members of the Permanent Committee	99 200	33 100	66 100
10 members of the Supervisory Council	33 100	33 100	-

### Executive Board – external members

Service on the Executive Board is remunerated at fixed annual rates. Remuneration to members and alternates of the Executive Board is determined by the Ministry of

Finance. Total remuneration to members and alternates of the Executive Board and its committees was NOK 2 735 400 in 2021 compared with NOK 2 361 871 in 2020.

**Table 12.4** Remuneration to the Executive Board

2021						
Amounts in NOK	Total remuneration	Executive Board	Audit Committee	Remuneration Committee	Ownership Committee	Risk and Investment Committee
Karen Helene Ulltveit-Moe	532 600	357 700	83 600	-	-	91 300
Kristine Ryssdal	435 300	357 700	-	27 800	49 800	-
Arne Hyttnes	455 500	357 700	70 000	27 800	-	-
Hans Aasnæs	449 000	357 700	-	-	-	91 300
Nina Udnes Tronstad	455 500	357 700	70 000	27 800	-	-
Egil Herman Sjørusen	407 500	357 700	-	-	49 800	-

2020						
Amounts in NOK	Total remuneration	Executive Board	Audit Committee	Remuneration Committee	Ownership Committee	Risk and Investment Committee
Karen Helene Ulltveit-Moe	521 100	350 000	81 800	-	-	89 300
Kristine Ryssdal	398 700	350 000	-	-	48 700	-
Arne Hyttnes	445 700	350 000	68 500	27 200	-	-
Hans Aasnæs	439 300	350 000	-	-	-	89 300
Nina Udnes Tronstad	443 025	350 000	17 125	27 200	48 700	-
Egil Herman Sjørusen <sup>1</sup>	58 333	58 333	-	-	-	-
Benedicte Schilbred Fasmer <sup>2</sup>	55 713	43 750	8 563	3 400	-	-

<sup>1</sup> Appointed on 30 October 2020.

<sup>2</sup> Served in the period 1 April 2020 to 15 May 2020.

### Monetary Policy and Financial Stability Committee – external members

The Monetary Policy and Financial Stability Committee was established in 2020. Work is remunerated at fixed annual

rates as set by the Ministry of Finance. Total remuneration to members of the Monetary Policy and Financial Stability Committee in 2021 was NOK 654 000, compared with NOK 640 000 in 2020.

**Table 12.5** Remuneration to the Monetary Policy and Financial Stability Committee

Amounts in NOK	2021	2020
Ingvild Almås	327 000	320 000
Jeanette Fjære-Lindkjenn	327 000	320 000

### 3. Benefits to senior executives

Senior executives, except for the Governor and Deputy Governors, are entitled to the same retirement benefits and have the same borrowing rights as the Bank's other employees. Pension benefits earned for the year are equal to the individual executive's accrued service cost for the year. Pension plans are discussed in Note 11 Pension, and loans to employees are discussed in a separate section in this note.

Senior executives do not earn performance-based or other variable remuneration. See section above regarding performance-based pay.

Value of other benefits shows the tax value of benefits-in-kind and primarily comprise coverage of electronic communication, personal insurance and some travel expenses.

A six-month quarantine period applies to the Governor and Deputy Governors after stepping down or the end of their terms of office. The Ministry of Finance may grant an exemption from this quarantine period. As long as the quarantine period is in force, the Governor and Deputy Governor are entitled to maintain a normal salary and other remuneration.

A quarantine period of six months applies to the CEO of NBIM after stepping down or the end of his term of office. Moreover, he has contractually waived his rights to employment protection in exchange for severance pay. Severance pay shall be paid for six months in the event of dismissal by Norges Bank and for three months in the event of resignation. Any income from a new employer will be deducted from this compensation.

#### **Governor and Deputy Governors**

The salaries of the Governor and Deputy Governors of Norges Bank are determined by the Ministry of Finance. In addition, they have a free telephone, free newspaper subscription and insurance covered by their employer. The Governor also has a company car at his disposal. The Ministry of Finance has established a separate pension plan for the Governor and Deputy Governors. The plan is based on the pension plan for members of the Storting and of the Government. The period of service for full benefit under the pension plan is 30 years, pensionable income is limited to 12 times the National Insurance Scheme basic amount (G) and members do not pay pension contributions. The pension is subject to life expectancy adjustments and is not coordinated with other public sector pension plans. The plan is funded out of the Bank's current income. Governor Øystein Olsen was a member of Norges Bank's pension fund during his first term of office.

**Table 12.6** Remuneration to the Norges Bank Executive Management Team

Amounts in NOK					2021
Position	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Governor	Øystein Olsen	2 592 843	178 529	287 199	-
Deputy Governor	Ida Wolden Bache <sup>1</sup>	2 120 667	8 681	369 480	-
Deputy Governor	Øystein Børsum <sup>2</sup>	824 928	3 500	182 997	-
Chief Executive Officer - NBIM	Nicolai Tangen	6 285 080	9 768	398 628	-
Chief of Staff / Deputy Chief Executive Officer - NBIM	Trond Grande	4 713 889	8 866	389 615	-
Executive Director, Norges Bank Administration	Jane Kristin Aamodt Haugland	2 069 249	7 764	396 937	1 704 952
Executive Director, General Secretariat	Birger Vikøren	1 862 452	7 800	425 651	-

<sup>1</sup> Gross salary includes holiday pay received. Part of the holiday pay was earned in another position.

<sup>2</sup> Began in this position on 2 August 2021. Remuneration shown from the date the appointment became effective.

Amounts in NOK					2020
Position	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Governor	Øystein Olsen	2 524 121	163 647	269 977	-
Deputy Governor	Ida Wolden Bache <sup>1</sup>	1 538 299	13 408	243 109	-
Chief Executive Officer - NBIM	Nicolai Tangen <sup>2</sup>	2 216 666	2 432	133 240	-
Chief of Staff / Deputy Chief Executive Officer - NBIM	Trond Grande	4 713 889	7 688	342 921	-
Executive Director, Norges Bank Administration	Jane Kristin Aamodt Haugland	1 996 058	9 217	348 320	1 812 296
Executive Director, General Secretariat	Birger Vikøren	1 795 363	9 041	378 415	-
<b>Former executives</b>					
Deputy Governor	Jon Nicolaisen <sup>3</sup>	1 923 133	179 970	113 830	-
Deputy Governor	Egil Matsen <sup>4</sup>	519 862	2 283	30 325	-
Chief Executive Officer - NBIM	Yngve Slyngstad <sup>5</sup>	4 511 094	11 482	433 722	-

<sup>1</sup> Began in this position on 1 April 2020. Remuneration shown from the date the appointment became effective.

<sup>2</sup> Began in this position on 1 September 2020. Remuneration shown from the date the appointment became effective.

<sup>3</sup> Resigned from this position on 4 December 2020. Remuneration shown up until the date the resignation became effective.

<sup>4</sup> Resigned from this position on 30 March 2020. Remuneration shown up until the date the resignation became effective.

<sup>5</sup> Resigned from this position on 31 August 2020. Remuneration shown up until the date the resignation became effective.



## Benefits to senior executives in Norges Bank's Central Banking Operations

**Table 12.7** Remuneration to senior executives in Norges Bank's Central Banking Operations

Amounts in NOK					2021
Position	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Executive Director, Financial Stability	Torbjørn Hægeland	2 010 485	7 779	350 494	-
Executive Director, Monetary Policy	Ole Christian Bech-Moen <sup>1</sup>	2 346 344	7 764	314 114	-
Executive Director, Markets and ICT	Olav Andreas Bø	2 122 245	7 764	359 440	-

<sup>1</sup> Gross salary includes holiday pay received. Part of the holiday pay was earned in another position.

Amounts in NOK					2020
Position	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Executive Director, Financial Stability	Torbjørn Hægeland	1 801 675	7 296	314 971	-
Executive Director, Monetary Policy	Ole Christian Bech-Moen <sup>1</sup>	406 250	1 520	55 369	-
Executive Director, Markets and ICT	Olav Andreas Bø	2 058 038	7 432	308 022	-
<b>Former senior executives</b>					
Executive Director, Monetary Policy	Ida Wolden Bache <sup>2</sup>	430 956	4 470	79 853	-

<sup>1</sup> Began in this position on 15 October 2020. Remuneration shown from the date the appointment became effective.

<sup>2</sup> Resigned from this position on 31 March 2020. Remuneration shown up until the date the resignation became effective.

## Remuneration to senior executives in Norges Bank Investment Management

**Table 12.8** Remuneration to senior executives in Norges Bank Investment Management

Amounts in NOK						2021
Position	Name	Gross salary	Gross performance pay	Value of other benefits	Pension benefits earned	Employee loan
Chief Executive Officer	Nicolai Tangen	6 285 080	-	9 768	398 628	-
Chief of Staff/Deputy Chief Executive Officer	Trond Grande	4 713 889	-	8 866	389 615	-
Chief Technology Officer	Age Bakker	3 807 453	-	9 852	458 735	-
Chief Operating Officer	Birgitte Bryne <sup>1</sup>	3 400 726	-	10 683	423 164	-
Chief Real Assets Officer	Mie Caroline Holstad <sup>1</sup>	2 983 050	-	8 295	325 485	-
Chief Risk Officer	Dag Huse	4 561 828	-	7 764	652 734	-
Chief Governance and Compliance Officer	Carine Smith Ihenacho <sup>4, 5</sup>	4 715 388	79 651	93 012	471 539	-
Chief Equities Officer	Petter Johnsen <sup>4</sup>	8 251 932	-	106 903	825 193	-
Chief Real Assets Strategies Officer	Geir Øivind Nygård	4 492 583	-	7 764	296 300	-

Amounts in NOK						2020
Position	Name	Gross salary	Gross performance pay	Value of other benefits	Pension benefits earned	Employee loan
Chief Executive Officer	Nicolai Tangen <sup>2</sup>	2 216 666	-	2 432	133 240	-
Chief of Staff/Deputy Chief Executive Officer	Trond Grande	4 713 889	-	7 688	342 921	-
Chief Technology Officer	Age Bakker	3 801 524	-	8 554	410 981	-
Chief Operating Officer	Birgitte Bryne <sup>3</sup>	814 555	-	2 536	89 114	-
Chief Real Assets Officer	Mie Caroline Holstad <sup>3</sup>	742 145	-	2 837	62 997	-
Chief Risk Officer	Dag Huse	4 561 828	-	7 296	578 352	-
Chief Governance and Compliance Officer	Carine Smith Ihenacho <sup>4, 5</sup>	4 091 916	75 934	90 456	409 192	-
Chief Equities Officer	Petter Johnsen <sup>4</sup>	8 438 073	-	110 216	843 807	-
Chief Real Assets Strategies Officer	Geir Øivind Nygård <sup>5</sup>	4 521 252	351 680	7 296	241 751	-
<b>Former senior executives</b>						
Chief Executive Officer	Yngve Slyngstad <sup>8</sup>	4 511 094	-	11 482	433 722	-
Chief Investment Officer Allocation Strategies	Ole Christian Bech-Moen <sup>7</sup>	4 486 923	-	6 398	206 374	-
Chief Compliance and Control Officer	Stephen A. Hirsch <sup>6</sup>	3 217 419	-	8 744	313 892	-
Chief Financial Officer	Hege Gjerde <sup>6</sup>	2 152 561	-	5 472	255 250	1 250 201
Chief People and Operations Officer	Nina Kathrine Hammerstad <sup>6</sup>	2 325 845	-	5 564	275 935	-
Chief Investment Officer Real Estate	Karsten Kallevig <sup>9</sup>	4 009 633	-	5 784	243 940	-

<sup>1</sup> Gross salary includes holiday pay received. Part of the holiday pay was earned in another position.

<sup>2</sup> Began in this position on 1 September 2020. Remuneration shown from the date the appointment became effective.

<sup>3</sup> Began in this position on 6 October 2020. Remuneration shown from the date the appointment became effective.

<sup>4</sup> Receives a salary in GBP. Amounts therefore include the foreign currency translation effect. Pension benefits earned are equal to the year's payments into a defined contribution pension plan.

<sup>5</sup> Members of the leader group in Norges Bank Investment Management only receive a fixed salary. Some members of the leader group who previously had a performance-based salary no longer have this scheme, but will in the coming years be paid the withheld performance salary. The amounts stated in the table are performance salaries paid in the financial year, but earned and recognized in the income statement in previous periods.

<sup>6</sup> Resigned from this position on 5 October 2020. Remuneration shown up until the resignation became effective.

<sup>7</sup> Resigned from this position on 14 October 2020. Remuneration shown up until the resignation became effective.

<sup>8</sup> Resigned from this position on 31 August 2020. Remuneration shown until the resignation became effective.

<sup>9</sup> Resigned from this position on 30 September 2020. Remuneration shown until the resignation became effective.

### Loans to employees

The Bank's loan scheme for its employees comprises residential mortgages and consumer loans. Mortgages are provided in accordance with guidelines from the Supervisory Council within 80 percent of assessed value, limited to NOK 3 052 000 and a maximum term of 30 years. Consumer loans are limited to a maximum of four times the employee's monthly salary, though not exceeding NOK 350 000. The

loan schemes apply to all employees. The interest rate is linked to the norm rate for loans on favourable terms from an employer. The Ministry of Finance sets the norm rate six times a year. The norm rate at December 2021 was 1.3 percent. Total loans to employees at 31 December 2021 were NOK 167.3m, compared with NOK 182.9m at 31 December 2020.

## Note 13 Management fee, GPFG

### Accounting policy

The management fee for management of the GPFG accrues during the financial year and is presented in the income statement as Management fee, Government Pension Fund Global. Unsettled management fee at year-end is measured at amortised cost.

Norges Bank's total operating expenses related to the management of the GPFG are reimbursed by the Ministry of Finance as principal. The management fee corresponds to actual costs incurred by Norges Bank, excluding administrations fees invoiced separately to Norges Bank's

subsidiaries in Norway and including performance-based fees to external managers. The management fee was NOK 4 640m in 2021 and NOK 5 305m in 2020. See Note 20.12 Management costs for a specification and further information.

# Note 14 Non-financial assets

## Accounting policy

In the balance sheet, the assets are described below grouped under the line Non-financial assets.

Non-current assets are recognised at cost, less accumulated straight-line depreciation over their expected useful life.

Gold comprises gold coins and gold bars that are part of the Bank's historical collections. The holdings were recognised at estimated cost in accordance with fair value on the date the gold was reclassified from international reserves to non-current assets.

The collection of art and numismatic objects such as medals, banknotes and coins is recognised at estimated cost on the basis of the most recent appraisal.

### Impairment testing

An impairment test is performed if there is an indication that an asset is impaired. If the carrying amount exceeds fair value, the carrying amount will be reduced to fair value. In the event the metallic value of gold rises, the holdings of gold are not revalued.

**Table 14.1** Non-financial assets

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Non-current assets	1 508	1 626
Gold	291	291
Art and numismatic collections	89	89
Other assets	122	113
<b>Non-financial assets</b>	<b>2 010</b>	<b>2 119</b>

**Table 14.2** Non-current assets

2021						
Amounts in NOK millions	Intangible assets	Property, plant and equipment			Plant under construction	Total
	Software	Buildings	Land	Other		
Cost at 1 Jan.	726	3 266	60	268	36	4 356
+ Additions for the year	12	67	-	1	2	82
- Disposals for the year	-61	-	-	-8	-	-69
-/+ Adjustments for the year	-	-	-	-	-	-
<b>Cost at 31 Dec.</b>	<b>677</b>	<b>3 333</b>	<b>60</b>	<b>261</b>	<b>38</b>	<b>4 370</b>
- Accumulated depreciation and impairment at 1 Jan.	-588	-1 906	-	-236	-	-2 730
+ Disposals depreciation for the year	61	-	-	8	-	68
- Depreciation for the year	-71	-108	-	-9	-	-188
- Impairment for the year	-13	-	-	-	-	-13
<b>Depreciation and impairment at 31 Dec.</b>	<b>-610</b>	<b>-2 014</b>	<b>-</b>	<b>-237</b>	<b>-</b>	<b>-2 862</b>
<b>Carrying amount at 31 Dec.</b>	<b>67</b>	<b>1 319</b>	<b>60</b>	<b>24</b>	<b>38</b>	<b>1 508</b>
Depreciation schedule, no. of years	3-6	5-75	none	4-10	none	

2020						
Amounts in NOK millions	Intangible assets	Property, plant and equipment			Plant under construction	Total
	Software	Buildings	Land	Other		
Cost at 1 Jan.	725	3 188	60	267	143	4 383
+ Additions for the year	42	90	-	11	-	143
- Disposals for the year	-41	-12	-	-10	-107	-170
-/+ Adjustments for the year	-	-	-	-	-	-
<b>Cost at 31 Dec.</b>	<b>726</b>	<b>3 266</b>	<b>60</b>	<b>268</b>	<b>36</b>	<b>4 356</b>
- Accumulated depreciation and impairment at 1 Jan.	-528	-1 809	-	-237	-	-2 574
+ Disposals depreciation for the year	40	12	-	10	-	62
- Depreciation for the year	-100	-109	-	-9	-	-218
- Impairment for the year	-	-	-	-	-	-
<b>Depreciation and impairment at 31 Dec.</b>	<b>-588</b>	<b>-1 906</b>	<b>-</b>	<b>-236</b>	<b>-</b>	<b>-2 730</b>
<b>Carrying amount at 31 Dec.</b>	<b>138</b>	<b>1 360</b>	<b>60</b>	<b>32</b>	<b>36</b>	<b>1 626</b>
Depreciation schedule, no. of years	3-6	5-75	none	4-10	none	

### Buildings

Bankplassen 4 is being leased to the government for 80 years, beginning in November 1986. The building is fully depreciated and its carrying amount at 31 December 2021 is NOK 0.

# Note 15 Other operating expenses and other operating income

## 1. Other operating expenses

**Table 15.1** Other operating expenses

Amounts in NOK millions	2021	2020
Custody costs	494	497
IT services, systems and data	922	959
Research, consulting and legal fees	358	350
Other costs	350	362
<b>Total other operating expenses excl. external managers</b>	<b>2 124</b>	<b>2 168</b>
Base fees to external managers	896	728
Performance-based fees to external managers	840	1 282
<b>Total fees to external managers</b>	<b>1 736</b>	<b>2 010</b>
<b>Total other operating expenses</b>	<b>3 860</b>	<b>4 178</b>
Depreciation, amortisation and impairment losses	200	219
Personnel expenses	1 799	2 084
<b>Total operating expenses</b>	<b>5 859</b>	<b>6 481</b>

**Table 15.2** Fees, external auditor

Amounts in NOK thousands, inclusive VAT	Norges Bank		Subsidiaries <sup>1</sup>	
	2021	2020	2021	2020
Statutory audit	14 806	14 638	7 631	7 991
Other assurance services <sup>2</sup>	1 842	4 444	89	101
Tax advice	-	-	-	-
Other services	-	206	-	-
<b>Total fees, external auditor</b>	<b>16 648</b>	<b>19 288</b>	<b>7 720</b>	<b>8 092</b>

<sup>1</sup> Norges Bank has established subsidiaries whose activities exclusively constitute investments as part of the management of the investment portfolio of the GPFG.

<sup>2</sup> The external auditor assists the Office of the Supervisory Council on a number of supervisory reviews. Fees related to this are shown as Other assurance services.

### Accounting policy

Other operating income is recognised at the time a service is rendered. The transaction price is agreed annually and primarily contains fixed elements.

## 2. Other operating income

**Table 15.3** Other operating income

Amounts in NOK millions	2021	2020
Services, banks	90	90
Services, government (see Note 19 Related parties)	-	-
Rent (see Note 19 Related parties)	27	27
Management fee (see Note 19 Related parties)	2	2
Other income	1	2
<b>Total other operating income</b>	<b>120</b>	<b>121</b>

### Services for banks

Norges Bank performs settlement services for banks through Norges Bank's settlement system (NBO). To promote efficient and robust settlement of payments in Norges Bank, expenses for account maintenance and

settlement services are covered by the annual fees for NBO. The assumption is that revenues will cover two-thirds of the overall cost of implementing and operating the settlement system. A third of expenses is attributable to central banking functions and covered by Norges Bank.

# Note 16 Notes and coins

## Accounting policy

Notes and coins in circulation are recognised at face value when they are put into circulation and derecognised when they are withdrawn from. Notes and coins are put into circulation at the time they are removed from a central bank depot and transferred to private banks. Likewise, they are removed from circulation when they are returned to a central bank depot.

Norges Bank is obliged to redeem withdrawn notes and coins at face value. When it is no longer deemed likely that withdrawn notes and coins will be redeemed, they are recognised as income in profit or loss as Other financial income/expenses. Notes and coins that are redeemed are recognised as an expense on the same line in profit or loss.

Expenses for the production of notes and coins are recognised in profit or loss as incurred in Other operating expenses.

**Table 16.1** Notes and coins in circulation

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
<b>Denomination</b>		
50-krone	1 026	1 031
100-krone	2 064	2 126
200-krone	5 842	6 380
500-krone	19 185	19 570
1000-krone	7 332	7 560
<b>Total notes</b>	<b>35 449</b>	<b>36 667</b>
<b>Total coins</b>	<b>4 296</b>	<b>4 339</b>
<b>Total</b>	<b>39 745</b>	<b>41 006</b>

Of notes and coins in circulation at 31 December 2021, NOK 6 375m comprised withdrawn notes. This pertains to all denominations in Series VII, which were withdrawn in 2018, 2019 and 2020. Norges Bank is still obliged to redeem these notes at face value.

