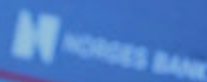




NORGES BANK 2020
"MOT LYSERE TIDER"
AV PVN



IN1 SDI

IN2 SDI

IN3 SDI

NORGES BANK

ANNUAL REPORT

/2020

IN7 STL1

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 **Øystein Olsen**

6 **Governor**

An extraordinary year

A new central bank act entered into force on 1 January 2020. With it, a new governance structure was introduced with an Executive Board and an expert committee for monetary policy and financial stability. The beginning of 2020 brought new roles and tasks for many of the Bank's staff and external contacts.

The new governing bodies had a rough start. On 12 March, Norway shut down and the economic outlook changed dramatically. The Monetary Policy and Financial Stability Committee held an emergency meeting and adopted a number of measures to calm financial markets and counter the economic downturn. The policy rate was reduced, eventually to zero, the countercyclical capital buffer for banks was reduced, Norges Bank announced NOK purchases to stabilise the foreign exchange market and banks were offered extraordinary F-loans in USD and NOK.

In parallel with the economic earthquake that shook Norway, the Executive Board made an important appointment. In autumn 2019, Yngve Slyngstad had announced that he was leaving his position after 12 years as CEO of Norges Bank Investment Management (NBIM). In March, following a thorough recruitment process, the Executive Board was able to present his successor, Nicolai Tangen. A revised employment contract was signed in August and Tangen took up the position as planned on 1 September.

NBIM has experienced a year of very demanding market conditions. The stock market decline in spring 2020 was one of the most pronounced the world had ever seen. NBIM employees were forced to make big decisions quickly in a situation where most people were working remotely. Some

overseas offices were periodically closed completely. Nevertheless, the Government Pension Fund Global's performance has been excellent, which is evidence of commendable flexibility and work effort.

Norges Bank Central Banking Operations (NBCBO) has also had its crisis preparedness put to the test. New market measures were introduced very quickly and were crucial to the functioning of banks and financial markets throughout the crisis. The Bank's highly skilled employees have made a tremendous effort working remotely to update analyses and projections as the Covid-19 pandemic and the economic outlook have evolved and to closely monitor conditions that could pose a threat to financial system stability.

The pandemic set strict requirements regarding the way we organised our work. Operations and analyses were performed remotely in cooperation with key members of staff who were physically at the Bank. Others have worked to ensure a clean workplace in compliance with infection control guidelines. Technical solutions to facilitate digital meeting platforms were developed at record speed so that the Bank could also continue to provide critical services in the state of emergency that still persists. All of the Bank's employees have made an impressive effort. This is consistent with the community spirit that has characterised the authorities, businesses and a patient population through an extraordinary year. We should now be able to give ourselves a Covid-friendly pat on the back for what has been accomplished in 2020 and look forward to 2021, when mass vaccination will hopefully allow us to live more normally again.

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This is Norges Bank



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Norges Bank is Norway's central 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 speciedaler, and to extend credit to firms and private individuals.

Today, Norges Bank no longer extends credit. 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 Government Pension Fund Global (GPF) and is responsible for promoting efficient and robust payment systems and financial markets. In addition, the Bank has, as previously, the sole right to issue Norwegian banknotes and coins.

Norges Bank normally sets the policy rate eight times a year. The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of close to 2.0% over time. As part of its work to promote stability in the financial system, the Bank was assigned responsibility for preparing a decision basis and providing advice to the Ministry of Finance regarding the level of the countercyclical capital buffer requirement imposed on banks.

Norges Bank is responsible for the management of the GPFG. The objective is to achieve the highest possible return net of costs within the framework of the investment mandate.

Our mission

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

The Bank conducts monetary policy, monitors financial system stability and promotes robust and efficient payment systems and financial markets.

Norges Bank is responsible for the management of Norway's foreign exchange reserves and the management of the GPFG on behalf of the Government.





Our vision and our values



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Norges Bank is committed to being a transparent and well-run central bank. We aim to be at the forefront of monetary policy innovation and payment system modernisation. We are responsible for safeguarding and building financial wealth for future generations. We pursue a policy of open and active communication to promote understanding of the Bank's role and the performance of its tasks.

The Bank's core values are team spirit, integrity, innovation and excellence. We strive to maintain a cost-efficient and prudent use of resources and to provide good working conditions, exercise ownership rights responsibly and be environmentally conscious.





Governor Øystein Olsen and Deputy Governor Ida Wolden Bache chairing an online meeting for Norges Bank staff.

Important events in 2020

- **A new central bank act entered into force on 1 January, resulting in changes to Norges Bank's governance structure and the establishment of a committee for monetary policy and financial stability.**
- **Norges Bank reduced the policy rate from 1.5% to 0% in the course of spring.**
- **Norges Bank advised the Ministry of Finance to reduce the level of the countercyclical capital buffer for banks from 2.5% to 1%. The Ministry of Finance followed Norges Bank's advice.**
- **The Executive Board presented Nicolai Tangen as the new CEO of Norges Bank Investment Management on 26 March.**
- **The market value of the Government Pension Fund Global (GPF) was NOK 10 914bn at year-end 2020, and the return on the GPF was equivalent to NOK 1 070bn in 2020.**
- **Norges Bank offered banks extraordinary liquidity in both NOK and USD. At their highest, extraordinary F-loans outstanding amounted to just below NOK 250bn.**
- **After the krone reached record-weak levels against a number of currencies in March, Norges Bank undertook NOK purchases to promote a well-functioning NOK market.**
- **Egil Matsen resigned as Deputy Governor on 1 April 2020 and Deputy Governor Jon Nicolaisen took over his tasks related to the management of the GPF. At the same time, Ida Wolden Bache was appointed Deputy Governor with special responsibility for central banking operations. Jon Nicolaisen resigned his post on 4 December 2020.**





Governor of Norges Bank Øystein Olsen and NBIM CEO Nicolai Tangen holding a press conference at Norges Bank.

Key figures

Norges Bank's policy rate was reduced to

0%

in 2020

The year-on-year rise in the consumer price index (CPI) was

1.3%

in 2020

The countercyclical capital buffer rate was

1%

at year-end 2020

The market value of the foreign exchange reserves was

NOK 596bn

at year-end 2020

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

NOK 421bn

were settled daily in 2020

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

NOK 10 914bn

at year-end 2020

The market value of the GPF increased by

NOK 826bn

in 2020

Norges Bank's total comprehensive income was

NOK 29bn

for 2020

Transfers to the Treasury totalled

NOK 15bn

in 2020

Norges Bank has

925

permanent employees from 35 countries



TABLE 1 KEY FIGURES FOR THE PAST FIVE YEARS

	2016	2017	2018	2019	2020
Policy rate. Percent	0.5	0.5	0.75	1.5	0
CPI. Percent ¹	3.6	1.8	2.7	2.2	1.3
Countercyclical capital buffer. Percent	1.5	2.0	2.0	2.5	1
Market value of the GPFG. NOK bn	7510	8488	8256	10 088	10 914
Increase in the GPFG. NOK bn	35	978	-233	1 832	826
Market value of the foreign exchange reserves. NOK bn	480	512	512	246	596
Total comprehensive income. NOK bn	-3	28	16	44	29
Transfers to the Treasury	18	14	15	20	15
Average daily payments in Norges Bank's settlement system (NBO). NOK bn	221	236	248	259	421
Number of employees	923	922	953	940	925

¹ Percentage change from previous year.

Organisation

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 and the Monetary Policy and Financial Stability Committee.

Norges Bank Central Banking Operations (NBCBO) is responsible for the conduct of monetary policy, financial stability, market operations and management of the foreign exchange reserves. NBCBO is headed by the governor of Norges Bank, who is appointed by the King in Council. NBCBO comprises three departments: Monetary Policy, Financial Stability and Markets and ICT. The Monetary Policy department includes a research unit that carries out research on topics related to all of NBCBO's operations and an international unit.