No withdrawn notes and coins were recognised as income in 2021 or 2020. In 2021, withdrawn notes and coins were redeemed in the amount of NOK 7.5m, the same amount as in 2020.



# Note 17 International Monetary Fund (IMF)

## Accounting policy:

### **Allocated Special Drawing Rights (SDRs)**

Norges Bank's holdings of SDRs are recognised as an asset in the balance sheet, under Claim on the IMF. The equivalent value of SDR allocations by the IMF shows Norges Bank's total allocations of SDRs and is recognised as a liability, under Liabilities to the IMF. Norges Bank's holdings of SDRs and the equivalent value of SDRs are measured at amortised cost.

### **Reserve tranche position**

The reserve tranche position comprises Norges Bank's allocated IMF quota less the IMF's krone deposit with Norges Bank. The outstanding balance with the IMF is recognised gross in the balance sheet, under Claim on the IMF and Liabilities to the IMF, respectively. The IMF quota and the krone liability to the IMF are measured at amortised cost.

### **Loans to the IMF and international commitments under the auspices of the IMF**

Loans and international commitments are recognised in the balance sheet at fair value at initial recognition, under Claim on the IMF. Subsequent measurement is at amortised cost.

Pursuant to Section 3-10, Sub-section 1, of the Central Bank Act, Norges Bank shall administer Norway's financial rights and obligations ensuing from participation in the International Monetary Fund (IMF).

Norway helps to finance the IMF through Norway's IMF quota subscription and various lending agreements with the IMF. The current lending agreements are: the multilateral lending programme New Arrangements to Borrow (NAB), bilateral borrowing agreements with the IMF and agreements to finance the Poverty Reduction and Growth Trust (PRGT).

**Table 17.1** Claims on and liabilities to the IMF

					31 Dec. 2021
Amounts in NOK millions	Loan resource commitments <sup>1</sup>	Amounts drawn on commitments	Subscription <sup>2</sup>	SDRs	Total amount recognised
<b>Financial assets</b>					
IMF subscription (quota)	-	-	46 426	-	46 426
Holdings of Special Drawing Rights (SDRs)	-	-	-	66 207	66 207
Loans to the IMF - NAB	48 630	571	-	-	571
Loans to the IMF - Bilateral borrowing agreement	31 959	-	-	-	-
Loans to the IMF - PRGT	12 636	4 121	-	-	4 121
<b>Claims on the IMF</b>	<b>-</b>	<b>4 692</b>	<b>46 426</b>	<b>66 207</b>	<b>117 325</b>
<b>Financial liabilities</b>					
Krone liability to the IMF	-	-	34 220	-	34 220
Equivalent value of SDR allocations	-	-	-	63 824	63 824
<b>Liabilities to the IMF</b>	<b>-</b>	<b>-</b>	<b>34 220</b>	<b>63 824</b>	<b>98 044</b>
<b>Net positions with the IMF</b>	<b>-</b>	<b>4 692</b>	<b>12 206</b>	<b>2 383</b>	<b>19 281</b>

					31 Dec. 2020
Amounts in NOK millions	Loan resource commitments <sup>1</sup>	Amounts drawn on commitments	Subscription <sup>2</sup>	SDRs	Total amount recognised
<b>Financial assets</b>					
IMF subscription (quota)	-	-	46 461	-	46 461
Holdings of Special Drawing Rights (SDRs)	-	-	-	18 858	18 858
Loans to the IMF - NAB	24 332	1 043	-	-	1 043
Loans to the IMF - Bilateral borrowing agreement	74 231	-	-	-	-
Loans to the IMF - PRGT	12 372	4 719	-	-	4 719
<b>Claims on the IMF</b>	<b>-</b>	<b>5 762</b>	<b>46 461</b>	<b>18 858</b>	<b>71 081</b>
<b>Financial liabilities</b>					
Krone liability to the IMF	-	-	34 584	-	34 584
Equivalent value of SDR allocations	-	-	-	19 341	19 341
<b>Liabilities to the IMF</b>	<b>-</b>	<b>-</b>	<b>34 584</b>	<b>19 341</b>	<b>53 925</b>
<b>Net positions with the IMF</b>	<b>-</b>	<b>5 762</b>	<b>11 877</b>	<b>-483</b>	<b>17 156</b>

<sup>1</sup> Commitments giving the IMF a borrowing facility with Norges Bank up to an agreed amount. Only the portion drawn is recognised in the balance sheet.

<sup>2</sup> The net subscription refers to the reserve tranche position and is Norway's quota less Norway's krone liability to the IMF. If necessary, Norges Bank may draw from the IMF an amount equal to Norway's reserve tranche position.

The IMF has created an international reserve asset called the Special Drawing Right (SDR). All rights in and commitments to the IMF are denominated in SDRs. The value of the SDR is calculated on the basis of a currency basket comprising the US dollar, euro, Chinese renminbi, Japanese yen and pound sterling. The currency weights are adjusted each year in accordance with changes in bilateral foreign exchange rates. At 31 December 2021, SDR 1 was equal to NOK 12.36.

### 1. Norway's IMF quota subscription

The IMF is owned and directed by member countries and functions like a credit union in which each member country pays in a subscription, also called its quota. These subscriptions are the IMF's basic source of funding for loans. The amount of the subscription reflects the member country's relative position in the global economy. The quota determines a member country's voting power in IMF decisions, the member's financial contribution to the IMF, the amount of financing the member can access in the event of balance of payments problems and the amount of SDRs the member receives when SDRs are allocated. Norway's quota at 31 December 2021 was SDR 3 755m, or NOK 46 426m.

### 2. Holdings and equivalent value of Special Drawing Rights (SDRs)

SDRs are periodically allocated to IMF member countries, most recently in 2021. Equivalent value of SDR allocations shows the amount of SDRs Norway has been allocated since the scheme was established. Holdings of SDRs may be used to pay in quota increases, for other transactions with the IMF or for purchase or sale of SDRs from or to other IMF members. However, SDRs cannot be used for direct purchases of goods and services. As at 31 December 2021, a total of SDR 5 162m had been allocated to Norway, an increase of SDR 3 599m. Norway's holdings of SDRs have been deposited with the IMF and amounted to SDR 5 355m at 31 December 2021, compared with SDR 1 524m at year-end 2020.

### 3. Norges Bank's loans to the IMF New Arrangements to Borrow (NAB)

The New Arrangements to Borrow (NAB) programme is used for loans if the IMF has a need for funds in excess of subscriptions from member countries. At 31 December 2021, Norway's total resource commitments under the NAB were SDR 3 933m. Norges Bank's loans to the IMF under the NAB at 31 December 2021 totalled SDR 46m compared with SDR 84m at year-end 2020.

#### Bilateral borrowing agreement

In 2017, the IMF and Norges Bank concluded a new bilateral borrowing agreement, after the previous such agreement terminated on 4 November 2016. Under the agreement, the IMF is provided with a borrowing facility in the form of a drawing arrangement of up to SDR 2 585m. The agreement is part of a broader international effort to ensure the IMF sufficient resources to meet the borrowing requirements of member countries in times of crisis. This borrowing agreement has for the time being not been drawn on.

#### Poverty Reduction and Growth Trust (PRGT)

Norway participates in the financing of the IMF's subsidised lending programme for low-income countries under three agreements. Norway signed such agreement in June 2010 and November 2016 to provide SDR 300m each. These facilities have been fully drawn by the IMF, and the IMF will henceforth only make interest and principal payments without the ability to draw further amounts. On 20 June 2020, Norway signed a new borrowing agreement with the IMF for a further SDR 400m. Loans to the PRGT at 31 December 2021 totalled SDR 333m, compared with SDR 381m at year-end 2020.

### 4. The IMF's deposits with Norges Bank

The IMF has deposited its entire NOK holdings with Norges Bank, referred to as the Krone liability to the IMF. However, the value of these deposits is adjusted so that the IMF bears no risk associated with exchange rate movements between the krone and the SDR. At 31 December 2021, krone deposits from the IMF totalled SDR 2 768m, compared with SDR 2 795m at year-end 2020.

## 5. Net interest income on claims on and liabilities to the IMF

**Table 17.2** Net interest income, claims on/liabilities to the IMF

				2021
Amounts in NOK millions	Amount drawn on loan resource commitments	Subscription	SDRs	Total
Interest income from the IMF	3	193	19	215
Interest expenses to the IMF	-	-18	-19	-37
<b>Net interest income from the IMF</b>	<b>3</b>	<b>174</b>	<b>-</b>	<b>177</b>

				2020
Amounts in NOK millions	Amount drawn on loan resource commitments	Subscription	SDRs	Total
Interest income from the IMF	12	127	44	183
Interest expenses to the IMF	-	-83	-43	-126
<b>Net interest income from the IMF</b>	<b>12</b>	<b>44</b>	<b>1</b>	<b>57</b>

### 6. Interest on the IMF quota subscription and interest on the krone liability to the IMF

Interest on the reserve tranche position is calculated by the IMF. Interest is calculated net by the IMF but presented gross in Norges Bank's financial statements as interest income and interest expenses associated with the quota subscription. Interest is calculated monthly and netted quarterly. The interest rate is based on the IMF's SDR interest rate and updated weekly by the IMF.

### 7. Interest on Special Drawing Rights and interest on equivalent value of SDR allocations

Norges Bank earns interest income on its holdings of SDRs and is charged for interest expenses on the equivalent value of SDR allocations. Interest is calculated monthly and netted quarterly. The interest rate is based on the IMF's SDR interest rate and updated weekly by the IMF.

### 8. Interest on IMF lending programmes

Interest is calculated monthly and netted quarterly. The interest rate is based on the IMF's SDR interest rate and updated weekly by the IMF on its website.

# Note 18 Loans and deposits

## Accounting policy

At initial recognition, loans to banks are recognised in the balance sheet at fair value. There are no establishment fees or other directly attributable transaction costs. Subsequent measurement is at amortised cost, where the effective interest is recognised in profit or loss. If there is an indication that an impairment loss has been incurred, the amount of the loss is measured as the difference between the carrying amount and the present value of estimated future cash flows. The carrying amount of the engagement is reduced, and the amount of the loss for the period is recognised in profit or loss.

At initial recognition, deposits from banks and deposits from the Treasury are recognised in the balance sheet at fair value. Subsequent measurement is at amortised cost, where the effective interest is recognised in profit or loss.

Interest income is recognised in profit or loss when the interest is earned. Interest expense is recognised in profit or loss as incurred.

**Table 18.1** Lending to banks

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Fixed-rate loans to banks	45 101	80 168
<b>Total lending to banks</b>	<b>45 101</b>	<b>80 168</b>

**Table 18.2** Deposits from banks

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Sight and reserve deposits from banks	23 011	40 578
Fixed-rate deposits from banks	-	12 000
Other deposits	361	229
<b>Deposits from banks</b>	<b>23 372</b>	<b>52 807</b>

**Table 18.3** Deposits from the Treasury

Amounts in NOK millions	31 Dec. 2021	31 Dec. 2020
Deposits from the Treasury	344 142	313 131
<b>Deposits from the Treasury</b>	<b>344 142</b>	<b>313 131</b>

**Table 18.4** Interest income from lending to banks

Amounts in NOK millions	2021	2020
Interest income on D-loans to banks	-	-
Interest income on Fixed-rate loans to banks	86	206
<b>Total interest income from lending to banks</b>	<b>86</b>	<b>206</b>

### 1. Interest terms for loans to banks

Fixed-rate loans (F-loans) are the instrument primarily used to supply liquidity to the banking system. They are issued to banks at a fixed or floating rate and specified maturity against collateral in the form of securities. The maturity on F-loans is determined by Norges Bank and varies depending on the projection of structural liquidity. Average maturity on floating rate F-loans to banks was 5.5 days in 2021 and 79.7 days in 2020. Average maturity on fixed rate F-loans to banks was 3.5 days in 2021, compared with 2.0 days in 2020.

The interest rates on F-loans are normally determined by multi-price auctions. In a multi-price auction banks submit

bids for a desired amount and interest rate. Norges Bank decides the aggregate amount of the allotment. The banks' interest rate bids are ranked in descending order. Banks that place bids within the aggregate amount will be awarded in the amount and at the interest rate submitted. The interest rate is normally close to the policy rate.

D-loans may be intraday or overnight. Intraday D-loans improve the efficiency of payment settlement, as banks can obtain cover for their positions. These loans are interest-free and are normally repaid by the end of the day. If the loan extends overnight, it becomes an interest-bearing D-loan, with an interest rate 1 percentage point above the policy rate.

**Table 18.5** Interest expense on banks' and Treasury deposits

Amounts in NOK millions	2021	2020
Interest expense on sight and reserve deposits from banks	-19	-119
Interest expense on fixed-rate deposits from banks	-	-182
Interest expense on depots operated by banks	-	-2
Interest expense on deposits from the Treasury	-	-670
<b>Total interest expense on banks' and Treasury deposits</b>	<b>-19</b>	<b>-973</b>

### 2. Interest terms for deposits from banks

Sight deposits: Banks can deposit unlimited reserves in Norges Bank via the standing deposit facility. The interest rate on deposits less than or equal to a bank's quota is equal to the policy rate (sight deposit rate). Sight deposits in excess of this quota, referred to as reserve deposits, are remunerated at a lower rate, the reserve rate. The reserve rate is 1 percentage point lower than the policy rate.

Fixed-rate deposits: Norges Bank reduces the quantity of reserves in the banking system by providing banks with fixed-rate deposits (F-deposits). As in the case of F-loans, the interest rate is normally determined by multi-price auction. The maturity on F-deposits is determined by Norges Bank and varies depending on the projection of structural liquidity. Norges Bank can offer F-deposits at a floating rate, i.e. the interest rate on the F-deposits depends on the benchmark rate in the money market. Average maturity on F-deposits was 1.5 days in 2021 and 1.7 days in 2020.

### 3. Interest terms for deposits from the Treasury

Interest terms for deposits from the government are set in a special agreement between Norges Bank and the Ministry of Finance. The interest rate on the government's account is calculated on the basis of yields on foreign short-term government securities, weighted by the investments in the foreign exchange reserves.

In 2021, interest on Treasury deposits was paid at an annual rate of 0 percent. In 2020, interest was paid on these deposits at an annual rate of 0.75 percent in Q1, 0.5 percent in Q2 and 0 percent in Q3 and Q4.

# Note 19 Related parties

## Accounting policy

Norges Bank is owned by the Norwegian government and under Paragraph 25 of IAS 24 Related Party Disclosures is exempt from the disclosure requirements pertaining to related party transactions and outstanding balances, including commitments, with the Norwegian government. This includes transactions with other entities that are related parties because the Norwegian government has control of, joint control of, or significant influence over both Norges Bank and the other entities.

Norges Bank, including the GPFG, is a separate legal entity that is wholly owned by the government through the Ministry of Finance. See Note 1 General information for information regarding the relationship between the Ministry of Finance, Norges Bank and the GPFG. Norges Bank carries out all transactions in its own name and on market terms.

For information regarding transactions with governing bodies and senior executives of Norges Bank, see Note 12 Personnel expenses.

### 1. Management of the GPFG

The Ministry of Finance has placed funds for asset management by the GPFG as a krone deposit in a special account with Norges Bank (the krone account). GPFG assets are invested further in an investment portfolio comprising financial instruments, real estate and renewable energy infrastructure. See information regarding inflows during the period in Note 20 GPFG Statement of changes in owner's capital.

Norges Bank charges the Ministry of Finance a management fee relating to management of the GPFG, which amounted to NOK 4 640m in 2021 and NOK 5 305m in 2020.

In 2021, Norges Bank received a payment of NOK 10 481m for both the management fee in 2020 of NOK 5 305m and the management fee for 2021 based on a forecast in December 2021 of NOK 5 176m. The final amount of the management fee for 2021 turned out to be NOK 536m lower than the forecast. Thus, Norges Bank has a liability of NOK 536m to the GPFG at year-end 2021 under the balance sheet line Other financial liabilities.

For further information, see Note 20.12 Management costs.

### 2. Transactions between Norges Bank and the GPFG

Internal trades in the form of money market lending or borrowing between the GPFG and Norges Bank's equity portfolio are presented in the balance sheet as a net balance between the two reporting entities, on the balance sheet lines Other financial assets and Other financial liabilities. Associated income and expense items are presented gross in the respective income statement as either interest income or interest expense. All transactions are carried out at market prices.

### 3. Transactions between Norges Bank and wholly owned subsidiaries

As part of the management of the GPFG's investments in real estate and infrastructure for renewable energy, Norwegian subsidiaries have been established that are wholly owned by Norges Bank. These subsidiaries are charged a quarterly administration fee. For 2021, invoiced administration fees totalled NOK 1.6m.

### 4. Other transactions with the government

Pursuant to Section 3-7 of the Central Bank Act, Norges Bank provides services in connection with government borrowing and government debt management and the central government's group account. Under the new Central Bank Act in force from 1 January 2020, Norges Bank's costs related to these tasks are no longer covered by the Ministry of Finance.

Pursuant to point 5 of the Guidelines for provisions and allocations of Norges Bank's profit or loss, "In connection with the closing of the books each year, an amount equal to one third of the capital in the Transfer Fund shall be transferred to the Treasury." This transfer amounted to NOK 11.1bn for 2021 and NOK 15.2bn for 2020.

On the basis of the prepared financial statements, the transfer takes place in the following year, but the amount due appears under the balance sheet item Other liabilities in the balance sheet at 31 December.

### 5. Other related party transactions

Norges Bank has transactions with other government agencies and bodies. These transactions are primarily related to leasing of buildings and amounted to NOK 26.7m in 2021 and NOK 26.8m in 2020.

# Note 20 Government Pension Fund Global (GPIFG)

## Income statement

Amounts in NOK millions	Note	2021	2020
<b>Profit/loss on the portfolio before foreign exchange gain/loss</b>			
Income/expense from:			
- Equities	4	1 593 618	883 788
- Bonds	4	-40 905	198 080
- Unlisted real estate	6	35 811	-1 017
- Unlisted infrastructure	7	1 198	-
- Financial derivatives	4	-4 839	-6 891
- Secured lending	13	3 842	4 028
- Secured borrowing	13	21	-751
Tax expense	10	-8 887	-7 513
Interest income/expense		-13	25
Other income/expense		11	-35
<b>Profit/loss on the portfolio before foreign exchange gain/loss</b>		<b>1 579 857</b>	<b>1 069 713</b>
Foreign exchange gain/loss	11	-24 589	57 948
<b>Profit/loss on the portfolio</b>		<b>1 555 269</b>	<b>1 127 661</b>
Management fee	12	-4 640	-5 305
<b>Profit/loss and total comprehensive income</b>		<b>1 550 628</b>	<b>1 122 356</b>



# Balance sheet

Amounts in NOK millions	Note	31 Dec. 2021	31 Dec. 2020
<b>Assets</b>			
Deposits in banks		18 450	18 258
Secured lending	13,14	297 405	192 526
Cash collateral posted	14	3 725	5 715
Unsettled trades		15 767	4 460
Equities	5	8 383 302	7 538 156
Equities lent	5,13	505 117	438 353
Bonds	5	2 795 536	2 343 362
Bonds lent	5,13	623 367	520 978
Financial derivatives	5,14	7 879	2 551
Unlisted real estate	6	310 134	272 507
Unlisted infrastructure	7	14 287	-
Withholding tax receivable	10	3 427	2 234
Other assets	17	1 860	1 340
Management fee receivable		536	-
<b>Total assets</b>		<b>12 980 791</b>	<b>11 340 440</b>
<b>Liabilities and owner's capital</b>			
Secured borrowing	13,14	591 960	390 380
Cash collateral received	14	11 848	6 004
Unsettled trades		22 607	20 326
Financial derivatives	5,14	9 055	7 619
Deferred tax	10	5 180	2 308
Other liabilities	17	56	42
Management fee payable		-	5 305
<b>Total liabilities</b>		<b>640 706</b>	<b>431 983</b>
Owner's capital		12 340 085	10 908 457
<b>Total liabilities and owner's capital</b>		<b>12 980 791</b>	<b>11 340 440</b>

# Statement of cash flows

## Accounting policy

The statement of cash flows is prepared in accordance with the direct method. Major classes of gross cash receipts and payments are presented separately, with the exception of specific transactions that are presented on a net basis, primarily relating to the purchase and sale of financial instruments.

Inflows and withdrawals between the GPFG and the Norwegian government are financing activities. These transfers have been settled in the period. Accrued inflows/withdrawals are shown in the statement of changes in owner's capital.

Amounts in NOK million, receipt (+) / payment (-)	Note	2021	2020
<b>Operating activities</b>			
Receipts of dividend from equities		166 040	152 788
Receipts of interest from bonds		46 449	60 255
Receipts of interest and dividend from unlisted real estate	6	6 088	8 375
Receipts of interest and dividend from unlisted infrastructure	7	80	-
Net receipts of interest and fee from secured lending and borrowing		3 883	3 053
Receipts of dividend, interest and fee from holdings of equities, bonds, unlisted real estate and unlisted infrastructure		222 540	224 470
Net cash flow from purchase and sale of equities		495 674	-80 610
Net cash flow from purchase and sale of bonds		-646 867	102 085
Net cash flow to/from investments in unlisted real estate	6	-7 056	-15 997
Net cash flow to/from investments in unlisted infrastructure	7	-13 375	-
Net cash flow financial derivatives		-542	-5 499
Net cash flow cash collateral related to derivative transactions		8 502	-6 080
Net cash flow secured lending and borrowing		74 976	94 317
Net payment of taxes	10	-7 202	-5 724
Net cash flow related to interest on deposits in banks and bank overdraft		-42	-10
Net cash flow related to other income/expense, other assets and other liabilities		878	-623
Management fee paid to Norges Bank	15	-10 481	-4 312
<b>Net cash inflow/outflow from operating activities</b>		<b>117 005</b>	<b>302 018</b>
<b>Financing activities</b>			
Inflow from the Norwegian government		78 846	5 032
Withdrawal by the Norwegian government		-199 000	-301 800
<b>Net cash inflow/outflow from financing activities</b>		<b>-120 154</b>	<b>-296 768</b>
<b>Net change deposits in banks</b>			
Deposits in banks at 1 January		18 258	14 476
Net increase/decrease of cash in the period		-3 149	5 250
Net foreign exchange gain/loss on cash		3 341	-1 467
<b>Deposits in banks at end of period</b>		<b>18 450</b>	<b>18 258</b>

# Statement of changes in owner's capital

## Accounting policy

Owner's capital for the GPFG comprises contributed capital in the form of accumulated net inflows from the Norwegian government and retained earnings in the form of total comprehensive income. Owner's capital corresponds to the Ministry of Finance's krone account in Norges Bank.

Amounts in NOK millions	Inflows from owner	Retained earnings	Total owner's capital
1 January 2020	3 384 240	6 699 531	10 083 771
Profit/loss and total comprehensive income	-	1 122 356	1 122 356
Inflow during the period <sup>1</sup>	4 130	-	4 130
Withdrawal during the period <sup>1</sup>	-301 800	-	-301 800
<b>31 December 2020</b>	<b>3 086 570</b>	<b>7 821 887</b>	<b>10 908 457</b>
1 January 2021	3 086 570	7 821 887	10 908 457
Profit/loss and total comprehensive income	-	1 550 628	1 550 628
Inflow during the period <sup>1</sup>	80 000	-	80 000
Withdrawal during the period <sup>1</sup>	-199 000	-	-199 000
<b>31 December 2021</b>	<b>2 967 570</b>	<b>9 372 515</b>	<b>12 340 085</b>

<sup>1</sup> There was an inflow to the krone account of NOK 80 billion in 2021, while NOK 209.5 billion was withdrawn from the krone account. Of this, NOK 5.3 billion was used to pay the management fee for 2020 and NOK 5.2 billion was used to pay the management fee for 2021. The management fee for 2021 was settled prior to year-end, based on a forecast. This was higher than the final management fee for the year and the difference will be settled in March 2022. There was an inflow of NOK 4.1 billion to the krone account in 2020, while NOK 306.1 billion was withdrawn from the krone account. Of this, NOK 4.3 billion was used to pay the accrued management fee for 2019.

# GPFG Note 1 General Information

General information relating to the GPFG appears in Note 1 General information.

# GPFG Note 2 Accounting policies

The accounting policies for the financial reporting of the GPFG are described in Note 2 Accounting policies.

## GPFG Note 3 Returns

**Table 3.1** Returns

	2021	2020
<b>Returns measured in the fund's currency basket (percent)</b>		
Return on equity investments	20.76	12.14
Return on fixed-income investments	-1.94	7.46
Return on unlisted real estate investments	13.64	-0.08
Return on unlisted infrastructure investments	4.15	-
Return on fund	14.51	10.86
Relative return on fund (percentage points)	0.74	0.27
<b>Returns measured in Norwegian kroner (percent)</b>		
Return on equity investments	20.67	12.70
Return on fixed-income investments	-2.01	8.00
Return on unlisted real estate investments	13.55	0.42
Return on unlisted infrastructure investments	7.24	-
Return on fund	14.42	11.41

Table 3.1 shows return for the fund and for each asset class. A time-weighted rate of return methodology is applied, where the fair value of holdings is determined at the time of cash flows into and out of the asset classes and the fund as a whole, and periodic returns are geometrically linked. Returns are calculated net of non-reclaimable withholding taxes on dividends and interest, and taxes on capital gains. Returns are measured both in Norwegian kroner and in the fund's currency basket. The currency basket is weighted according to the currency composition of the benchmark index for equities and bonds. Returns measured in the fund's currency basket are calculated as the geometric difference between the fund's returns measured in Norwegian kroner and the return of the currency basket.

The fund's relative return is calculated as the arithmetic difference between the fund's return and the return of the fund's benchmark index. The fund's benchmark index consists of global equity and bond indices determined by the Ministry of Finance and is calculated by weighting the monthly returns of the benchmark indices for each of the two asset classes, using the weight in the actual benchmark at the beginning of the month for the respective asset class.

The first investment in unlisted renewable energy infrastructure was completed on 31 May 2021. Therefore, return figures for the asset class apply from June 2021.

# GPFG Note 4 Income/expense from equities, bonds and financial derivatives

## Accounting policy

The following accounting policies relate to the respective income and expense elements presented in tables 4.1 to 4.3:

Dividends are recognised when the dividend is formally approved by the general meeting or equivalent decision-making body.

Interest income is recognised when the interest is accrued. Interest expense is recognised as incurred.

Realised gain/loss mainly represents amounts realised when assets or liabilities are derecognised. Average acquisition cost is assigned upon derecognition. Realised gain/loss includes transaction costs, which are expensed as incurred. Transaction costs are defined as all costs directly attributable to the completed transaction. For investments in equities and bonds, these normally comprise commission fees and stamp duty.

Unrealised gain/loss represents changes in fair value for the related balance sheet item during the period, that are not attributable to the aforementioned categories.

Tables 4.1 to 4.3 specify the income and expense elements for equities, bonds and financial derivatives, respectively, where the line Income/expense shows the amount recognised in profit or loss for the relevant income statement line.

**Table 4.1** Specification Income/expense from equities

Amounts in NOK million	2021	2020
Dividends	170 556	157 477
Realised gain/loss	652 455	103 946
Unrealised gain/loss	770 608	622 365
<b>Income/expense from equities before foreign exchange gain/loss</b>	<b>1 593 618</b>	<b>883 788</b>

**Table 4.2** Specification Income/expense from bonds

Amounts in NOK million	2021	2020
Interest	47 885	62 213
Realised gain/loss	6	71 432
Unrealised gain/loss	-88 796	64 436
<b>Income/expense from bonds before foreign exchange gain/loss</b>	<b>-40 905</b>	<b>198 080</b>

**Table 4.3** Specification Income/expense from financial derivatives

Amounts in NOK million	2021	2020
Interest	-877	-1 186
Realised gain/loss	-2 223	-5 702
Unrealised gain/loss	-1 738	-3
<b>Income/expense from financial derivatives before foreign exchange gain/loss</b>	<b>-4 839</b>	<b>-6 891</b>

# GPFG Note 5 Holdings of equities, bonds and financial derivatives

## Accounting policy

Investments in equities and bonds are measured at fair value through profit or loss. Accrued dividends and interest are presented in the balance sheet on the same line as the underlying financial instruments, and are specified in tables 5.1 and 5.2 for equities and bonds, respectively. The balance sheet line Equities includes investments in depository certificates (GDR/ADR) and units in listed funds, such as REITs. Lent equities and bonds are presented separately. For more information on lent securities, see note 13 Secured lending and borrowing.

Financial derivatives are measured at fair value through profit or loss. Variation margin for exchange traded futures is considered to be settlement, and amounts are presented in the balance sheet as Deposits in banks. Norges Bank does not engage in hedge accounting, therefore no financial instruments are designated as hedging instruments.

For further information on fair value measurement of equities, bonds and financial derivatives, see note 8 Fair value measurement. Changes in fair value are recognised in the income statement and specified in note 4 Income/expense from equities, bonds and financial derivatives.

**Table 5.1** Equities

Amounts in NOK million	31 Dec. 2021		31 Dec. 2020	
	Fair value incl. accrued dividends	Accrued dividends	Fair value incl. accrued dividends	Accrued dividends
Equities	8 888 419	7 353	7 976 509	6 973
<b>Total equities</b>	<b>8 888 419</b>	<b>7 353</b>	<b>7 976 509</b>	<b>6 973</b>
Of which equities lent	505 117		438 353	

Table 5.2 specifies investments in bonds per category. Nominal value represents the amount that shall be returned at maturity, also referred to as the par value of the bond.

**Table 5.2** Bonds

Amounts in NOK million	31 Dec. 2021			31 Dec. 2020		
	Nominal value	Fair value incl. accrued interest	Accrued interest	Nominal value	Fair value incl. accrued interest	Accrued interest
<b>Government bonds</b>						
Government bonds issued in the government's local currency	1 855 432	1 914 848	5 585	1 389 636	1 523 986	6 406
<b>Total government bonds</b>	<b>1 855 432</b>	<b>1 914 848</b>	<b>5 585</b>	<b>1 389 636</b>	<b>1 523 986</b>	<b>6 406</b>
<b>Government-related bonds</b>						
Sovereign bonds	10 034	10 016	42	5 251	5 525	45
Bonds issued by local authorities	125 037	131 218	600	108 392	121 827	600
Bonds issued by supranational bodies	69 365	70 640	167	53 855	57 155	219
Bonds issued by federal agencies	154 055	155 965	394	122 001	128 258	399
<b>Total government-related bonds</b>	<b>358 941</b>	<b>367 840</b>	<b>1 204</b>	<b>289 498</b>	<b>312 765</b>	<b>1 263</b>
<b>Inflation-linked bonds</b>						
Inflation-linked bonds issued by government authorities	160 158	195 879	371	141 583	169 965	350
<b>Total inflation-linked bonds</b>	<b>160 158</b>	<b>195 879</b>	<b>371</b>	<b>141 583</b>	<b>169 965</b>	<b>350</b>
<b>Corporate bonds</b>						
Bonds issued by utilities	61 423	66 264	622	55 620	63 618	591
Bonds issued by financial institutions	321 224	327 240	2 149	255 026	272 234	2 039
Bonds issued by industrial companies	331 394	354 885	2 771	328 095	366 365	2 855
<b>Total corporate bonds</b>	<b>714 041</b>	<b>748 389</b>	<b>5 542</b>	<b>638 741</b>	<b>702 216</b>	<b>5 485</b>
<b>Securitised bonds</b>						
Covered bonds	200 604	191 948	544	160 209	155 409	657
<b>Total securitised bonds</b>	<b>200 604</b>	<b>191 948</b>	<b>544</b>	<b>160 209</b>	<b>155 409</b>	<b>657</b>
<b>Total bonds</b>	<b>3 288 727</b>	<b>3 418 903</b>	<b>13 246</b>	<b>2 619 667</b>	<b>2 864 341</b>	<b>14 161</b>
Of which bonds lent		623 367			520 978	

### Financial derivatives

Financial derivatives such as foreign exchange derivatives, interest rate derivatives, credit derivatives and futures, are used to adjust the exposure in various portfolios as a cost-efficient alternative to trading in the underlying securities. Foreign exchange derivatives are also used in

connection with liquidity management. Equity derivatives with an option component are often a result of corporate actions, and can be converted into equities or sold. The GPFG also uses equity swaps in combination with purchase and sale of equities.

Table 5.3 specifies financial derivatives recognised in the balance sheet. Notional amounts are the basis for calculating any cash flows and gains/losses for derivative contracts. This provides information on the extent to which different types of financial derivatives are used.

**Table 5.3** Financial derivatives

Amounts in NOK million	31 Dec. 2021			31 Dec. 2020		
	Notional amount	Fair value		Notional amount	Fair value	
		Asset	Liability		Asset	Liability
Foreign exchange derivatives	791 724	5 920	5 278	359 170	1 620	6 475
Interest rate derivatives	199 485	1 330	2 870	37 523	725	1 144
Credit derivatives	29 563	164	902	-	-	-
Equity derivatives <sup>1</sup>	-	349	-	-	206	-
Exchange-traded futures contracts <sup>2</sup>	57 062	116	5	28 587	-	-
<b>Total financial derivatives</b>	<b>1 077 834</b>	<b>7 879</b>	<b>9 055</b>	<b>425 280</b>	<b>2 551</b>	<b>7 619</b>

<sup>1</sup> Notional amounts are not considered relevant for equity derivatives and are therefore not included in the table.

<sup>2</sup> Exchange-traded futures contracts are settled daily with margin payments and fair value is normally zero at the balance sheet date, with the exception of futures contracts in certain markets where there is different timing for setting the market value for recognition in the balance sheet and daily margining.

#### Foreign exchange derivatives

This consists of foreign currency exchange contracts (forwards), which are agreements to buy or sell a specified quantity of foreign currency on an agreed future date.

#### Interest rate derivatives

Interest rate swaps are agreements between two parties to exchange interest payment streams based on different interest rate calculation methods, where one party pays a floating rate of interest and the other pays a fixed rate.

#### Credit derivatives

This comprises credit default swaps indices (CDS Indices) for corporate bonds, where one party (the seller) assumes the credit risk and the other party (the buyer) reduces the credit risk on the underlying index of corporate bonds. Under a CDS Index contract, the seller receives a periodic coupon from the buyer as compensation for assuming the credit risk. The buyer only receives payment if the credit protection is triggered by for instance default on the underlying credit in the index (credit event).

#### Equity derivatives

Equity derivatives are derivatives with exposure to an underlying equity. Equity derivatives recognised in the balance sheet include instruments with an option component, such as rights and warrants. These instruments grant the owner the right to purchase an equity at an agreed price within a certain time frame.

#### Futures contracts

Futures contracts are listed contracts to buy or sell a specified asset (security, index, interest rate or similar assets) at an agreed price at a future point in time.

#### Equity swaps in combination with purchase or sale of equities

Equity swaps are not recognised in the balance sheet. See the accounting policy in note 13 Secured lending and borrowing for further information. At the end of 2021, equities purchased in combination with offsetting equity swaps amounted to NOK 80 billion (NOK 56 billion at the end of 2020). Equity sales in combination with offsetting equity swaps amounted to NOK 64 billion (NOK 54 billion at the end of 2020). See also table 14.1 in note 14 Collateral and offsetting. The GPFG has virtually no net exposure from equity swaps in combination with purchase or sale of equities.



# GPFG Note 6 Unlisted real estate

## Accounting policy

Investments in unlisted real estate are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. Subsidiaries presented as Unlisted real estate in the balance sheet are measured at fair value through profit or loss. See note 2 Accounting policies for further information.

The fair value of unlisted real estate is determined as the sum of the GPFG's share of assets and liabilities in the underlying subsidiaries, measured at fair value. For further information, see note 8 Fair value measurement.

Changes in fair value are recognised in the income statement and presented as Income/expense from unlisted real estate.

The following accounting policies apply to the respective income and expense elements presented in table 6.1:

Interest is recognised when it is accrued.

Dividends are recognised when the dividend is formally approved by the general meeting or equivalent decision-making body, or is paid out in accordance with the company's articles of association.

**Table 6.1** Income/expense from unlisted real estate

Amounts in NOK million	2021	2020
Payments of interest and dividend from unlisted real estate	6 088	8 375
Unrealised gain/loss <sup>1</sup>	29 723	-9 392
<b>Income/expense from unlisted real estate before foreign exchange gain/loss</b>	<b>35 811</b>	<b>-1 017</b>

<sup>1</sup> Accrued interest and dividends which are not cash-settled are included in Unrealised gain/loss.

**Table 6.2** Changes in carrying amounts unlisted real estate

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
<b>Unlisted real estate at 1 January</b>	<b>272 507</b>	<b>264 538</b>
Net cash flow to/from investments in unlisted real estate	7 056	15 997
Unrealised gain/loss	29 723	-9 392
Foreign exchange gain/loss	849	1 363
<b>Unlisted real estate, closing balance for the period</b>	<b>310 134</b>	<b>272 507</b>

## Cash flows between the GPFG and subsidiaries presented as unlisted real estate

The GPFG makes cash contributions to subsidiaries in the form of equity and long-term loan financing, to fund investments in real estate assets, primarily properties. Net income in the underlying real estate companies can be distributed back to the GPFG in the form of interest and dividend as well as repayment of equity and long-term loan

financing. Net income generated in the underlying real estate companies that is not distributed back to the GPFG, is reinvested in the underlying entities to finance for instance property development and repayment of external debt. There are no significant restrictions on the distribution of interest and dividend from subsidiaries to the GPFG.

Tables 6.3 specifies cash flows between the GPFG and subsidiaries presented as Unlisted real estate, related to ongoing operations and other activities.

**Table 6.3** Cash flow unlisted real estate

Amounts in NOK million	2021	2020
Interest and dividend from ongoing operations	6 037	5 976
Repayments of intercompany loans from ongoing operations	1 692	1 697
<b>Cash flow from ongoing operations unlisted real estate</b>	<b>7 729</b>	<b>7 673</b>
Payments for new real estate investments	-13 486	-20 531
Payments for property development	-866	-1 109
Net payments external debt	4 039	-
Repayments of intercompany loans from sales	1 565	3 945
Interest and dividend from sales	51	2 399
<b>Cash flow to/from other activities unlisted real estate</b>	<b>-8 697</b>	<b>-15 295</b>
<b>Net cash flow unlisted real estate<sup>1</sup></b>	<b>-968</b>	<b>-7 622</b>

<sup>1</sup> Shown in the statement of cash flows as Receipts of interest and dividend from unlisted real estate and Net cash flow to/from investments in unlisted real estate.

Net income in the underlying real estate companies which is distributed back to the GPFG in the form of interest and dividends, is presented in the statement of cash flows as Receipts of interest and dividend from unlisted real estate. In 2021 this amounted to NOK 6 088 million (NOK 8 375 million in 2020).

Cash flows between the GPFG and real estate subsidiaries in the form of equity and loan financing, as well as repayment of these, are presented in the statement of cash flows as Net cash flows to/from investments in unlisted real estate. In 2021 this amounted to NOK -7 056 million (NOK -15 997 million in 2020).

A net cash flow from the GPFG to subsidiaries will result in an increase in the value of Unlisted real estate in the balance sheet, while a net cash flow from subsidiaries to the GPFG will result in a decrease.

#### Underlying real estate companies

Real estate subsidiaries have investments in other non-consolidated, unlisted companies. For further information, see note 16 Interests in other entities.

### Principles for measurement and presentation

The following principles apply for the respective income and expense elements presented in table 6.4:

Rental income is recognised on a straight-line basis over the lease term. Net rental income mainly comprises accrued rental income, less costs relating to the operation and maintenance of properties.

Asset management fees are directly related to the underlying properties and are primarily linked to the operation and development of properties and leases. Fixed fees are expensed as incurred. Variable fees to external asset managers are based on achieved performance over time. The provision for variable fees is based on the best estimate of the incurred fees to be paid. The change in best estimate in the period is recognised in profit or loss.

Transaction costs and fees from purchases and sales of properties are incurred as one-off costs and expensed as incurred.

Table 6.4 specifies the GPFG's share of net income generated in the underlying real estate companies, which is the basis for Income/expense from unlisted real estate presented in table 6.1.

**Table 6.4** Income from underlying real estate companies

Amounts in NOK million	2021	2020
Net rental income	11 173	11 609
External asset management - fixed fees	-819	-728
External asset management - variable fees	-30	-71
Internal asset management - fixed fees <sup>1</sup>	-84	-65
Operating costs in wholly-owned subsidiaries <sup>2</sup>	-63	-64
Operating costs in joint ventures	-109	-110
Interest expense external debt	-673	-555
Tax expense	-253	-211
<b>Net income from ongoing operations</b>	<b>9 141</b>	<b>9 805</b>
Realised gain/loss	424	2 151
Unrealised gain/loss <sup>3</sup>	26 387	-12 472
<b>Realised and unrealised gain/loss</b>	<b>26 811</b>	<b>-10 321</b>
Transaction costs and fees from purchases and sales	-141	-500
<b>Net income underlying real estate companies</b>	<b>35 811</b>	<b>-1 017</b>

<sup>1</sup> Internal asset management is carried out on 100 percent owned properties by employees in a wholly-owned, consolidated subsidiary.

<sup>2</sup> Operating costs in wholly-owned subsidiaries are measured against the upper limit from the Ministry of Finance, see note 12 Management costs for more information.

<sup>3</sup> Unrealised gain/loss presented in table 6.1 includes net income in the underlying real estate companies which is not distributed back to the GPFG, and will therefore not correspond to Unrealised gains/loss presented in table 6.4.

Table 6.5 specifies the GPFG's share of assets and liabilities in the underlying real estate companies, which comprises the closing balance for Unlisted real estate as presented in table 6.2.

**Table 6.5** Assets and liabilities underlying real estate companies

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Properties	336 332	293 408
External debt	-22 780	-18 783
Net other assets and liabilities <sup>1</sup>	-3 417	-2 118
<b>Total assets and liabilities underlying real estate companies</b>	<b>310 134</b>	<b>272 507</b>

<sup>1</sup> Net other assets and liabilities comprise cash, tax and operational receivables and liabilities.