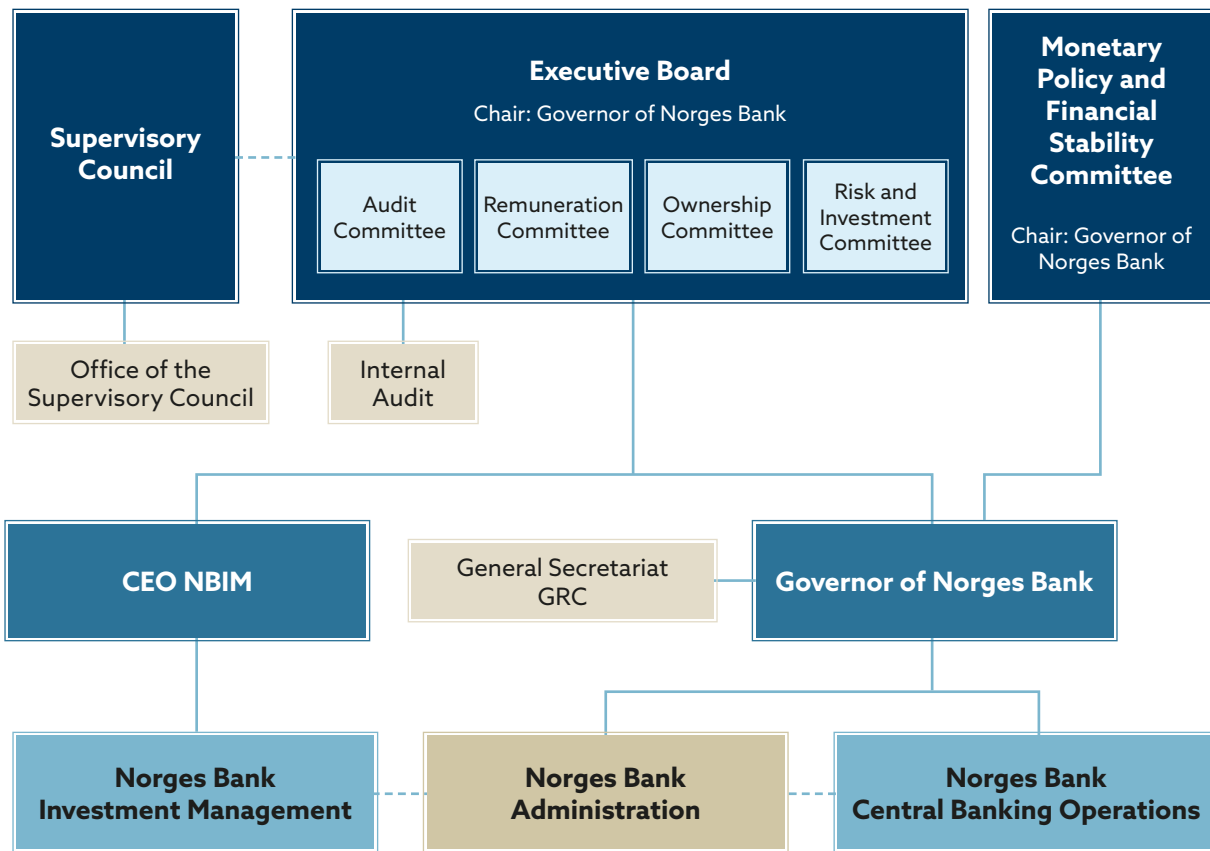
Norges Bank Investment Management (NBIM) is responsible for managing the Government Pension Fund Global (GPF). The CEO of NBIM is appointed by the Executive Board. As from 2020, the post of CEO is limited to two five-year terms. NBIM comprises the following units: Technology, Operations, Governance and Compliance, Asset Strategies, Equity Strategies, Real Assets, Investment Risk and Staff.

The GPF is invested worldwide and NBIM is an international organisation with employees from 33 countries. NBIM has offices in Oslo, London, New York, Shanghai, Singapore and subsidiaries in Tokyo, Paris and Luxembourg.