### Agreements for purchases and sales of real estate

When purchasing and selling property, there will normally be a time period between entering into the agreement and completion of the transaction. Properties are recognised or derecognised in the underlying real estate companies upon transfer of control. This will normally be the date the consideration is transferred and the transaction is completed. Transactions are normally announced when the agreement is entered into. Purchases and sales above USD 100 million are announced. Previously announced agreements for purchases and sales which are not yet completed at the end of 2021, are described in the following paragraph.

In the second quarter of 2019, Norges Bank entered into agreements to acquire a 48 percent interest in two to-be-constructed buildings in New York at 561 Greenwich Street and 92 Avenue of the Americas, with expected completion in the first quarter of 2023 and the fourth quarter of 2024, respectively. The buildings will be purchased, and the final purchase price determined upon completed construction.

# GPFG Note 7 Unlisted infrastructure for renewable energy

## Accounting policy

Investments in unlisted renewable energy infrastructure (Unlisted infrastructure) are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. Subsidiaries presented as Unlisted infrastructure in the balance sheet are measured at fair value through profit or loss. See note 2 Accounting policies for further information.

The fair value of unlisted infrastructure is determined as the sum of the GPFG's share of assets and liabilities in the underlying subsidiaries, measured at fair value. For further information, see note 8 Fair value measurement.

Changes in fair value are recognised in the income statement and presented as Income/expense from unlisted infrastructure.

The following accounting policies apply to the respective income and expense elements presented in table 7.1:

Interest is recognised when it is accrued.

Dividends are recognised when the dividend is formally approved by the general meeting or equivalent decision-making body, or is paid out in accordance with the company's articles of association.

**Table 7.1** Income/expense from unlisted infrastructure

Amounts in NOK million	2021	2020
Payments of interest and dividend from unlisted infrastructure	80	-
Unrealised gain/loss <sup>1</sup>	1 118	-
<b>Income/expense from unlisted infrastructure before foreign exchange gain/loss</b>	<b>1 198</b>	<b>-</b>

<sup>1</sup> Accrued interest and dividends which are not cash-settled are included in Unrealised gain/loss.

**Table 7.2** Changes in carrying amounts unlisted infrastructure

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
<b>Unlisted infrastructure at 1 January</b>	<b>-</b>	<b>-</b>
Net cash flow to/from investments in unlisted infrastructure	13 375	-
Unrealised gain/loss	1 118	-
Foreign exchange gain/loss	-207	-
<b>Unlisted infrastructure, closing balance for the period</b>	<b>14 287</b>	<b>-</b>

## Cash flows between the GPFG and subsidiaries presented as Unlisted infrastructure

The GPFG makes cash contributions to subsidiaries in the form of equity and long-term loan financing, to fund investments in renewable energy infrastructure. Net income in the underlying infrastructure companies can be distributed back to the GPFG in the form of interest and

dividend as well as repayment of equity and long-term loan financing. There are no significant restrictions on the distribution of interest and dividend from subsidiaries to the GPFG.

Tables 7.3 specifies cash flows between the GPFG and subsidiaries presented as Unlisted infrastructure, related to ongoing operations and other activities.

**Table 7.3** Cash flow unlisted infrastructure

Amounts in NOK million	2021	2020
Interest and dividend from ongoing operations	80	-
Repayments of intercompany loans from ongoing operations	648	-
<b>Cash flow from ongoing operations unlisted infrastructure</b>	<b>728</b>	<b>-</b>
Payments for new infrastructure investments	-14 023	-
<b>Cash flow to/from other activities unlisted infrastructure</b>	<b>-14 023</b>	<b>-</b>
<b>Net cash flow unlisted infrastructure<sup>1</sup></b>	<b>-13 295</b>	<b>-</b>

<sup>1</sup> Shown in the statement of cash flows as Receipts of interest and dividend from unlisted infrastructure and Net cash flow to/from investments in unlisted infrastructure.

Net income in the underlying infrastructure companies which is distributed back to the GPFG in the form of interest and dividends, is presented in the statement of cash flows as Receipts of interest and dividend from unlisted infrastructure. In 2021 this amounted to NOK 80 million (NOK 0 million in 2020).

Cash flows between the GPFG and infrastructure subsidiaries in the form of equity and loan financing, as well as repayment of these, are presented in the statement of cash flows as Net cash flows to/from investments in unlisted infrastructure. In 2021 this amounted to NOK -13 375 million (NOK 0 million in 2020).

A net cash flow from the GPFG to subsidiaries will result in an increase in the value of Unlisted infrastructure in the balance sheet, while a net cash flow from subsidiaries to the GPFG will result in a decrease.

#### Underlying infrastructure companies

Infrastructure subsidiaries have investments in other non-consolidated, unlisted companies. For further information, see note 16 Interests in other entities.

#### Principles for measurement and presentation

The following principles apply for the respective income and expense elements presented in table 7.4:

Income from the sale of renewable energy is recognised at time of delivery. Net income from the sale of renewable energy mainly comprises accrued income from power sales, less costs relating to the operation and maintenance of infrastructure assets.

Transaction costs and fees from purchases and sales of renewable energy infrastructure are incurred as one-off costs and expensed as incurred.

Table 7.4 specifies the GPFG's share of net income generated in the underlying infrastructure companies, which is the basis for Income/expense from unlisted infrastructure presented in table 7.1.

**Table 7.4** Income from underlying infrastructure companies

Amounts in NOK million	2021	2020
Net income from sale of renewable energy	747	-
Operating costs in wholly-owned subsidiaries <sup>1</sup>	-7	-
Operating costs in joint ventures	9	-
Tax expense	-160	-
<b>Net income from ongoing operations</b>	<b>589</b>	<b>-</b>
<b>Unrealised gain/loss<sup>2</sup></b>	<b>639</b>	<b>-</b>
<b>Transaction costs and fees from purchases and sales</b>	<b>-31</b>	<b>-</b>
<b>Net income underlying infrastructure companies</b>	<b>1 198</b>	<b>-</b>

<sup>1</sup> Operating costs in wholly-owned subsidiaries are measured against the upper limit from the Ministry of Finance, see note 12 Management costs for more information.

<sup>2</sup> Unrealised gain/loss presented in table 7.1 includes net income in the underlying infrastructure companies which is not distributed back to the GPFG, and will therefore not correspond to Unrealised gains/loss presented in table 7.4.

Table 7.5 specifies the GPFG's share of assets and liabilities in the underlying infrastructure companies, which comprises the closing balance for Unlisted infrastructure as presented in table 7.2.

**Table 7.5** Assets and liabilities underlying infrastructure companies

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Wind farm	14 290	-
Net other assets and liabilities <sup>1</sup>	-3	-
<b>Total assets and liabilities underlying infrastructure companies</b>	<b>14 287</b>	<b>-</b>

<sup>1</sup> Net other assets and liabilities comprise cash, tax and operational receivables and liabilities.

# GPFG Note 8 Fair value measurement

## Accounting policy

All assets and liabilities presented as Equities, Bonds, Unlisted real estate, Unlisted infrastructure, Financial derivatives, Secured lending and borrowing, Deposits in banks, Withholding tax receivable, Deferred tax and Cash collateral posted and received are measured at fair value through profit or loss.

Fair value, as defined by IFRS 13 Fair value measurement, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

### 1. Introduction

Fair value for the majority of assets and liabilities is based on quoted market prices or observable market inputs. If the market is not active, fair value is established using standard valuation techniques. Estimating fair value can be complex and requires the use of judgement, in particular when observable inputs are not available. This valuation risk is addressed by the control environment in Norges Bank Investment Management, which is described in section 6 of this note.

### 2. The fair value hierarchy

All assets and liabilities measured at fair value are classified in the three categories in the fair value hierarchy presented in table 8.1. The classification is determined by the observability of the market inputs used in the fair value measurement:

- Level 1 comprises assets that are valued based on unadjusted quoted prices in active markets. An active market is defined as a market in which transactions take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

- Assets and liabilities classified as Level 2 are valued using models with market inputs that are either directly or indirectly observable. Inputs are considered observable when they are developed using market data reflecting actual events and transactions.
- Assets classified as Level 3 are valued using models with significant use of unobservable inputs. Inputs are considered to be unobservable when market data is not available, and the input is developed using the best available information on the assumptions that market participants would use when pricing the asset.

An overview of models and valuation techniques with their respective observable and unobservable inputs, categorised by type of instrument, is provided in section 4 of this note.

## Significant estimate

Level 3 investments consist of instruments held at fair value that are not traded or quoted in active markets. Fair value is determined using valuation techniques that use models with significant use of unobservable inputs. A considerable degree of judgement is applied in determining the assumptions that market participants would use when pricing the asset or liability, when observable market data is not available.

**Table 8.1** Categorisation of the investment portfolio by level in the fair value hierarchy

Amounts in NOK million	Level 1		Level 2		Level 3		Total	
	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020
<b>Equities</b>	<b>8 849 354</b>	<b>7 932 488</b>	<b>37 716</b>	<b>43 424</b>	<b>1 349</b>	<b>597</b>	<b>8 888 419</b>	<b>7 976 509</b>
Government bonds	1 494 936	1 319 168	419 912	204 818	-	-	1 914 848	1 523 986
Government-related bonds	278 345	235 974	89 495	76 791	-	-	367 840	312 765
Inflation-linked bonds	177 457	153 784	18 422	16 181	-	-	195 879	169 965
Corporate bonds	674 632	591 372	73 750	110 816	7	28	748 389	702 216
Securitised bonds	162 737	128 141	29 211	27 268	-	-	191 948	155 409
<b>Total bonds</b>	<b>2 788 107</b>	<b>2 428 439</b>	<b>630 790</b>	<b>435 874</b>	<b>7</b>	<b>28</b>	<b>3 418 903</b>	<b>2 864 341</b>
Financial derivatives (assets)	246	76	7 633	2 471	-	4	7 879	2 551
Financial derivatives (liabilities)	-	-	-9 055	-7 619	-	-	-9 055	-7 619
<b>Total financial derivatives</b>	<b>246</b>	<b>76</b>	<b>-1 422</b>	<b>-5 148</b>	<b>-</b>	<b>4</b>	<b>-1 176</b>	<b>-5 068</b>
<b>Unlisted real estate</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>310 134</b>	<b>272 507</b>	<b>310 134</b>	<b>272 507</b>
<b>Unlisted infrastructure</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14 287</b>	<b>-</b>	<b>14 287</b>	<b>-</b>
Other (assets) <sup>1</sup>	-	-	340 634	224 533	-	-	340 634	224 533
Other (liabilities) <sup>2</sup>	-	-	-631 651	-419 059	-	-	-631 651	-419 059
<b>Total</b>	<b>11 637 707</b>	<b>10 361 003</b>	<b>376 067</b>	<b>279 623</b>	<b>325 777</b>	<b>273 136</b>	<b>12 339 549</b>	<b>10 913 762</b>
<b>Total (percent)</b>	<b>94.3</b>	<b>94.9</b>	<b>3.1</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>	<b>100.0</b>	<b>100.0</b>

<sup>1</sup> Other (assets) consists of the balance sheet lines Deposits in banks, Secured lending, Cash collateral posted, Unsettled trades (assets), Withholding tax receivable and Other assets.

<sup>2</sup> Other (liabilities) consists of the balance sheet lines Secured borrowing, Cash collateral received, Unsettled trades (liabilities), Deferred tax and Other liabilities.

The majority of the total portfolio is priced based on observable market prices. At the end of 2021, 97.4 percent of the portfolio was classified as Level 1 or 2, which is a marginal decrease compared to year-end 2020. Movements between levels in the fair value hierarchy are described in section 3 of this note.

### Equities

Measured as a share of total value, virtually all equities (99.56 percent) are valued based on official closing prices from stock exchanges and are classified as Level 1. A small share of equities (0.42 percent) are classified as Level 2. These are mainly equities for which trading has recently been suspended, or illiquid securities that are not traded daily. For a few securities (0.02 percent) that are not listed, or where trading has been suspended and an adjustment has been applied to the last traded price based on company-specific factors, unobservable inputs are used to a significant extent in the fair value measurement. These holdings are therefore classified as Level 3.

### Bonds

The majority of bonds (81.55 percent) have observable, executable market quotes in active markets and are classified as Level 1. The share of the bond portfolio classified as Level 2 amounts to 18.45 percent. These are securities that do not have a sufficient number of observable quotes or that are priced based on comparable liquid bonds. An insignificant share of bond holdings that do not have observable quotes are classified as Level 3, since

the valuation is based on significant use of unobservable inputs.

### Unlisted real estate

All unlisted real estate investments are classified as Level 3, since models are used to value the underlying assets and liabilities with extensive use of unobservable market inputs. All unlisted real estate investments are measured at the value determined by external valuers. Exceptions to this policy are newly acquired properties where the purchase price, excluding transaction costs, is normally considered to be the best estimate of fair value, or where there are indications that external valuation reports do not reflect fair value and adjustments to valuations are therefore warranted.

### Unlisted renewable energy infrastructure

The first investment in unlisted renewable energy infrastructure was completed on 31 May 2021. See note 7 Unlisted renewable energy infrastructure for further information. Investments in unlisted infrastructure are classified as Level 3, since models are used to value the underlying assets and liabilities with extensive use of unobservable market inputs.

Investments in unlisted infrastructure are measured at the value determined by external valuers. Exceptions to this policy are newly acquired infrastructure assets where the purchase price, excluding transaction costs, is normally considered to be the best estimate of fair value, or where



there are indications that external valuation reports do not reflect fair value and adjustments to valuations are therefore warranted.

### Financial derivatives

Some equity derivatives (rights and warrants) that are actively traded on exchanges are classified as Level 1. The

majority of derivatives are classified as Level 2, as the valuation of these is based on standard models using observable market inputs. Certain derivatives are valued based on models with significant use of unobservable inputs and are classified as Level 3.

Other assets and liabilities are classified as Level 2.

## 3. Movements between the levels in the fair value hierarchy

### Accounting policy

Transfers between levels in the fair value hierarchy are deemed to have occurred at the beginning of the reporting period.

### Reclassifications between Level 1 and Level 2

The share of equities classified as Level 1 is virtually unchanged compared to year-end 2020. There have been no significant reclassifications of equities between Level 1 and Level 2.

The share of bonds classified as Level 2 has increased by 3.2 percentage points compared to year-end 2020. The increase is mainly due to the purchase of government bonds classified as Level 2 just prior to year-end, of NOK 214 543 million. This impact is partly offset by a net reclassification from Level 2 to Level 1 of NOK 17 490 million, due to improved liquidity. The reclassified holdings mainly consist of corporate bonds denominated in US dollar.

**Table 8.2** Changes in Level 3 holdings

Amounts in NOK million	01.01.2021	Pur- chases	Sales	Settle- ments	Net gain/ loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31 Dec. 2021
Equities	597	908	-16	-	-327	242	-68	13	1 349
Bonds	28	-	-	-	-22	-	-	1	7
Financial derivatives (assets)	4	-	-	-	-	-	-4	-	-
Unlisted real estate <sup>1</sup>	272 507	7 056	-	-	29 723	-	-	849	310 134
Unlisted infrastructure <sup>1</sup>	-	13 375	-	-	1 118	-	-	-207	14 287
<b>Total</b>	<b>273 136</b>	<b>21 339</b>	<b>-16</b>	<b>-</b>	<b>30 492</b>	<b>242</b>	<b>-72</b>	<b>656</b>	<b>325 777</b>

Amounts in NOK million	01.01.2020	Pur- chases	Sales	Settle- ments	Net gain/ loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31 Dec. 2020
Equities	816	16	-18	-8	-195	75	-70	-18	597
Bonds	16	-	-1	14	-2	-	-	-	28
Financial derivatives (assets)	3	-	-3	-	4	-	-	-	4
Unlisted real estate <sup>1</sup>	264 538	15 997	-	-	-9 392	-	-	1 363	272 507
<b>Total</b>	<b>265 373</b>	<b>16 013</b>	<b>-22</b>	<b>6</b>	<b>-9 585</b>	<b>75</b>	<b>-70</b>	<b>1 345</b>	<b>273 136</b>

<sup>1</sup> Purchases represent the net cash flow to investments in unlisted real estate and unlisted infrastructure, as presented in the statement of cash flows.

The share of the portfolio classified as Level 3 was 2.6 percent at the end of 2021, an increase from 2.5 percent at year-end 2020. The GPF's aggregate holdings in Level 3 amounted to NOK 325 777 million at year-end 2021, an increase of NOK 52 641 million compared to year-end 2020. The increase is mainly due to investments in unlisted real estate which are all classified as Level 3, as well as the first investment in unlisted infrastructure.

Investments in unlisted real estate amounted to NOK 310 134 million at year-end 2021, an increase of NOK 37 627 million compared to year-end 2020. The increase is mainly due to unrealised gains and new investments.

#### 4. Valuation techniques

Norges Bank Investment Management has defined hierarchies for which price sources are to be used in the valuation. Holdings that are included in the benchmark indices are normally valued in accordance with prices from the index providers, while the remaining holdings of equities and bonds are valued almost exclusively using prices from other reputable external price providers. For equities and derivatives traded in active markets (Level 1), the close price is used. For bonds traded in active markets, the bid price is generally used. Market activity and volumes are monitored using several price sources that provide access to market prices, quotes and transactions at the measurement date.

The next section sets out the valuation techniques used for instruments classified as Level 2 and Level 3 in the fair value hierarchy. Furthermore, the most significant observable and unobservable inputs used in the valuation models are described.

##### Unlisted real estate (Level 3)

The fair value of unlisted real estate is determined as the sum of the underlying assets and liabilities as presented in note 6 Unlisted real estate. Assets and liabilities consist mainly of properties and external debt. Properties are valued at each reporting date by external certified and independent valuation specialists using valuation models. Valuation of properties is inherently predisposed to significant forward-looking judgements. These include key assumptions and estimates with respect to each individual property type, location, future revenue streams and relevant yields. These assumptions represent primarily unobservable inputs and Unlisted real estate is therefore classified as Level 3 in the fair value hierarchy. Estimates used reflect recent comparable market transactions of properties with a similar location, condition and quality.

Valuation of commercial real estate is based on variations of discounted cash flow models.

Yields and assumptions regarding expected future cash flows are the most important inputs in the valuation models. Expected future cash flows are affected by changes in assumptions related to, but not limited to:

- Market rental values and market rental value growth

- Expected inflation (market, consumer price index, costs, etc.)
- Renewal probabilities, void periods, operating costs and capital costs
- Tenant default probability

Future cash flows are valued with a combination of capitalisation and discount rates. These take into account a range of factors reflecting the specific investment, including specific asset level characteristics, comparable market transactions, the local and global economic environment and forecasts for the future.

##### Unlisted renewable energy infrastructure (Level 3)

The fair value of unlisted infrastructure is determined as the sum of the underlying assets and liabilities as presented in note 7 Unlisted renewable energy infrastructure, which mainly consist of wind farm assets. At year-end, the fund had only one investment in this asset class, with no collateralised debt. This investment is valued by an external, independent valuation specialist using a bespoke valuation model. Valuation of unlisted infrastructure is inherently predisposed to significant forward-looking judgements. These include key assumptions and estimates with respect to each individual asset type, location, future revenue streams and relevant discount rates. These assumptions represent primarily unobservable inputs and Unlisted infrastructure is therefore classified as Level 3 in the fair value hierarchy.

Discount rates and assumptions regarding expected future revenue streams (power prices) are the most important inputs in the valuation models. Power prices are forecasted by independent, energy market forecasters.

Forecasted future cash flows are discounted by the external valuer using a financial model. The model takes into account estimates of risk premiums both for the market in general and for the specific infrastructure assets. In addition, the external valuer also compares this value with value estimates calculated using market multiples (trading factors from similar companies) and transaction multiples (metrics from recent comparable transactions), before determining the final estimate of fair value.

##### Equities (Level 2 and Level 3)

Equities that are valued based on models with observable inputs provided by vendors, are classified as Level 2 in the fair value hierarchy. These holdings are not traded in active markets and include listed shares in companies where trading has been suspended. The valuation models take into account various observable market inputs such as comparable equity quotes, last traded price and volume.

Holdings in Level 3 consist of equities that are not listed or have been suspended from trading, where the valuation models use unobservable inputs to a significant extent. For equities that are suspended from trading, the value is adjusted down compared to last-traded price, based on an assessment of company-specific factors. For equities that are not listed, an adjustment for liquidity risk is applied.

Valuation models for these holdings take into account unobservable inputs such as historical volatility, company performance and analysis of comparable companies.

### Bonds (Level 2 and Level 3)

Bonds classified as Level 2 are valued using observable inputs from comparable issues, as well as direct indicative or executable quotes. These holdings usually consist of less liquid bonds than those classified as Level 1, i.e. where there is no trading volume of binding offers and a low volume of indicative quotes at the measurement date.

Bonds classified as Level 3 are valued based on models using unobservable inputs such as probability for future cash flows and spreads to reference curves. These holdings include defaulted and highly illiquid bonds.

### Financial derivatives (Level 2 and Level 3)

Foreign exchange derivatives consist mainly of foreign exchange forward contracts, and are valued using industry standard models which predominantly use observable market data inputs such as forward rates.

Interest rate derivatives, which mainly consist of interest rate swaps, are valued using industry standard models with predominantly observable market data inputs such as interest from traded interest rate swaps.

Equity derivatives and credit derivatives, are mainly valued based on prices provided by vendors according to the price hierarchy. In some cases where an equity derivative is not traded, inputs such as conversion factors, subscription price and strike price are utilised to value the instruments.

### 5. Sensitivity analysis for Level 3 holdings

The valuation of holdings in Level 3 involves the use of judgement when determining the assumptions that market participants would use when observable market data is not available. In the sensitivity analysis for Level 3 holdings, the effect of using reasonable alternative assumptions is shown.

**Table 8.3** Additional specification Level 3 and sensitivities

Amounts in NOK million	Key assumption	Change in key assumption	Specification of Level 3 holdings per 31 Dec. 2021	Sensitivities 31 Dec. 2021		Specification of Level 3 holdings per 31 Dec. 2020	Sensitivities 31 Dec. 2020	
				Unfavorable changes	Favorable changes		Unfavorable changes	Favorable changes
<b>Equities</b>	Suspension adjustment	20.0 percent	1 349	-270	270	597	-119	119
<b>Total bonds</b>	Probability of future cash flows <sup>1</sup>	10.0 percent	7	-1	1	28	-3	3
<b>Financial derivatives (assets)</b>	Other		-	-	-	4	-4	-
<b>Unlisted real estate</b>	Yield	0.2 percentage point		-15 219	17 050		-12 708	14 864
	Market rent	2.0 percent		-5 253	5 253		-4 401	4 383
			<b>310 134</b>	<b>-20 472</b>	<b>22 302</b>	<b>272 507</b>	<b>-17 109</b>	<b>19 247</b>
<b>Unlisted infrastructure</b>	Discount rate	0.25 percentage point		-385	404		-	-
	Power price forecast	5.0 percent		-435	438		-	-
			<b>14 287</b>	<b>-820</b>	<b>843</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>			<b>325 777</b>	<b>-21 563</b>	<b>23 416</b>	<b>273 136</b>	<b>-17 235</b>	<b>19 369</b>

<sup>1</sup> Holdings consist mainly of defaulted bonds.

Unlisted real estate investments constitute the vast majority of holdings classified as Level 3. Changes in key assumptions can have a material effect on the valuation of unlisted real estate investments. A number of key assumptions are used, of which yields and growth forecasts for future market rents are the assumptions that have the largest impact when estimating property values. This is

illustrated in the sensitivity analysis by using other reasonable alternative assumptions for yield and market rents. The sensitivity analysis is based on a statistically relevant sample that is representative for the unlisted real estate portfolio, and reflects both favourable and unfavourable changes.

In an unfavourable outcome, an increase in the yield of 0.2 percentage point, and a reduction in market rents of 2 percent would result in a decrease in value of the unlisted real estate portfolio of approximately NOK 20 472 million or 6.6 percent (6.3 percent at year-end 2020). In a favourable outcome, a reduction in the yield of 0.2 percentage point and an increase in market rents of 2 percent would result in an increase in value of the unlisted real estate portfolio of approximately NOK 22 302 million or 7.2 percent (7.1 percent at year-end 2020). The isolated effects of changes in yields and future market rents are presented in table 8.3.

The sensitivity analysis for unlisted infrastructure investments will be adapted to each individual investment. A number of key assumptions are used, of which discount rates and future power prices are the assumptions that have the largest impact when estimating values. This is illustrated in the sensitivity analysis by using other reasonable alternative assumptions for discount rates and future power prices.

In an unfavourable outcome, an increase in the discount rate of 0.25 percentage point, and a reduction in power prices of 5 percent would result in a decrease in value of unlisted infrastructure of approximately NOK 820 million or 5.7 percent. In a favourable outcome, a reduction in the discount rate of 0.25 percentage point and an increase in power prices of 5 percent would result in an increase in value of unlisted infrastructure of approximately NOK 843 million or 5.9 percent. The isolated effects of changes in discount rates and power prices are presented in table 8.3.

## 6. Control environment

The control environment for fair value measurement of financial instruments and investments in unlisted real estate and unlisted infrastructure is organised around a formalised and documented valuation policy and guidelines, supported by work and control procedures.

The valuation environment has been adapted in accordance with market standards and established valuation practices. This is implemented in practice through daily valuation of all holdings, except for investments in unlisted real estate and unlisted infrastructure, where valuations are performed quarterly. For unlisted real estate, the quarterly valuations are performed by external valuers. For unlisted infrastructure, external valuers perform the valuations at the end of the second and fourth quarters, while the internal valuation department performs the valuations at the end of the first and third quarters. These processes are scalable to market changes and are based on internal and external data solutions.

All holdings and investments are generally valued by external, independent price providers. These have been selected based on analyses performed by the departments responsible for valuation.

Price providers are monitored on an ongoing basis through regular discussions, controls and price challenges for individual securities. For a large portion of holdings, prices

from independent price providers are based on quoted market prices. For holdings that are not sufficiently liquid for valuation to be based on quoted prices, widely recognised models are used. Observable inputs are used where possible, but unobservable inputs are used in some cases, due to illiquid markets.

The valuation process is subject to numerous daily controls by the valuation departments. These controls are based on defined thresholds and sensitivities, which are monitored and adjusted in accordance with prevailing market conditions. At the end of each month for financial instruments and at the end of each quarter for investments in unlisted real estate and unlisted infrastructure, more extensive controls are performed to ensure the valuations represent fair value in accordance with IFRS. Particular attention is paid to illiquid financial instruments and unlisted investments, i.e. investments deemed to pose valuation challenges. Illiquid instruments are identified using sector and currency classifications, credit rating indicators, bid/ask spreads, and market activity.

Valuation memos and reports are prepared each quarter-end, documenting the results of the controls performed and the most important sources of uncertainty in the valuations.

Prior to the publication of the financial reporting, the valuation documentation is reviewed, significant pricing issues are discussed, and the valuation is approved in the NBIM Leader Group Investment meeting.

# GPFG Note 9 Investment risk

## Management mandate for the GPFG

The GPFG is managed by Norges Bank on behalf of the Ministry of Finance, in accordance with section 3, second paragraph of the Government Pension Fund Act and the management mandate for the GPFG issued by the Ministry of Finance.

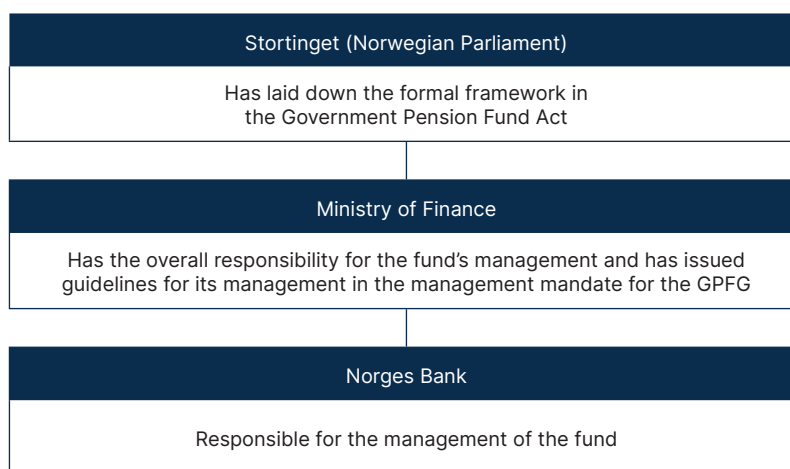
The GPFG shall seek to obtain the highest possible return after costs measured in the currency basket of the actual benchmark index, within the set management limits. The strategic benchmark index set by the Ministry of Finance is divided into two asset classes, equities and bonds, with an allocation of 70 percent to equities and 30 percent to bonds.

The benchmark index for equities is constructed based on the market capitalisation for equities in the countries included in the benchmark. The benchmark index for bonds specifies a defined allocation between government bonds and corporate bonds, with a weight of 70 percent to government bonds and 30 percent to corporate bonds. The currency distribution is a result of these weighting principles.

Investments in unlisted real estate and unlisted renewable energy infrastructure are not defined by the fund's benchmark index. The management mandate sets a maximum allocation to unlisted real estate of 7 percent of the investment portfolio. Investments in unlisted infrastructure can amount to up to 2 percent of the investment portfolio. The fund's allocation to unlisted real estate and unlisted infrastructure is further regulated in the investment mandate issued by the Executive Board of Norges Bank. It is up to Norges Bank to determine the allocation to unlisted real estate and unlisted infrastructure within the limits set in the management mandate, and how it shall be financed.

The fund may not invest in securities issued by Norwegian entities, securities issued in Norwegian kroner, or real estate and infrastructure located in Norway. The fund can also not invest in companies which are excluded following the guidelines for observation and exclusion from the GPFG.

**Chart 9.1 Management mandate for the GPFG**



## Norges Bank's governance structure

The Executive Board of Norges Bank has delegated the responsibility for the management of the GPFG to the Chief Executive Officer (CEO) of Norges Bank Investment Management.

The CEO of Norges Bank Investment Management is authorised through a job description and an investment mandate. The Executive Board has issued principles for, among other things, risk management, responsible investment and compensation to employees in Norges Bank Investment Management. Internationally recognised standards are applied in the areas of valuation and performance measurement as well as management, measurement and control of risk.

Reporting to the Executive Board is carried out monthly, and more extensively on a quarterly basis. The Governor of Norges Bank and the Executive Board are notified immediately in the event of special events or significant matters.

Investment responsibilities within Norges Bank Investment Management are further delegated through investment mandates. Responsibility for processes and personnel is delegated through job descriptions, while process requirements are described in policies and guidelines. The composition of the leader group and the delegation of authority shall ensure segregation of duties between the investment areas, trading, operations, risk management and compliance and control.

**Chart 9.2 Norges Bank's governance structure**



The NBIM Leader Group Investment Meeting complements the delegation of responsibility by advising on investment risk management and the portfolio's investment universe.

Internal risk reporting requirements are set by the CEO of Norges Bank Investment Management through job descriptions in the risk area. Reporting to the CEO is carried out on a daily, weekly and monthly basis. The CEO shall be notified immediately of any special events or serious breaches of the investment mandate.

#### Framework for investment risk

In the management mandate for the GPF, there are a number of limits and restrictions within the combined equity and bond asset class, as well as within the individual asset classes. Investments in unlisted real estate and unlisted renewable energy infrastructure are regulated by a separate management framework in the investment mandate. The framework underpins how a diversified exposure to unlisted real estate and unlisted infrastructure shall be established and managed.

Clear roles and responsibilities are a cornerstone of process design at Norges Bank Investment Management. Changes to investment mandates, the portfolio hierarchy and new counterparties are monitored and require approval by the Chief Risk Officer (CRO), or a person authorised by the CRO.

The Executive Board's principles for risk management are further described through policies and guidelines. Responsibility for effective processes related to risk management is delegated to the CRO and the Chief Corporate Governance & Compliance Officer.

Risk management is defined as management of market risk, credit risk, counterparty risk, operational risk and risk related to environmental, social and governance factors. The first three items listed are defined as investment risk. The investment area in Norges Bank Investment Management is responsible for managing risk in the portfolio and in individual mandates, while the risk management areas independently measure, manage and report investment risk across the portfolio, at asset class level and other levels within the portfolio that reflect the investment process. Separate risk assessments are required in advance of investments in unlisted real estate and unlisted infrastructure.

**Table 9.1** Investment risk

Type	Market risk	Credit risk	Counterparty risk
Definition	Risk of loss or a change in the market value of the portfolio, or parts of the portfolio, due to changes in financial market variables, real estate and infrastructure values	Risk of loss due to a bond issuer not meeting its payment obligations	Risk of loss due to counterparty bankruptcy or other events leading to counterparties defaulting
Main dimensions	Measured both absolute and relative to the benchmark - Concentration risk - Volatility and correlation risk - Systematic factor risk - Liquidity risk	Measured at single issuer and portfolio levels - Probability of default - Loss given default - Expected Loss	Measured risk exposure by type of position - Securities lending - Unsecured bank deposits and securities - Derivatives including FX contracts - Repurchase and reverse repurchase agreements - Settlement risk towards brokers and long settlement transactions

### Investment risk - market risk

Norges Bank Investment Management defines market risk as the risk of loss or a change in the market value of the portfolio, or parts of the portfolio, due to changes in financial market variables, as well as real estate and infrastructure values. Market risk for the investment portfolio, both absolute and relative to the benchmark, is measured along the dimensions concentration risk, volatility and correlation risk, systematic factor risk and liquidity risk. For unlisted real estate, this involves measurement of the share of real estate under construction, vacancy, tenant concentration and geographic concentration. For unlisted infrastructure, this involves measurement of exposure towards different sectors, share of income from government subsidies, development exposure, and geographic concentration. Market risk is actively taken to generate investment returns in line with the objectives of the investment mandates.

### Investment risk – credit risk

Norges Bank Investment Management defines credit risk as the risk of loss resulting from a bond issuer defaulting on their payment obligations. Credit risk is measured both in relation to single issuers, where the probability of default and loss given default are taken into account, and at portfolio level, where the correlation of credit losses between instruments and issuers is taken into account. Credit risk is actively taken to generate investment returns in line with the objectives of the investment mandates.

### Investment risk – counterparty risk

Norges Bank Investment Management defines counterparty risk as the risk of loss due to counterparty bankruptcy or other events leading to counterparties defaulting. Counterparties are necessary to ensure effective liquidity management and effective trading and management of market and credit risk. Counterparty risk also arises in connection with securities lending and with the management of the equity and bond portfolios, as well as the real estate and infrastructure portfolios. Counterparty risk is controlled and limited to the greatest extent possible, given the investment strategy.

### Risk management process

Norges Bank Investment Management employs several measurement methodologies, processes and systems to control investment risk. Robust and widely recognised risk management systems and processes are complemented by internally developed measurement methodologies and processes.

### Market risk

Norges Bank Investment Management measures market risk in both absolute terms for the actual portfolio, and the relative market risk for holdings in the GPF. G.

Continuous monitoring, measurement and assessment of market risk is performed along multiple risk dimensions, employing a number of methodologies and approaches. Combining different and complementary risk measures provides a better insight into the risk profile of the holdings in the GPF. G.

### Concentration risk

Concentration analysis complements statistical risk estimation by describing the concentration of a single exposure or a group of exposures. More concentrated portfolios tend to contribute to less diversification. Concentration is measured across different dimensions depending on the asset class, including country, currency, sector, issuer and company exposure.

The portfolio is invested across several asset classes, countries and currencies as shown in table 9.2.

**Table 9.2** Allocation by asset class, country and currency

Market value in percent by country and currency <sup>1</sup>				Market value in percent by asset class		Assets minus liabilities excluding management fee <sup>2</sup>		
Asset class	Market	31 Dec. 2021	Market	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020
Equities	<b>Developed</b>	<b>89.5</b>	<b>Developed</b>	<b>88.0</b>				
	US	44.9	US	41.7				
	Japan	7.0	Japan	8.2				
	UK	7.0	UK	7.3				
	France	4.9	France	4.8				
	Switzerland	4.7	Switzerland	4.6				
	Total other	20.9	Total other	21.4				
	<b>Emerging</b>	<b>10.5</b>	<b>Emerging</b>	<b>12.0</b>				
	China	3.8	China	5.3				
	Taiwan	2.3	Taiwan	2.1				
	India	1.6	India	1.3				
	Brazil	0.5	Brazil	0.6				
	South Africa	0.4	South Africa	0.5				
	Total other	2.0	Total other	2.2				
<b>Total equities</b>					<b>71.95</b>	<b>72.80</b>	<b>8 878 464</b>	<b>7 945 475</b>
Fixed income	<b>Developed</b>	<b>99.6</b>	<b>Developed</b>	<b>97.2</b>				
	US dollar	50.3	US dollar	47.7				
	Euro	27.6	Euro	28.1				
	Japanese yen	7.9	Japanese yen	7.6				
	British pound	4.9	British pound	4.9				
	Canadian dollar	3.8	Canadian dollar	3.6				
	Total other	5.0	Total other	5.2				
	<b>Emerging</b>	<b>0.4</b>	<b>Emerging</b>	<b>2.8</b>				
	Brazilian real	0.1	South Korean won	0.8				
	Chilean peso	0.1	Mexican peso	0.7				
	Colombian peso	0.0	Russian ruble	0.3				
	Polish zloty	0.0	Indonesian rupiah	0.2				
	South Korean won	0.0	Columbian peso	0.2				
	Total other	0.1	Total other	0.7				
<b>Total fixed income</b>					<b>25.41</b>	<b>24.70</b>	<b>3 135 259</b>	<b>2 695 184</b>
Unlisted real estate	US	50.1	US	46.8				
	UK	17.8	France	19.3				
	France	17.1	UK	18.1				
	Germany	3.9	Germany	4.0				
	Switzerland	3.6	Switzerland	3.9				
	Total other	7.4	Total other	7.9				
<b>Total unlisted real estate</b>					<b>2.52</b>	<b>2.50</b>	<b>311 538</b>	<b>273 109</b>
<b>Total unlisted infrastructure</b>					<b>0.12</b>	<b>-</b>	<b>14 288</b>	<b>-</b>

<sup>1</sup> Market value in percent per country and currency includes derivatives and cash.

<sup>2</sup> At year-end 2020, a net liability of NOK 6 million related to future investments in unlisted infrastructure was not allocated to the asset classes specified in the table.



At the end of 2021, the equity portfolio's share of the fund was 72.0 percent, down from 72.8 percent at year-end 2020. The fixed-income portfolio's share of the fund was 25.4 percent, up from 24.7 percent at year-end 2020. The share of the fixed-income portfolio invested in emerging market currencies fell from 2.8 percent at the end of 2020 to 0.4 percent at year-end 2021. Unlisted real estate amounted

to 2.5 percent of the fund at year-end, compared to 2.5 percent at year-end 2020. Unlisted infrastructure made up 0.1 percent of the fund at year-end.

For equity investments, concentration in the portfolio is further measured by sector. Table 9.3 shows the composition of the equity asset class by sector.

**Table 9.3** Allocation of equity investments by sector<sup>1</sup>, percent

Sector	31 Dec. 2021	31 Dec. 2020 <sup>2</sup>
Technology	20.5	19.0
Consumer discretionary	14.6	15.8
Financials	14.4	14.2
Industrials	13.4	13.7
Health care	11.4	11.9
Real estate	6.3	5.3
Consumer staples	6.0	6.5
Basic materials	4.4	4.4
Energy	3.7	3.0
Telecommunications	3.2	3.7
Utilities	2.4	2.9

<sup>1</sup> Does not sum up to 100 percent because cash and derivatives are not included.

<sup>2</sup> In 2021, FTSE changed its ICB sector classification. Comparative amounts have been restated to conform with current period presentation.

The GPFG has substantial investments in government-issued bonds. Table 9.4 shows the largest holdings in bonds issued by governments. These include government bonds

issued in local and foreign currency and inflation-linked bonds issued in local currency.

**Table 9.4** Largest holdings within the segment government bonds

Amounts in NOK million	Market value 31 Dec. 2021	Amounts in NOK million	Market value 31 Dec. 2020
US	877 936	US	717 935
Japan	370 519	Japan	294 195
Singapore	145 217	Germany	138 176
Germany	121 399	UK	87 746
UK	93 596	France	72 442
France	74 825	Spain	51 345
Italy	63 741	Australia	41 065
Canada	55 754	South Korea	36 045
Australia	45 988	Italy	31 261
Spain	45 547	Canada	31 242

The portfolio is also invested in companies which issue both equities and bonds. Table 9.5 shows the portfolio's largest holdings of non-government issuers, including both bond

and equity holdings. Covered bonds issued by financial institutions and debt issued by other underlying companies are included in the bonds column.

**Table 9.5** Largest holdings excluding sovereigns, both bonds and equities

Amounts in NOK million, 31 Dec. 2021	Sector	Equities	Bonds	Total
Apple Inc	Technology	216 952	7 094	224 046
Microsoft Corp	Technology	210 468	1 368	211 836
Alphabet Inc	Technology	144 417	1 809	146 226
Amazon.com Inc	Consumer discretionary	121 160	6 639	127 799
Nestlé SA	Consumer staples	89 082	1 775	90 857
Meta Platforms Inc	Technology	83 016	-	83 016
Taiwan Semiconductor Manufacturing Co Ltd	Technology	72 171	1 176	73 347
Tesla Inc	Consumer discretionary	68 097	-	68 097
Roche Holding AG	Health care	65 283	1 453	66 736
ASML Holding NV	Technology	64 496	252	64 748

Amounts in NOK million, 31 Dec. 2020	Sector <sup>1</sup>	Equities	Bonds	Total
Apple Inc	Technology	185 339	8 382	193 721
Microsoft Corp	Technology	147 893	1 722	149 616
Amazon.com Inc	Consumer discretionary	124 334	5 970	130 304
Alphabet Inc	Technology	97 343	2 614	99 957
Nestlé SA	Consumer staples	77 028	2 503	79 531
Taiwan Semiconductor Manufacturing Co Ltd	Technology	66 089	1 784	67 872
Facebook Inc	Technology	67 424	-	67 424
Roche Holding AG	Health care	59 125	424	59 549
Samsung Electronics Co Ltd	Technology	56 598	-	56 598
Alibaba Group Holding Ltd	Consumer discretionary	55 559	439	55 998

<sup>1</sup> In 2021, FTSE changed its ICB sector classification. Sector classifications have been restated to conform with current period presentation.