In line with its new mandate, Norges Bank carried out organisational changes at year-end 2019. A new unit, Norges Bank Administration (NBA), was established to provide shared support functions for NBCBO and NBIM. NBA pools support functions such as HR, communications, finance and procurement, property management, legal expertise, archiving and security, in order to share expertise, contribute to cost-effective solutions and underpin the Bank's identity as a single institution. The executive director of NBA reports to the governor of Norges Bank.

Compliance and control (GRC) is the governor's control body, Internal Audit is the Executive Board's control body, and the Office of the Supervisory Council is the Supervisory Council's secretariat.

The governor and deputy governors are also served by a General Secretariat that assists the Executive Board and the Monetary Policy and Financial Stability Committee and provides professional support, speech writing services and other support functions for the executive management of Norges Bank.







Management seminar at Norges Bank. The speaker is Ada Magnæs Aass, Director of People and Organisation. From left to right: Executive Director Torbjørn Hægeland, Financial Stability, Executive Director Olav Andreas Bø, Markets and ICT, Executive Director Ole Christian Bech Moen, Monetary Policy, NBIM CEO Nicolai Tangen, Executive Director Jane Haugland, Norges Bank Administration and Governor of Norges Bank Øystein Olsen. Other managers participated via videolink.

3 | Crisis measures spring 2020

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Crisis measures spring 2020

The outbreak of the Covid-19 pandemic was sudden and the consequences of the pandemic for the Norwegian and global economy have been severe. Norges Bank responded with forceful measures: the policy rate was gradually reduced to zero, Norges Bank offered banks extraordinary F-loans, advised a reduction in the countercyclical capital buffer and intervened in the NOK market. The measures introduced by Norges Bank in spring 2020 are presented below in chronological order.

12 March

- At an extraordinary meeting on 12 March, Norges Bank's Monetary Policy and Financial Stability Committee unanimously decided to reduce the policy rate by 0.5 percentage point to 1.0%. There was considerable uncertainty about the duration and impact of the Covid-19 outbreak and there was a risk of a pronounced economic downturn. The Committee monitored developments and was prepared to make further rate cuts.
- To ensure that the policy rate passed through to money market rates, Norges Bank offered extraordinary three-month F-loans to banks on 12 March.

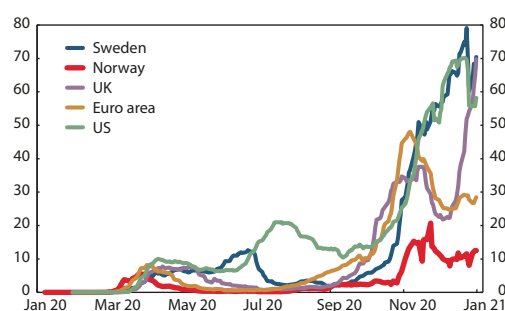
13 March

- On the advice of Norges Bank, the Ministry of Finance decided on 13 March to reduce the countercyclical capital buffer rate for banks from 2.5% to 1%, with immediate effect. The purpose was to prevent tighter bank lending standards from amplifying a downturn in the Norwegian economy.

18 March

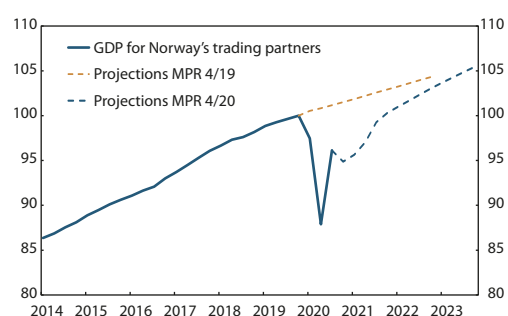
- Norges Bank announced that collateral requirements for loans in Norges Bank would be relaxed to ensure that banks had sufficient access to borrowing from Norges Bank. As a result of the relaxation, banks could pledge the entire volume outstanding of a residential mortgage bond from their own corporate group as collateral for loans.