Table 9.6 shows the composition of the unlisted real estate asset class by sector.

**Table 9.6** Distribution of unlisted real estate investments by sector, percent

Sector	31 Dec. 2021	31 Dec. 2020
Office	54.6	57.2
Retail	12.3	16.4
Logistics	32.4	26.0
Other	0.7	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### Volatility and correlation risk

Norges Bank Investment Management uses models to quantify the risk of fluctuations in value for all or parts of the portfolio. Volatility is a standard risk measure based on the statistical concept of standard deviation, which takes into account the correlation between different investments in the portfolio. This risk measure gives an estimate of how much one can expect the portfolio's value to change or fluctuate during the course of a year, based on market conditions over the past three years. In two of three years, the portfolio return is expected to be within the negative and positive value of the estimated volatility. Expected volatility can be expressed in terms of the portfolio's absolute or relative risk.

Norges Bank Investment Management uses the same model both for portfolio risk and for relative volatility.

All the fund's investments are included in the calculation of expected relative volatility and are measured against the fund's benchmark index consisting of global equity and bond indices.

The modelling of unlisted investments is challenging due to few or no historical prices. For investments in unlisted real estate, the exposure to a group of relevant risk factors is mapped to the model framework in MSCI's Barra Private Real Estate 2 (PRE2) model. These are decided by key attributes

such as location and property type. The model uses time series of valuations and actual transactions as a starting point, but also includes listed real estate share prices to establish representative, daily time series. For investments in unlisted infrastructure, the starting point is a combination of time series available in the existing framework for listed markets. The exposure to generic, listed risk factors is mapped for each project based on attributes such as share

of contractually agreed prices, project lifetime, project phase, sector, country, and the quality of counterparties.

The risk model from MSCI then uses these factors for unlisted investments in the same way as ordinary equity and fixed-income risk factors, to calculate expected absolute and relative volatility, as well as expected shortfall for the fund's investments.

### Calculation of expected volatility

Expected volatility for the portfolio, and volatility relative to the benchmark index, is estimated by using a parametric calculation method based on current investments. The model weights weekly return data equally over a sampling period of three years.

Tables 9.7 and 9.8 present risk both in terms of the portfolio's absolute risk and the relative risk.

**Table 9.7** Portfolio risk, expected volatility, percent

	Expected volatility, actual portfolio							
	31 Dec. 2021	Min 2021	Max 2021	Average 2021	31 Dec. 2020	Min 2020	Max 2020	Average 2020
Portfolio	10.3	10.1	10.7	10.5	10.4	7.7	10.5	9.4
Equities	14.1	14.0	14.7	14.4	14.3	9.9	14.4	12.9
Fixed income	10.1	9.7	10.1	9.8	9.7	6.9	9.7	8.7
Unlisted real estate	11.7	10.5	11.7	10.8	10.5	8.7	10.7	10.1
Unlisted infrastructure	13.1	9.7	13.1	11.2	-	-	-	-

**Table 9.8** Relative risk measured against the fund's reference index, expected relative volatility, basis points

	Expected relative volatility							
	31 Dec. 2021	Min 2021	Max 2021	Average 2021	31 Dec. 2020	Min 2020	Max 2020	Average 2020
Portfolio	50	42	56	47	56	32	58	49

Risk measured as expected volatility indicates an expected annual value fluctuation in the fund of 10.3 percent, or approximately NOK 1 270 billion at the end of 2021, compared to 10.4 percent at year-end 2020. Expected volatility for the equity portfolio was 14.1 percent at year-end, down from 14.3 percent at year-end 2020, while expected volatility for the fixed-income portfolio was 10.1 percent, up from 9.7 percent at year-end 2020.

The management mandate for the GPF specifies that expected relative volatility for the fund shall not exceed 1.25 percentage points. The measurement of risk and follow-up of the limit is performed based on the risk model described above. The fund's expected relative volatility was 50 basis points at the end of the year, down from 56 basis points at year-end 2020. The decrease in the fund's expected relative volatility in 2021 is mainly due to changes in exposures.

In addition to the above-mentioned model, other risk models are employed that capture the market dynamics of recent periods to a greater extent, as well as models that measure tail risk.

Expected shortfall is a tail risk measure that quantifies the expected loss of a portfolio in extreme market situations. Expected shortfall measured on relative returns provides an estimate of the annual expected relative underperformance versus the benchmark index for a given confidence level. Using historical simulations, relative returns of the current portfolio compared to the benchmark index are calculated on a weekly basis over a sampling period from January 2007 until the end of the last accounting period. The expected shortfall at a 97.5 percent confidence level is then given by the annualised average relative return, measured in the currency basket for the 2.5 percent worst weeks.

The Executive Board has determined that the fund shall be managed in such a way that the annual expected shortfall measured against the benchmark index does not exceed 3.75 percentage points. Expected shortfall is measured and monitored based on the risk model described above. At the end of the year, expected shortfall was 1.52 percentage points, compared to 1.80 percentage points at year-end 2020.

## Calculation of expected shortfall

Expected shortfall for the portfolio, measured against its benchmark index, is estimated using historical simulations based on current investments. The model weights weekly returns equally over a sampling period from January 2007 until the end of the last accounting period, so that the measure can capture extreme market movements. A confidence level of 97.5 percent is used for the calculations.

### Strengths and weaknesses

The strength of these types of risk models is that one can estimate the risk associated with a portfolio across different asset classes, markets, currencies, securities and derivatives, and express this risk as a single numerical value, which takes into account the correlation between different asset classes, securities and risk factors, as well as capturing deviations from a normal distribution.

The model-based risk estimates are based on historical relationships in the markets and are expected to provide reliable forecasts in markets without significant changes in volatility and correlation. Estimates will be less reliable in periods marked by significant changes in volatility and correlation. Calculated volatility gives a point estimate of risk and provides little information on the total risk profile and any tail risk. Annualisation means that it is assumed that volatility and the composition of the portfolio are constant over time. To compensate for these shortcomings, complementary models and methods are employed, such as stress tests and analyses of concentration risk and realised returns.

### Verification of models

Risk models used in estimating and controlling investment risk are continuously evaluated and verified for their ability to estimate risk. The special nature of the investment portfolio and the investment universe, as well as the GPF's long-term investment horizon, are taken into account when evaluating the models.

### Credit risk

Credit risk is the risk of losses resulting from issuers of bonds defaulting on their payment obligations. Fixed-income instruments in the portfolio's benchmark index are all rated investment grade by one of the major credit rating agencies. Investments in bonds are made based on internal assessments with regards to expected return and risk profile.

**Table 9.9** Bond portfolio specified by credit rating

Amounts in NOK million, 31 Dec. 2021	AAA	AA	A	BBB	Lower rating	Total
Government bonds	1 186 701	183 432	443 812	78 790	22 113	1 914 848
Government-related bonds	163 648	131 307	57 669	13 485	1 731	367 840
Inflation-linked bonds	132 701	45 525	6 321	11 027	305	195 879
Corporate bonds	6 433	52 623	303 970	372 433	12 930	748 389
Securitised bonds	162 060	27 641	1 585	661	-	191 948
<b>Total bonds</b>	<b>1 651 543</b>	<b>440 528</b>	<b>813 357</b>	<b>476 397</b>	<b>37 078</b>	<b>3 418 903</b>

Amounts in NOK million, 31 Dec. 2020	AAA	AA	A	BBB	Lower rating	Total
Government bonds	854 305	187 976	366 824	90 714	24 167	1 523 986
Government-related bonds	126 113	132 126	42 844	10 558	1 123	312 765
Inflation-linked bonds	115 868	34 692	8 332	10 749	324	169 965
Corporate bonds	6 138	49 562	287 493	349 805	9 218	702 216
Securitised bonds	131 871	21 800	1 202	81	455	155 409
<b>Total bonds</b>	<b>1 234 296</b>	<b>426 156</b>	<b>706 697</b>	<b>461 905</b>	<b>35 288</b>	<b>2 864 341</b>

The market value of the bond portfolio increased to NOK 3 419 billion at year-end 2021, from NOK 2 864 billion at year-end 2020. The share of holdings in corporate bonds was reduced by 2.6 percentage points during the year, to 21.9 percent of the bond portfolio at year-end 2021. The largest decrease was for corporate bonds within the category BBB and A. Government bonds, including inflation-linked bonds, comprised 61.7 percent of the bond portfolio at year-end, an increase of 2.6 percentage points compared to year-end 2020.

The share of bonds with credit rating AAA increased by 5.2 percentage points during the year to 48.3 percent of the total bond portfolio at year-end. This increase was mainly due to an increase in the holdings in government bonds in the category AAA. The share of bonds with credit rating BBB decreased by 2.2 percentage points compared to year-end 2020, to 13.9 percent of the total bond portfolio at year-end

2021. This was mainly due to an increase in the value of the overall bond portfolio, since the value of bonds with credit rating BBB remained relatively stable during the year. The share of bonds with credit rating AA decreased by 2.0 percentage points compared to year-end 2020, to 12.9 percent at year-end 2021. The decrease is due to a reduction in government and government-related bond holdings.

The share of bonds in the Lower rating category was reduced to 1.1 percent of the bond portfolio at year-end 2021, from 1.2 percent at year-end 2020. This is mainly due to reduced holdings of government bonds within this category. Defaulted bonds had a market value of NOK 38 million at year-end 2021, compared to NOK 51 million at year-end 2020. Defaulted bonds are grouped under Lower rating.

**Table 9.10** Bond portfolio by credit rating and currency, percent

31 Dec. 2021	AAA	AA	A	BBB	Lower rating	Total
US dollar	26.8	2.0	6.5	7.4	0.3	43.0
Euro	10.0	6.0	4.3	4.9	0.2	25.3
Japanese yen	-	-	11.7	-	-	11.7
British pound	0.3	2.9	0.5	0.7	-	4.3
Singapore dollar	4.3	-	-	-	-	4.3
Other currencies	7.0	1.9	0.8	1.0	0.6	11.4
<b>Total</b>	<b>48.3</b>	<b>12.9</b>	<b>23.8</b>	<b>13.9</b>	<b>1.1</b>	<b>100.0</b>

31 Dec. 2020	AAA	AA	A	BBB	Lower rating	Total
US dollar	26.1	2.2	7.4	8.3	0.2	44.2
Euro	10.3	6.1	5.2	4.8	0.2	26.5
Japanese yen	-	-	11.0	-	-	11.0
British pound	0.1	3.2	0.5	0.7	-	4.6
Canadian dollar	2.6	0.9	0.2	-	-	3.6
Other currencies	4.0	2.5	0.5	2.4	0.9	10.2
<b>Total</b>	<b>43.1</b>	<b>14.9</b>	<b>24.7</b>	<b>16.1</b>	<b>1.2</b>	<b>100.0</b>

At year-end 2021, investments had been made in purchased credit default swaps with a nominal value of NOK 29.1 billion and sold credit default swaps with a nominal value of NOK 0.4 billion, mainly in the category where the underlying issuers have a high credit rating. There were no credit default swaps in the portfolio at year-end 2020. See table 5.3 in note 5 Holdings of equities, bonds and financial derivatives for further information. When investing in purchased credit default swaps, the credit risk in the bond portfolio is reduced when the portfolio has investments in the same underlying bonds as in the credit default swaps. At year-end 2021, the credit risk exposure was reduced by NOK 15.7 billion as a result of purchased credit default swaps.

The overall credit quality of the bond portfolio improved slightly during the year.

In addition to credit ratings from credit rating agencies, measurement of credit risk is complemented by two credit risk models, of which one is based on credit ratings and the other is based on observable credit premiums. Both of these methods also take into account the correlation and expected value of bonds in a bankruptcy situation. The models also take into account credit default swaps, and these reduce or increase the credit risk depending on whether credit risk is bought or sold. The models are used for risk measurement and monitoring of credit risk in the fixed-income portfolio.

## Counterparty risk

Counterparties are necessary to trade in the markets and to ensure effective management of liquidity, market and credit risk. Exposure to counterparty risk is related to trading in derivatives and foreign exchange contracts, securities lending, and repurchase and reverse repurchase agreements. Counterparty risk also arises from unsecured bank deposits and in connection with the daily liquidity management of the fund, as well as purchases and sales of unlisted real estate and unlisted infrastructure. Furthermore, there is exposure to counterparty risk related to counterparties in the international settlement and custody systems where transactions settle. This can occur both for currency trades and for the purchase and sale of securities. Settlement risk and exposure from trades with a long settlement period are also defined as counterparty risk.

Various counterparties are used to reduce concentration and there are strict requirements for counterparty credit rating. Credit rating requirements are generally higher for counterparties to unsecured deposits in banks than in cases where collateral is received. Changes in counterparty credit ratings are monitored continuously.

Netting agreements are in place for trades in OTC derivatives, currency contracts, as well as repurchase and reverse repurchase agreements, in order to reduce counterparty risk. Many derivatives are also cleared, meaning that the counterparty risk is mainly towards the clearing house instead of banks. Further reduction of counterparty risk is achieved through requirements for collateral for counterparty net positions with a positive market value. For instruments where collateral is used, minimum requirements have been set relating to the credit quality, time to maturity and concentration of the collateral. Netting and collateral agreements are entered into for all approved counterparties for these types of trades.

There are also requirements governing the way real estate and infrastructure transactions are conducted in order to ensure acceptable counterparty risk. Counterparty risk that arises during the acquisition process is analysed in advance of the transaction and requires approval by the CRO. In 2021, 22 real estate transactions were analysed and approved by the CRO through this process, compared to 7 transactions in 2020. For investments in unlisted infrastructure, 1 transaction was analysed and approved through this process. No such approval was given in 2020.

Counterparty risk is also limited by setting exposure limits for individual counterparties. In most instances, the exposure limit is determined by the credit rating of the counterparty, where counterparties with strong credit ratings have a higher limit than counterparties with weaker credit rating. Exposure per counterparty is measured daily against limits set by the Executive Board and the CEO of Norges Bank Investment Management.

The methodologies used to calculate counterparty risk are in accordance with internationally recognised standards. As a rule, the Basel regulations for banks are used for measuring counterparty risk, with certain adjustments based on internal analyses. The risk model calculates the expected counterparty exposure in the event of a counterparty default. The Standardised Approach in the Basel regulations (SA-CCR) is used for derivatives and foreign exchange contracts. The Standardised Approach takes into account collateral received and netting arrangements when calculating counterparty risk.

For repurchase agreements, securities lending transactions executed through an external agent and securities posted as collateral in derivative trades, a method is used that adds a premium to the market value to reflect the position's volatility. When determining counterparty risk exposure for these positions, an adjustment is also made for netting and actual collateral received and posted.

Exposure to counterparty risk is related to counterparties in the settlement and custody systems, both for currency trades and for the purchase and sale of securities. Settlement risk is reduced using the currency settlement system CLS (Continuous Linked Settlement), or by trading directly with the settlement bank. For some currencies, Norges Bank is exposed to settlement risk when the sold currency is delivered to the counterparty before the receipt of currency is confirmed. This type of exposure is included on the line Settlement risk towards brokers and long settlement transactions in table 9.11.

In table 9.11, exposure is broken down by type of activity/instrument associated with counterparty risk.

Total counterparty risk increased to NOK 155.3 billion at year-end 2021, from NOK 117.5 billion at year-end 2020, an increase of 32 percent. The largest increase in counterparty risk exposure came from derivatives, including foreign exchange contracts, due to an increase in activity in these instruments. This increase amounted to NOK 27.4 billion in 2021, and was largest for foreign exchange contracts. Furthermore, there was an increase in counterparty risk for interest rate swaps and credit default swaps. These instruments are cleared, so the counterparty risk is mainly towards the clearing counterpart. There was also an increase in risk exposure from securities lending and repurchase and reverse repurchase agreements at year-end 2021 compared to year-end 2020. This is mainly due to an increase in equities lent and repurchase and reverse repurchase agreements.

Both equities and bonds are lent through the securities lending programme. The risk exposure for the programme increased to NOK 68.5 billion at year-end 2021, from NOK 55.9 billion at year-end 2020. Counterparty risk exposure from securities lending amounted to 44 percent of the fund's total counterparty risk exposure at year-end 2021, compared to 48 percent at year-end 2020.

**Table 9.11** Counterparty risk by type of position

Amounts in NOK million	Risk exposure	
	31 Dec. 2021	31 Dec. 2020
Securities lending	68 494	55 928
Derivatives including foreign exchange contracts	61 144	33 784
Unsecured bank deposits <sup>1</sup> and securities	18 072	22 863
Repurchase and reverse repurchase agreements	7 459	4 286
Settlement risk towards brokers and long settlement transactions	93	625
<b>Total</b>	<b>155 262</b>	<b>117 487</b>

<sup>1</sup> Includes bank deposits in non-consolidated subsidiaries.

Norges Bank's counterparties have a credit rating from independent credit rating agencies or a documented internal

credit rating. Credit ratings for counterparties are monitored and complemented by alternative credit risk indicators.

Table 9.12 shows approved counterparties classified by credit rating category. The table also includes brokers that are used when purchasing and selling securities.

**Table 9.12** Counterparties by credit rating<sup>1</sup>

	Norges Bank's counterparties (excluding brokers)		Brokers	
	31 Dec. 2021	31 Dec. 2020	31 Dec. 2021	31 Dec. 2020
AAA	3	3	1	1
AA	33	32	33	33
A	61	63	86	83
BBB	9	10	33	35
BB	2	2	21	15
B	0	1	4	7
<b>Total</b>	<b>108</b>	<b>111</b>	<b>178</b>	<b>174</b>

<sup>1</sup> The table shows the number of legal entities. The same legal entity can be included as both broker and counterparty.

The number of counterparties and brokers have remained relatively stable during the year. There were 108 counterparties at year-end 2021, compared to 111 at year-end 2020. The number of brokers increased to 178 at year-end 2021, from 174 at year-end 2020. The overall credit quality of brokers and counterparties remained unchanged from year-end 2020.

### Leverage

Leverage may be used to ensure effective management of the investments within the equity and bond portfolios, but not with the aim of increasing the economic exposure to risky assets. The use of leverage is regulated in both the management mandate and the investment mandate. Leverage is the difference between total net exposure and market value of the portfolio. Net exposure is determined by including securities at market value, cash at face value and positions in derivatives by converting them to the underlying exposure. When the exposure is greater than market value, the portfolio is leveraged.

The GPF's leverage was 1.6 percent for the aggregated equity and bond portfolio at the end of 2021, compared to 1.5 percent at the end of 2020. For investments in unlisted real estate, requirements are set in the investment mandate, limiting the maximum leverage of the portfolio to 35 percent. The unlisted real estate investments had a debt ratio of 6.6 percent at the end of 2021, compared to 6.4 percent at the end of 2020. At year-end 2021, the unlisted infrastructure investments did not have external debt.

### Sale of securities Norges Bank does not own

Sale of securities not owned by Norges Bank (short sales) can only be carried out if there are established borrowing agreements to cover a negative position. Such transactions are rarely undertaken, and no securities had been sold in this manner at year-end 2021.

# GPFG Note 10 Tax

## Accounting policy

Norges Bank is exempt from income tax on its operations in Norway, but is subject to taxes in a number of foreign jurisdictions. Tax expense in the income statement represents income taxes that are not reimbursed through local tax laws or treaties, and consists of taxes on dividends, interest income and capital gains related to investments in equities and bonds, tax on fee income from secured lending and taxes in consolidated subsidiaries. The majority of these taxes are collected at source.

Withholding taxes, net of deductions for refundable amounts, are recognised at the same time as the related dividend or interest income. See the accounting policy in note 4 Income/expense from equities, bonds and financial derivatives.

Other income tax, which is not collected at source, is recognised in the income statement in the same period as the related income or gain and presented in the balance sheet as a liability within Other liabilities, until it has been settled. Deferred tax in the balance sheet mainly consists of capital gains tax. Capital gains tax is recognised as a liability based on the expected future payment when the GPFG is in a gain position in the applicable market. No deferred tax asset is presented in the balance sheet when the GPFG is in a loss position, since the recognition criteria are not considered to be met.

Tax incurred in subsidiaries presented in the balance sheet lines Unlisted real estate and Unlisted infrastructure is recognised in the income statement as Income/expense from unlisted real estate and Income/expense from unlisted infrastructure, respectively. Only the tax expense in consolidated subsidiaries is included in the income statement line Tax expense. This is specified in table 10.1 in the line Other.

All uncertain tax positions, such as disputed withholding tax refunds, are assessed each reporting period. The best estimate of the probable reimbursement or payment is recognised in the balance sheet.

Table 10.1 shows tax expense by type of investment and type of tax.

**Table 10.1** Specification tax expense

Amounts in NOK million, 2021	Gross income before taxes	Income tax on dividends, interest and fees	Capital gains tax	Other	Tax expense	Net income after taxes
Income/expense from:						
Equities	1 593 618	-5 221	-3 474	-	-8 695	1 584 923
Bonds	-40 905	-10	13	-	3	-40 902
Secured lending	3 842	-186	-	-	-186	3 656
Other	-	-	-	-10	-10	-
<b>Tax expense</b>		<b>-5 417</b>	<b>-3 460</b>	<b>-10</b>	<b>-8 887</b>	

Amounts in NOK million, 2020	Gross income before taxes	Income tax on dividends, interest and fees	Capital gains tax	Other	Tax expense	Net income after taxes
Income/expense from:						
Equities	883 788	-5 409	-1 847	-	-7 256	876 532
Bonds	198 080	-136	-37	-	-172	197 908
Secured lending	4 028	-80	-	-	-80	3 949
Other	-	-	-	-5	-5	-
<b>Tax expense</b>		<b>-5 624</b>	<b>-1 884</b>	<b>-5</b>	<b>-7 513</b>	



Table 10.2 shows receivables and liabilities recognised in the balance sheet related to tax.

**Table 10.2** Specification balance sheet items related to tax

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Withholding tax receivable	3 427	2 234
Tax payable <sup>1</sup>	18	12
Deferred tax	5 180	2 308

<sup>1</sup> Included within the balance sheet line item Other liabilities.

Table 10.3 specifies the line Net payment of taxes in the statement of cash flows.

**Table 10.3** Specification net payment of taxes

Amounts in NOK million	2021	2020
Receipt of refunded withholding tax	8 252	6 748
Payment of taxes	-15 453	-12 472
<b>Net payment of taxes</b>	<b>-7 202</b>	<b>-5 724</b>

# GPFG Note 11 Foreign exchange gains and losses

In accordance with the management mandate, the fund is not invested in securities issued by Norwegian companies, securities denominated in Norwegian kroner nor real estate or infrastructure located in Norway. The fund's returns are measured primarily in the fund's currency basket, which is a

weighted combination of the currencies in the fund's benchmark index for equities and bonds. The fund's market value in Norwegian kroner is affected by changes in exchange rates, but this has no bearing on the fund's international purchasing power.

## Accounting judgement

The management of Norges Bank has concluded that the Norwegian krone is the bank's functional currency, since this currency is dominant for the bank's underlying activities. Owner's equity, in the form of the GPFG krone account, is denominated in Norwegian kroner and a share of the costs related to management of the GPFG is incurred in Norwegian kroner. The financial reporting for the GPFG is part of Norges Bank's financial statements and the functional currency of the GPFG is therefore considered to be the Norwegian krone. Returns on the investment portfolio are reported both internally and to the owner in Norwegian kroner, while the percentage return is measured both in Norwegian kroner and in the currency basket defined by the Ministry of Finance. Furthermore, there is no single investment currency that stands out as dominant within the investment management.

## Accounting policy

Foreign currency transactions are recognised in the financial statements using the exchange rate prevailing on the transaction date. Assets and liabilities in foreign currencies are translated into Norwegian kroner using the exchange rate at the balance sheet date. The foreign exchange element linked to realised and unrealised gains and losses on assets and liabilities is disaggregated in the income statement and presented on a separate line, Foreign exchange gain/loss.

## Accounting judgement

Gains and losses on financial instruments are due to changes in the price of the instrument (before foreign exchange gain/loss) and changes in foreign exchange rates (foreign exchange gain/loss). These are presented separately in the income statement. The method used to allocate the total gain/loss in Norwegian kroner to a security element and a foreign exchange element is described below. Different methods may result in different allocations.

### Foreign exchange element

Unrealised gain/loss due to changes in foreign exchange rates is calculated based on the cost of the holding in foreign currency and the change in the exchange rate from the time of purchase until the balance sheet date. If the holding has been purchased in a prior period, previously recognised gain/loss is deducted to arrive at the gain/loss in the current period. Upon realisation, the exchange rate on the date of sale is used when calculating the realised gain/loss, and previously recognised unrealised gain/loss is reversed in the current period.

### Security element

Unrealised gain/loss due to changes in the security price is calculated based on the change in the security price from the purchase date to the balance sheet date, and the exchange rate at the balance sheet date. If the holding has been purchased in a prior period, previously recognised gain/loss is deducted to arrive at the gain/loss for the security element in the current period. Upon realisation, the selling price is used when calculating the realised gain/loss due to changes in security prices, and previously recognised unrealised gain/loss for the holding is reversed in the current period.

The change in the fund's market value due to changes in foreign exchange rates is presented in table 11.1.

**Table 11.1** Specification foreign exchange gain/loss

Amounts in NOK million	2021	2020
Foreign exchange gain/loss - EUR/NOK	-77 636	106 910
Foreign exchange gain/loss - JPY/NOK	-55 115	18 103
Foreign exchange gain/loss - CHF/NOK	-643	15 723
Foreign exchange gain/loss - GBP/NOK	13 272	4 854
Foreign exchange gain/loss - USD/NOK	104 202	-79 242
Foreign exchange gain/loss - other	-8 668	-8 399
<b>Foreign exchange gain/loss</b>	<b>-24 589</b>	<b>57 948</b>

Table 11.2 gives an overview of the distribution of the market value of the investment portfolio for the main currencies the GPFG is exposed to. This supplements the overview of the allocation by asset class, country and currency shown in table 9.2 in note 9 Investment risk.

**Table 11.2** Specification of the investment portfolio by currency

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
US dollar	5 506 906	4 644 534
Euro	2 225 143	1 995 892
British pound	925 209	800 602
Japanese yen	855 724	845 642
Swiss franc	532 796	451 465
Other currencies	2 293 771	2 175 627
<b>Market value investment portfolio</b>	<b>12 339 549</b>	<b>10 913 762</b>

Table 11.3 gives an overview of exchange rates at the balance sheet date for the main currencies the GPFG is exposed to.

**Table 11.3** Exchange rates

	31 Dec. 2021	31 Dec. 2020	Percent change
US dollar	8.82	8.56	3.0
Euro	10.03	10.48	-4.3
British pound	11.94	11.70	2.1
Japanese yen	0.08	0.08	-7.7
Swiss franc	9.68	9.69	-0.1

# GPFG Note 12 Management costs

## Accounting policy

Management fee is recognised in the GPFG's income statement as an expense when incurred.

Performance-based fees to external managers are based on achieved excess returns relative to the applicable benchmark index over time. The provision for performance-based fees is based on the best estimate of the incurred fee to be paid. The effect of changes in estimates is recognised in profit or loss in the current period.

Management costs comprise all costs relating to the management of the fund. These are mainly incurred in Norges Bank, but management costs are also incurred in subsidiaries of Norges Bank that are exclusively established as part of the management of the GPFG's investments in unlisted real estate and unlisted renewable energy infrastructure.

## Management costs in Norges Bank

The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the GPFG, in the form of a management fee. The management fee is equivalent to the actual costs incurred by Norges Bank, including performance-based fees to external managers, and is expensed in the income statement line Management fee. Costs included in the management fee are specified in table 12.1.

**Table 12.1** Management fee

Amounts in NOK million	2021		2020	
		Basis points		Basis points
Salary, social security and other personnel-related costs <sup>1</sup>	1 102		1 408	
Custody costs	468		474	
IT services, systems, data and information	591		650	
Research, consulting and legal fees	210		214	
Other costs	232		269	
Allocated costs Norges Bank	301		281	
Base fees to external managers	896		728	
<b>Management fee excluding performance-based fees</b>	<b>3 801</b>	<b>3.3</b>	<b>4 023</b>	<b>3.9</b>
Performance-based fees to external managers	840		1 282	
<b>Management fee</b>	<b>4 640</b>	<b>4.0</b>	<b>5 305</b>	<b>5.1</b>

<sup>1</sup> 2021 costs are reduced by NOK 265 million, due to a one-off accounting adjustment following a change in the method for accruing performance-based pay.

## Management costs in subsidiaries

Management costs incurred in wholly-owned subsidiaries consist of costs related to the management of the investments in unlisted real estate and unlisted renewable energy infrastructure. These costs are expensed directly in the portfolio result and are not part of the management fee.

Management costs incurred in non-consolidated subsidiaries are presented in the income statement lines Income/expense from unlisted real estate and Income/expense from unlisted infrastructure. Management costs incurred in consolidated subsidiaries are presented in the income statement line Other income/expense. These costs are specified in table 12.2.

**Table 12.2** Management costs subsidiaries

Amounts in NOK million	2021		2020	
		Basis points		Basis points
Salary, social security and other personnel-related costs	29		26	
IT services, systems, data and information	5		21	
Research, consulting and legal fees	38		31	
Other costs	41		25	
<b>Total management costs, subsidiaries<sup>1</sup></b>	<b>113</b>	<b>0.1</b>	<b>103</b>	<b>0.1</b>
Of which management costs non-consolidated subsidiaries	69		64	
Of which management costs consolidated subsidiaries	43		40	

<sup>1</sup> For 2021, the amount consists of NOK 106 million related to investments in unlisted real estate and NOK 7 million related to investments in unlisted renewable energy infrastructure. For 2020, the entire amount related to investments in unlisted real estate.

### Upper limit for reimbursement of management costs

Every year the Ministry of Finance establishes an upper limit for the reimbursement of management costs. Norges Bank is only reimbursed for costs incurred within this limit. Norges Bank is also reimbursed for performance-based fees to external managers. These fees are not measured against the upper limit.

For 2021, total management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external managers, were limited to NOK 5 400 million. In 2020, the limit was NOK 4 900 million.

Total management costs measured against the upper limit amounted to NOK 3 914 million in 2021. This consisted of management costs in Norges Bank, excluding performance-based fees to external managers, of NOK 3 801 million and management costs in subsidiaries of NOK 113 million. Total management costs including performance-based fees to external managers amounted to NOK 4 753 million in 2021.

### Costs measured as a share of assets under management

Costs are also measured in basis points, as a share of average assets under management. Average assets under management are calculated based on the market value of the portfolio in Norwegian kroner at the start of each month in the calendar year.

In 2021, management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external

managers, corresponded to 3.4 basis points of assets under management. Management costs including performance-based fees to external managers corresponded to 4.1 basis points of assets under management.

### Other operating costs in subsidiaries

In addition to the management costs presented in table 12.2, other operating costs are also incurred in subsidiaries related to the ongoing maintenance, operation and development of the investments. These are not costs related to investing in real estate or renewable energy infrastructure but are costs of operating the underlying investments once they are acquired. Therefore, they are not defined as management costs. Other operating costs are expensed directly in the portfolio result and are not part of the management fee. They are also not included in the costs measured against the upper limit.

Other operating costs incurred in non-consolidated subsidiaries are presented in the income statement lines Income/expense from unlisted real estate and Income/expense from unlisted infrastructure. For further information, see table 6.4 in note 6 Unlisted real estate and table 7.4 in note 7 Unlisted renewable energy infrastructure. Other operating costs incurred in consolidated subsidiaries are presented in the income statement line Other income/expense.

# GPFG Note 13 Secured lending and borrowing

Secured lending and borrowing consists of collateralised (secured) transactions, where the GPFG posts or receives securities or cash to or from a counterparty, with collateral in the form of other securities or cash. These transactions take place under various agreements such as securities lending agreements, repurchase and reverse repurchase agreements and equity swaps in combination with purchases or sales of equities.

The objective of secured lending and borrowing is to provide an incremental return on the GPFG's holdings of securities and cash. These transactions are also used in connection with liquidity management.

## Accounting policy

### Income and expense from secured lending and borrowing

Income and expense mainly consist of interest and net fees. These are recognised on a straight-line basis over the term of the agreement and presented in the income statement as Income/expense from secured lending and Income/expense from secured borrowing.

**Table 13.1** Income/expense from secured lending and borrowing

Amounts in NOK million	2021	2020
Income/expense from secured lending	3 842	4 028
Income/expense from secured borrowing	21	-751
<b>Net income/expense from secured lending and borrowing</b>	<b>3 863</b>	<b>3 277</b>

## Accounting policy

### Transferred financial assets

Securities transferred to counterparties in connection with secured lending and borrowing transactions are not derecognised when the agreement is entered into, as the derecognition criteria are not met. Since the counterparty has the right to sell or pledge the security, the security is considered to be transferred. Transferred securities are therefore presented separately in the balance sheet lines Equities lent and Bonds lent. During the lending period, the underlying securities are accounted for in accordance with accounting policies for the relevant securities.

When an equity is sold in combination with the purchase of an equivalent equity swap, the sold equity is presented in the balance sheet as Equities lent, since the GPFG's exposure to the equity is virtually unchanged. The equity swap (derivative) is not recognised in the balance sheet, since this would lead to recognition of the same rights twice. When an equity is purchased in combination with the sale of an equivalent equity swap, the GPFG has virtually no exposure to the equity or the derivative and neither the equity nor the derivative are recognised in the balance sheet.

### Secured lending

Cash collateral posted to counterparties in secured lending transactions is derecognised, and a corresponding receivable reflecting the cash amount that will be returned is recognised as a financial asset, Secured lending. This asset is measured at fair value.

### Secured borrowing

Cash collateral received in connection with secured borrowing transactions is recognised as Deposits in banks together with a corresponding financial liability, Secured borrowing. This liability is measured at fair value.

### Collateral received in the form of securities

Collateral received through secured lending and borrowing transactions in the form of securities, where the GPFG has the right to sell or pledge the security, is not recognised in the balance sheet unless reinvested.

Table 13.2 shows the amount presented as Secured lending, and the associated collateral received in the form of securities.

**Table 13.2** Secured lending

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Secured lending	297 405	192 526
<b>Total secured lending</b>	<b>297 405</b>	<b>192 526</b>
<b>Associated collateral in the form of securities (off balance sheet)</b>		
Equities received as collateral	118 669	62 514
Bonds received as collateral	185 951	134 307
<b>Total collateral received in the form of securities related to secured lending</b>	<b>304 620</b>	<b>196 821</b>

Table 13.3 shows transferred securities with the associated liability presented as Secured borrowing, and collateral received in the form of securities or guarantees.

**Table 13.3** Transferred financial assets and secured borrowing

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
<b>Transferred financial assets</b>		
Equities lent	505 117	438 353
Bonds lent	623 367	520 978
<b>Total transferred financial assets</b>	<b>1 128 484</b>	<b>959 332</b>
<b>Associated cash collateral, recognised as liability</b>		
Secured borrowing	591 960	390 380
<b>Total secured borrowing</b>	<b>591 960</b>	<b>390 380</b>
<b>Associated collateral in the form of securities or guarantees (off balance sheet)</b>		
Equities received as collateral	267 575	345 111
Bonds received as collateral	304 538	278 691
Guarantees	12 519	959
<b>Total collateral received in the form of securities or guarantees related to transferred financial assets</b>	<b>584 632</b>	<b>624 761</b>

# GPFG Note 14 Collateral and offsetting

## Accounting policy

### Cash collateral derivative transactions

Cash collateral posted in connection with derivative transactions is derecognised and a corresponding receivable, reflecting the cash amount that will be returned, is recognised in the balance sheet as Cash collateral posted. Cash collateral received in connection with derivative transactions is recognised in the balance sheet as Deposits in banks, with a corresponding liability Cash collateral received. Both Cash collateral posted and Cash collateral received are measured at fair value.

### Offsetting

Financial assets and liabilities are not offset and presented net in the balance sheet because the criteria in IAS 32 Financial instruments: Presentation are not met. Table 14.1 does not therefore include a column for amounts offset/netted in the balance sheet.

## Collateral

For various counterparties and transaction types, cash collateral will both be posted to and received from the same counterparty. Therefore, received cash collateral can be netted against posted cash collateral and vice-versa as shown in table 14.1. Cash collateral posted and Cash collateral received in the balance sheet are related exclusively to derivative transactions. Collateral in the form of cash or securities is also posted and received in connection with secured lending and borrowing transactions. See note 13 Secured lending and borrowing for further information.

## Offsetting

Table 14.1 provides an overview of financial assets and liabilities, the effects of legally enforceable netting agreements and related collateral to reduce credit risk. The column Assets/Liabilities in the balance sheet subject to netting shows the carrying amounts of financial assets and liabilities that are subject to legally enforceable netting

agreements. These amounts are adjusted for the effect of potential netting of financial assets and liabilities recognised in the balance sheet with the same counterparty, together with posted or received cash collateral. This results in a net exposure, which is shown in the column Assets/liabilities after netting and collateral.

Some netting agreements could potentially not be legally enforceable. Transactions under the relevant contracts are shown in the column Assets/liabilities not subject to enforceable netting agreements.

In the event of counterparty default, a collective settlement between Norges Bank and the bankruptcy estate could be agreed for certain groups of instruments, irrespective of whether the instruments belong to the GPFG or Norges Bank's foreign exchange reserves. Such a settlement will be allocated proportionately between these portfolios and is therefore not adjusted for in the table.



**Table 14.1** Assets and liabilities subject to netting agreements

Amounts in NOK million, 31 Dec. 2021			Amounts subject to enforceable master netting agreements				
Description	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements <sup>1</sup>	Assets in the balance sheet subject to netting	Financial liabilities related to same counterparty	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral
<b>Assets</b>							
Secured lending	297 405	82 735	214 669	-	124 868	89 801	-
Cash collateral posted	3 725	-	3 725	3 652	-	-	73
Financial derivatives	7 879	465	7 413	6 093	1 174	-	146
<b>Total</b>	<b>309 009</b>	<b>83 200</b>	<b>225 807</b>	<b>9 745</b>	<b>126 042</b>	<b>89 801</b>	<b>219</b>

Amounts in NOK million, 31 Dec. 2021			Amounts subject to enforceable master netting agreements				
Description	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements <sup>2</sup>	Liabilities in the balance sheet subject to netting	Financial assets related to same counterparty	Cash collateral posted (recognised as asset)	Security collateral posted (not derecognised)	Liabilities after netting and collateral
<b>Liabilities</b>							
Secured borrowing	591 960	77 216	514 743	-	124 868	388 193	1 682
Cash collateral received	11 848	-	11 848	3 635	-	-	8 212
Financial derivatives	9 055	5	9 050	6 093	2 149	-	808
<b>Total</b>	<b>612 863</b>	<b>77 221</b>	<b>535 641</b>	<b>9 728</b>	<b>127 017</b>	<b>388 193</b>	<b>10 702</b>

Amounts in NOK million, 31 Dec. 2020			Amounts subject to enforceable master netting agreements				
Description	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements <sup>1</sup>	Assets in the balance sheet subject to netting	Financial liabilities related to same counterparty	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral
<b>Assets</b>							
Secured lending	192 526	57 470	135 056	-	74 398	60 658	-
Cash collateral posted	5 715	-	5 715	5 715	-	-	-
Financial derivatives	2 551	206	2 345	2 345	-	-	-
<b>Total</b>	<b>200 791</b>	<b>57 676</b>	<b>143 116</b>	<b>8 060</b>	<b>74 398</b>	<b>60 658</b>	<b>-</b>

Amounts in NOK million, 31 Dec. 2020			Amounts subject to enforceable master netting agreements				
Description	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements <sup>2</sup>	Liabilities in the balance sheet subject to netting	Financial assets related to same counterparty	Cash collateral posted (recognised as asset)	Security collateral posted (not derecognised)	Liabilities after netting and collateral
<b>Liabilities</b>							
Secured borrowing	390 380	55 976	334 404	-	74 398	259 135	871
Cash collateral received	6 004	-	6 004	1 452	-	-	4 552
Financial derivatives	7 619	-	7 619	2 345	4 439	-	835
<b>Total</b>	<b>404 003</b>	<b>55 976</b>	<b>348 027</b>	<b>3 797</b>	<b>78 837</b>	<b>259 135</b>	<b>6 257</b>

<sup>1</sup> Secured lending includes amounts related to shares purchased in combination with equity swaps. In 2021, this amounted to NOK 80 billion (NOK 56 billion in 2020). See note 13 Secured lending and borrowing for further information.

<sup>2</sup> Secured borrowing includes amounts related to shares sold in combination with equity swaps. In 2021, this amounted to NOK 64 billion (NOK 54 billion in 2020). See note 13 Secured lending and borrowing for further information.

# GPFG Note 15 Related parties

## Accounting policy

Norges Bank is owned by the Norwegian government and is, in line with IAS 24.25, exempt from the disclosure requirements pertaining to related party transactions and outstanding balances, including commitments, with the Norwegian government. This includes transactions with other entities that are related parties because the Norwegian government has control of, joint control of, or significant influence over both Norges Bank and the other entities.

Norges Bank, including the GPFG, is a separate legal entity that is wholly state-owned through the Ministry of Finance. See note 1 General information for information regarding the relationship between the Ministry of Finance, Norges Bank and the GPFG. The GPFG conducts all transactions at market terms.

### Transactions with the government

The Ministry of Finance has placed funds for investment in the GPFG in the form of a Norwegian krone deposit with Norges Bank (the krone account). The krone deposit is subsequently placed with Norges Bank Investment Management for investment management. In accordance with the management mandate, transfers are made to and from the krone account. See additional information regarding the inflow/withdrawal for the period in the statement of changes in owner's capital.

### Transactions with Norges Bank

Norges Bank is not exposed to any economic risk from the management of the GPFG. The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the GPFG in the form of a management fee, see note 12 Management costs. In 2021, NOK 10.5 billion was deducted from the krone account to pay the accrued management fee to Norges Bank, of which NOK 5.3 billion was settlement of the management fee for 2020, and NOK 5.2 billion was settlement of the management fee for 2021. The management fee for 2021

was settled prior to year-end, based on a forecast. This was higher than the final management fee for the year and the difference will be settled in March 2022. In 2020, NOK 4.3 billion was deducted from the krone account to pay the accrued management fee. This related in its entirety to management fee for 2019.

Internal trades in the form of money market lending or borrowing between the GPFG and Norges Bank's foreign exchange reserves are presented as a net balance between the two portfolios in the balance sheet lines Other assets and Other liabilities. At the end of 2021, the net balance between the portfolios represented a receivable for the GPFG of NOK 130 million, compared to a receivable of NOK 806 million at the end of 2020. Associated income and expense items are presented net in the income statement as Interest income/expense.

### Transactions with subsidiaries

Subsidiaries of Norges Bank are established as part of the management of the GPFG's investments in unlisted real estate and unlisted renewable energy infrastructure. For an overview of the companies that own and manage the investments, as well as consolidated subsidiaries, see note 16 Interests in other entities. For further information regarding transactions with subsidiaries, see note 6 Unlisted real estate and note 7 Unlisted renewable energy infrastructure.

# GPFGB Note 16 Interests in other entities

Investments in unlisted real estate and unlisted renewable energy infrastructure are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFGB. These subsidiaries invest, through holding companies, in entities that invest in properties and renewable energy infrastructure. These entities may be subsidiaries or joint ventures.

The overall objective of the ownership structures used for investments in unlisted real estate and unlisted

infrastructure is to safeguard the financial wealth under management and to ensure the highest possible net return after costs, in accordance with the management mandate issued by the Ministry of Finance. Key criteria when deciding the ownership structure are legal protection, governance and operational efficiency. Taxes may represent a significant cost for the unlisted investments. Expected tax expense for the fund is therefore one of the factors considered when determining the ownership structure.

Table 16.1 shows the companies that own and manage the properties and infrastructure assets, as well as consolidated subsidiaries.

**Table 16.1** Real estate and infrastructure companies

Company	Business address	Property address <sup>2</sup>	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
<b>Non-consolidated companies</b>					
<b>United Kingdom</b>					
NBIM George Partners LP <sup>1</sup>	London	London	100.00	25.00	2011
MSC Property Intermediate Holdings Limited	London	Sheffield	50.00	50.00	2012
NBIM Charlotte Partners LP	London	London	100.00	57.75	2014
NBIM Edward Partners LP	London	London	100.00	100.00	2014
NBIM Caroline Partners LP	London	London	100.00	100.00	2015
NBIM Henry Partners LP	London	London	100.00	100.00	2016
NBIM Elizabeth Partners LP	London	London	100.00	100.00	2016
NBIM Eleanor Partners LP	London	London	100.00	100.00	2018
WOSC Partners LP	London	London	75.00	75.00	2019
<b>Luxembourg</b>					
NBIM S.à r.l.	Luxembourg	N/A	100.00	N/A	2011
<b>France</b>					
NBIM Louis SAS	Paris	Paris	100.00	50.00	2011
SCI 16 Matignon	Paris	Paris	50.00	50.00	2011
Champs Elysées Rond-Point SCI	Paris	Paris	50.00	50.00	2011
SCI PB 12	Paris	Paris	50.00	50.00	2011
SCI Malesherbes	Paris	Paris	50.00	50.00	2012
SCI 15 Scribe	Paris	Paris	50.00	50.00	2012
SAS 100 CE	Paris	Paris	50.00	50.00	2012
SCI Daumesnil	Paris	Paris	50.00	50.00	2012
SCI 9 Messine	Paris	Paris	50.00	50.00	2012

Company	Business address	Property address <sup>2</sup>	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
SCI Pasquier	Paris	Paris	50.00	50.00	2013
NBIM Marcel SCI	Paris	Paris	100.00	100.00	2014
NBIM Victor SCI	Paris	Paris	100.00	100.00	2016
NBIM Eugene SCI	Paris	Paris	100.00	100.00	2017
NBIM Beatrice SCI	Paris	Paris	100.00	100.00	2018
NBIM Jeanne SCI	Paris	Paris	100.00	100.00	2019
<b>Germany</b>					
NKE Neues Kranzler Eck Berlin Immobilien GmbH & Co. KG	Frankfurt	Berlin	50.00	50.00	2012
NBIM Helmut 2 GmbH & Co KG	Berlin	Berlin	100.00	100.00	2020
<b>Switzerland</b>					
NBIM Antoine CHF S.à r.l.	Luxembourg	Zürich	100.00	100.00	2012
<b>Europe</b>					
Prologis European Logistics Partners S.à r.l.	Luxembourg	Multiple European cities	50.00	50.00	2013
<b>United States</b>					
T-C 1101 Pennsylvania Venture LLC	Wilmington, DE	Washington	49.90	49.90	2013
T-C Franklin Square Venture LLC	Wilmington, DE	Washington	49.90	49.90	2013
T-C 33 Arch Street Venture LLC	Wilmington, DE	Boston	49.90	49.90	2013
T-C 475 Fifth Avenue Venture LLC	Wilmington, DE	New York	49.90	49.90	2013
No. 1 Times Square Development LLC	Wilmington, DE	New York	45.00	45.00	2013
OFC Boston LLC	Wilmington, DE	Boston	47.50	47.50	2013
425 MKT LLC	Wilmington, DE	San Francisco	47.50	47.50	2013
555 12th LLC	Wilmington, DE	Washington	47.50	47.50	2013
Prologis U.S. Logistics Venture LLC	Wilmington, DE	Multiple American cities	46.30	44.96	2014
OBS Boston LLC	Wilmington, DE	Boston	47.50	47.50	2014
100 Federal JV LLC	Wilmington, DE	Boston	45.00	45.00	2014
Atlantic Wharf JV LLC	Wilmington, DE	Boston	45.00	45.00	2014
BP/CGCenter MM LLC	Wilmington, DE	New York	45.00	45.00	2014
T-C 2 Herald Square Venture LLC	Wilmington, DE	New York	49.90	49.90	2014
T-C 800 17th Street Venture NW LLC	Wilmington, DE	Washington	49.90	49.90	2014
T-C Foundry Sq II Venture LLC	Wilmington, DE	San Francisco	49.90	49.90	2014
T-C Hall of States Venture LLC	Wilmington, DE	Washington	49.90	49.90	2014
SJP TS JV LLC	Wilmington, DE	New York	45.00	45.00	2015
T-C Republic Square Venture LLC	Wilmington, DE	Washington	49.90	49.90	2015
T-C 888 Brannan Venture LLC	Wilmington, DE	San Francisco	49.90	49.90	2015
Hudson Square Properties, LLC	Wilmington, DE	New York	48.00	48.00	2015
ConSquare LLC	Wilmington, DE	Washington	47.50	47.50	2016

Company	Business address	Property address <sup>2</sup>	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
100 First Street Member LLC	Wilmington, DE	San Francisco	44.00	44.00	2016
303 Second Street Member LLC	Wilmington, DE	San Francisco	44.00	44.00	2016
900 16th Street Economic Joint Venture (DE) LP	Wilmington, DE	Washington	49.00	49.00	2017
1101 NYA Economic Joint Venture (DE) LP	Wilmington, DE	Washington	49.00	49.00	2017
375 HSP LLC	Wilmington, DE	New York	48.00	48.00	2017
T-C 501 Boylston Venture LLC	Wilmington, DE	Boston	49.90	49.90	2018
SVF Seaport JV LLC	Wilmington, DE	Boston	45.00	45.00	2018
OMD Venture LLC	Wilmington, DE	Boston	47.50	47.50	2021
ARE-MA Region No. 102 JV LLC	Wilmington, DE	Boston	41.00	41.00	2021
<b>Japan</b>					
TMK Tokyo TN1	Tokyo	Tokyo	70.00	70.00	2017
Tokyo MN1 TMK	Tokyo	Tokyo	100.00	39.90	2020
<b>Netherlands</b>					
Borssele Wind Farm C.V.	The Hague	Borssele 1&2	50.00	50.00	2021
<b>Consolidated subsidiaries</b>					
<b>Japan</b>					
NBRE Management Japan Advisors K.K.	Tokyo	N/A	100.00	N/A	2015
<b>United Kingdom</b>					
NBRE Management Europe Limited	London	N/A	100.00	N/A	2016

<sup>1</sup> One property in this company, 20 Air Street, has an ownership share of 50 percent from 1 September 2017.

<sup>2</sup> For investments in unlisted real estate, the property address is shown. For investments in unlisted infrastructure, the project name is shown.

Activity in the consolidated subsidiaries consists of providing investment-related services to the GPF. This activity is presented in the income statement line Other costs and included in the balance sheet lines Other assets and Other liabilities.

In addition to the companies shown in table 16.1, Norges Bank has wholly-owned holding companies established in connection with investments in unlisted real estate and

unlisted renewable energy infrastructure. These holding companies do not engage in any operations and do not own any properties or infrastructure assets directly. The holding companies have their business address either in the same country as the investments, in connection with NBIM S.à r.l. in Luxembourg, or in Norway for the holding companies established for investments in Japan, France, Germany and the Netherlands.

# GPFG Note 17 Other assets and other liabilities

**Table 17.1** Other assets

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Net balance Norges Bank's foreign exchange reserves	130	806
Unsettled inflow krone deposit	1 381	227
Accrued income from secured lending	311	299
Other	38	9
<b>Other assets</b>	<b>1 860</b>	<b>1 340</b>

**Table 17.2** Other liabilities

Amounts in NOK million	31 Dec. 2021	31 Dec. 2020
Tax payable	18	12
Other	38	30
<b>Other liabilities</b>	<b>56</b>	<b>42</b>

# Independent auditor's report

## To the Supervisory Council of Norges Bank

### Independent auditor's report

#### Opinion

We have audited the financial statements of Norges Bank, which comprise the balance sheet as at 31 December 2021, the income statement, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion

- the financial statements comply with applicable statutory requirements, and
- the financial statements give a true and fair view of the financial position of Norges Bank as at 31 December 2021, and its financial performance and its cash flows for the year then ended in accordance with the Regulation concerning annual financial reporting for Norges Bank. The Regulation requires the financial statements for Norges Bank to be prepared in accordance with International Financial Reporting Standards as adopted by EU, but sets certain specific presentation requirements for the investment portfolio of the Government Pension Fund Global, including subsidiaries being part of the investment portfolio.

#### Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of Norges Bank as required by laws and regulations and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### 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 of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

**Management of the equity and fixed income portfolio in the Foreign exchange reserves and in the Government Pension Fund Global**

Key audit matter	How the matter was addressed in our audit
<p>Processes and control activities in the equity and fixed-income management related to amongst others trading, secured lending and borrowing, interest income and dividends, valuation, calculation of gains and losses, foreign currency translation and performance- and risk measurement are largely automated.</p> <p>Deviations in the automated investment management processes are analysed and followed up.</p> <p>Norges Bank's IT systems are mainly standard systems adapted to Norges Bank's needs. The IT solutions are operated in cooperation with various third parties.</p> <p>The IT systems used in the investment management are absolutely central for accounting and reporting. Effective internal controls in the automated investment management processes as well as in handling deviations are of significant importance to form the basis for ensuring accurate, complete and reliable financial reporting and this is therefore a key audit matter.</p>	<p>control activities for evaluation of the equity and fixed-income management.</p> <p>We assessed those elements of the overall governance models that are relevant to financial reporting.</p> <p>We assessed and tested the design of selected control activities related to IT operations, change management and information security. We tested that a sample of these control activities had operated effectively in the reporting period.</p> <p>We assessed whether selected valuation and calculation methods, including the method for currency conversion, were in accordance with IFRS.</p> <p>We assessed and tested the design of selected automated control activities for the IT systems related to trading, secured lending and borrowing, recognition of interest income and dividends, valuation, calculation of gains and losses, foreign currency translation and performance- and risk measurement. We tested that a sample of these control activities had operated effectively in the reporting period.</p> <p>We assessed and tested the design of selected manual control activities for the areas listed above related to analysis and the monitoring of deviations identified through the automated processes. We tested that a sample of these control activities had operated effectively in the reporting period.</p> <p>We assessed third party confirmations (ISAE 3402 reports) received from some of the service providers that Norges Bank uses in portfolio management, to assess whether these service providers had adequate internal controls in areas that are important for Norges Bank's financial reporting.</p> <p>We used our own IT specialists to understand the overall governance model for IT and in the assessment and testing of the control activities related to IT.</p>



**Notes and coins in circulation**

Key audit matter	How the matter was addressed in our audit
<p>Norges Bank is responsible for issuing cash (notes and coins).</p> <p>See note 16 for a description of the accounting policy and a description of the criteria for when notes and coins are recognized and derecognized from Norges Bank's balance sheet.</p> <p>Effective internal controls around notes and coins in depots and in the ordering and destruction process is essential for accurate financial reporting of notes and coins in circulation and is therefore a key audit matter.</p>	<p>Norges Bank has established various control activities related to notes and coins in circulation.</p> <p>We assessed and tested the design of a sample of control activities established to ensure correct balance of notes and coins, including ordering and receiving new notes and coins, accounting for notes and coins placed into and withdrawn from circulation, inventory count of central bank cash depots and the registration of destruction. For a sample of these control activities, we have tested if they operated effectively in the reporting period.</p> <p>For central bank cash depots run by external parties we obtained reports on the stock of notes from the external parties. For the central bank cash depot run by Norges Bank we conducted a re-count of a sample of notes. We compared the reports from the external third parties, Norges Bank and the result of our re-count with information from Norges Bank on the balances for the cash depots.</p> <p>We also assessed whether the disclosures on notes and coins in circulation in note 16 were adequate.</p>

**Valuation of investments using models with significant use of unobservable input (Level 3 assets), Government Pension Fund Global**

Key audit matter	How the matter was addressed in our audit
<p>Fair value of the majority of assets and liabilities in the Government Pension Fund Global is based on official closing prices and observable market prices.</p> <p>Investments in unlisted real estate, unlisted renewable energy infrastructure, and some securities are, however, valued using models with significant use of unobservable inputs, and these types of assets are classified as Level 3 in the fair value hierarchy. A considerable degree of judgement is applied in determining the assumptions that market participants would use when pricing the asset or liability, when observable market data is not available. The valuation of Level 3 investments is therefore subject to considerable uncertainty.</p> <p>The recognised value of assets classified as level 3 is NOK 325.8 billion as at 31 December 2021. Of this, investments in unlisted real estate amount to NOK 310.1 billion.</p> <p>Unlisted real estate in the Government Pension Fund Global is valued by external valuers.</p> <p>The valuation of unlisted real estate investments is complex and requires judgement. Valuation is based on information about each individual property type and location, as well as a number of assumptions and estimates.</p> <p>The assumptions and estimates are essential for the valuation, and the valuation of unlisted real estate is therefore a key audit matter.</p>	<p>Norges Bank has established various control activities for monitoring the valuations conducted by external valuation specialists. We have assessed and tested the design of selected control activities related to key assumptions and estimates, including future cashflows and applicable discount rates. For a sample of properties, we tested that these control activities had operated effectively in the reporting period.</p> <p>For a sample of properties, we received the external valuation reports from Norges Bank as of 31 December 2021, and assessed whether the applied valuation methods were in accordance with generally accepted valuation standards and practices. We assessed the reasonableness of selected unobservable inputs used in determining future market rent and discount rates against our understanding of the market. We assessed the valuer's independence, qualifications and experience. We reconciled the fair value in the financial reporting with the valuation reports.</p> <p>We used our own experts in the review of the valuation reports.</p> <p>We assessed whether the disclosures in note 20, GPFG, notes 6 and 8 regarding valuation of unlisted real estate were adequate.</p>

## Returns disclosures, Government Pension Fund Global

Key audit matter	How the matter was addressed in our audit
<p>Returns are measured in Norwegian kroner and in foreign currency based on a weighted composition of currencies in the benchmark indices for equity and fixed-income investments.</p> <p>All of the fund's investments, including investments in unlisted real estate and unlisted renewable energy infrastructure, are measured against the fund's reference index consisting of global equity and bond indices.</p> <p>Absolute and relative return information for the Government Pension Fund Global's equity and fixed-income investments is presented in note 20, GPFG, note 3.</p> <p>Measurement of absolute and relative returns is a complex area for the financial reporting and is therefore a key audit matter.</p>	<p>Norges Bank has established various control activities related to the calculation of returns.</p> <p>We assessed and tested the design of selected control activities related to the application of calculation formulas used to calculate returns, the consistency between accounting and performance measurement, and that external sources of information were accurately applied in the calculations. We tested that a sample of these control activities had operated effectively in the reporting period.</p> <p>In addition, we recalculated that the absolute returns for the year, and relative returns for selected days, were calculated in accordance with the methods described in note 20, GPFG, note 3.</p> <p>We assessed whether the returns disclosures in note 20, GPFG, note 3 were adequate.</p>

### Other Information

The Executive Board and the Governor (management) are responsible for the information in the Board of Directors' report and the other information accompanying the financial statements. The other information comprises information in the annual report, but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the information in the Board of Directors' report nor the other information accompanying the financial statements.

In connection with our audit of the financial statements, our responsibility is to read the Board of Directors' report and the other information accompanying the financial statements. The purpose is to consider if there is material inconsistency between the Board of Directors' report and the other information accompanying the financial statements and the financial statements or our knowledge obtained in the audit, or whether the Board of Directors' report and the other information accompanying the financial statements otherwise appear to be materially misstated. We are required to report if there is a material misstatement in the Board of Directors' report or the other information accompanying the financial statements. We have nothing to report in this regard.

Based on our knowledge obtained in the audit, it is our opinion that the Board of Directors' report

- is consistent with the financial statements and
- contains the information required by applicable legal requirements.

Our opinion on the Board of Director's report applies correspondingly to the statements on Corporate Social Responsibility.

### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the Regulation concerning annual financial reporting for Norges Bank. The Regulation requires the financial statements for Norges Bank to be prepared in accordance with International Financial Reporting Standards as adopted by EU, but sets certain specific presentation requirements for the investment portfolio of the Government Pension Fund Global, including subsidiaries being part of the investment portfolio, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error. We design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. 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.
- obtain 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 Norges Bank's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves a true and fair view.

From the matters communicated with the Executive Board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. 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, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Deloitte AS

Henrik Woxholt  
State Authorised Public Accountant

*Note: This translation from Norwegian has been prepared for information purposes only.*

To the Supervisory Council of Norges Bank

## Independent auditor's assurance report on the information on responsible investment management and on climate impact

We have been engaged by the Supervisory Council of Norges Bank to provide limited assurance in respect of the sections "Climate risk and the Government Pension Fund Global" and "Impact of Norges Bank's physical operations on the climate and the environment" under the chapter Climate change and the environment, and in the section "Responsible management of the Government Pension Fund Global (GPFJ)" under the chapter Corporate governance, ethics and culture, included in the Norges Bank – Annual Report 2021. Our responsibility is to conclude with a limited level of assurance that:

- Norges Bank has applied procedures to identify, collect, compile, and validate information for 2021 to be included in the sections specified above.
- The information in these sections is consistent with the supporting documentation presented to us.

### Responsibilities of the Executive Board and the Governor

The Executive Board and the Governor are responsible for the preparation and presentation of the information covered by the assurance engagement. They are also responsible for such internal controls they deem necessary to ensure that the information is free from material misstatement, whether due to fraud or error.

The criteria for the reporting principles for the preparation of the sections specified above is described in the sections.

### Auditor's responsibilities

Our responsibility is to express a limited assurance conclusion on the information in the sections covered by the assurance engagement. We have conducted our work in accordance with ISAE 3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board.

Deloitte AS is subject to International Standard on Quality Control 1 and, accordingly, applies a comprehensive quality control system, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Considering the risk of material misstatement, our work included analytical procedures and interviews with individuals responsible for preparing the information included in the sections covered by the assurance engagement, as well as a review on a sample basis of evidence supporting the information presented in these sections.

We believe that our work provides an appropriate basis for us to provide a conclusion with a limited level of assurance on the subject matters.

**Conclusions**

Based on our work, nothing has come to our attention causing us not to believe that:

- Norges Bank has applied procedures to identify, collect, compile, and validate information for 2021 to be included in the sections specified above.
- The information presented for 2021 in the sections identified above is consistent with the supporting documentation presented to us.

Oslo, 9 February 2022

Deloitte AS

Henrik Woxholt  
State Authorised Public Accountant (Norway)

Frank Dahl  
Sustainability expert

*Note: Translation has been made for information purposes only.*

# Resolution of the Supervisory Council on the financial statements for 2021

Norges Bank's Supervisory Council adopted the following decision at its meeting 23 February 2022:

- The Supervisory Council takes note of the Annual Report of the Executive Board for 2021.
- The Supervisory Council takes note of the auditor's report for Norges Bank and the auditor's report on responsible investment for 2021 and approves Norges Bank's financial statements for 2021.
- In accordance with the guidelines, the net profit of NOK 23bn is to be transferred as follows: NOK 20bn to the Adjustment Fund and NOK 3bn to the Transfer Fund. From the Transfer Fund, one-third, or NOK 11.1bn, will be transferred to the Treasury.

## The Supervisory Council's statement on the minutes of the meetings of the Executive Board and its supervision of the bank

Under the Norges Bank Act, the Supervisory Council submits a separate report to the Storting concerning its supervision of the Bank. The report for 2021 will be adopted by the Supervisory Council on 17 March 2022 and published upon submission to the Storting.







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