Chart 1 Infection rate per 100 000 population. Seven-day moving average. 7 January 2020-31 December 2020



Sources: Refinitiv Datastream and Norges Bank

Chart 2 GDP for Norway's trading partners. Index. Projections at selected times. 2019 Q4 = 100. 2014 Q1-2023 Q4



Sources: Statistics Norway and Norges Bank

19 March

- At an extraordinary meeting on 19 March, Norges Bank's Monetary Policy and Financial Stability Committee unanimously decided to reduce the policy rate by 0.75 percentage point to 0.25%. Since Norges Bank's lowering of the policy rate the previous week, the situation in the Norwegian economy had deteriorated further. Financial market turbulence had intensified and higher credit and money market premiums had raised financing costs for Norwegian businesses. The krone exchange rate had depreciated considerably.
- Norges Bank's offer of extraordinary loans was expanded with maturities from one week up to 12 months. The loans were fully allotted and prices varied from the policy rate to the policy rate plus 30 basis points.
- The Federal Reserve announced the establishment of temporary USD liquidity arrangements with a number of central banks, including Norges Bank. Under the arrangement, Norges Bank offered banks several rounds of F-loans in USD with a maturity of three months.
- The krone reached record-weak levels against a number of currencies on 19 March. Uncertainty in the NOK market was particularly high at that time, and exchange

rate movements were amplified by limited liquidity. In order to support a well-functioning NOK market, Norges Bank announced that the need to intervene in the market was under continuous assessment. Overall, Norges Bank made extraordinary NOK purchases in the foreign exchange market totalling NOK 3.5bn.

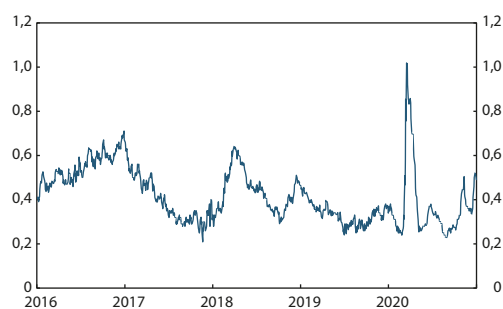
6 May

- At the monetary policy meeting on 6 May, Norges Bank's Monetary Policy and Financial Stability Committee decided unanimously to reduce the policy rate to 0%. In the Committee's assessment, low interest rates could not prevent the coronavirus outbreak from having a substantial impact on the Norwegian economy, but they could help dampen the downturn.

Later

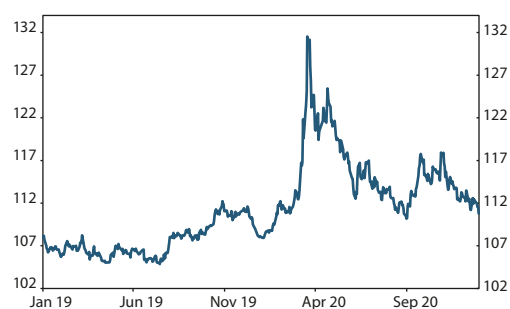
- In August, Norges Bank reduced the offer of extraordinary F-loans to three-month F-loans. At the same time, prices rose to 15 basis points above the policy rate. At the same time, the Bank announced that the relaxation of the collateral requirements for loans would gradually be reversed.
- The countercyclical capital buffer was still at 1% and the policy rate at 0% at end-2020.

Chart 3 Money market premiums. Percentage points. 1 January 2016 – 31 December 2020



Sources: Statistics Norway and Norges Bank

Chart 4 Import-weighted exchange rate index (I-44). 1 January 2019 – 31 December 2020



Sources: Statistics Norway and Norges Bank

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Governance of Norges Bank

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 Government Pension Fund Global (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 is the executive and advisory body for monetary policy and has executive and advisory authority in the work to promote financial stability. Norges Bank is responsible for issuing banknotes and coins, facilitating the central settlement system and overseeing the payment system. Norges Bank owns and manages Norway's official foreign exchange reserves and manages the GPFG.

Norges Bank's highest decision-making bodies are the Executive Board, the Monetary Policy and Financial Stability Committee and the Supervisory Council. 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 general manager for Norges Bank Investment Management, which manages the GPFG.

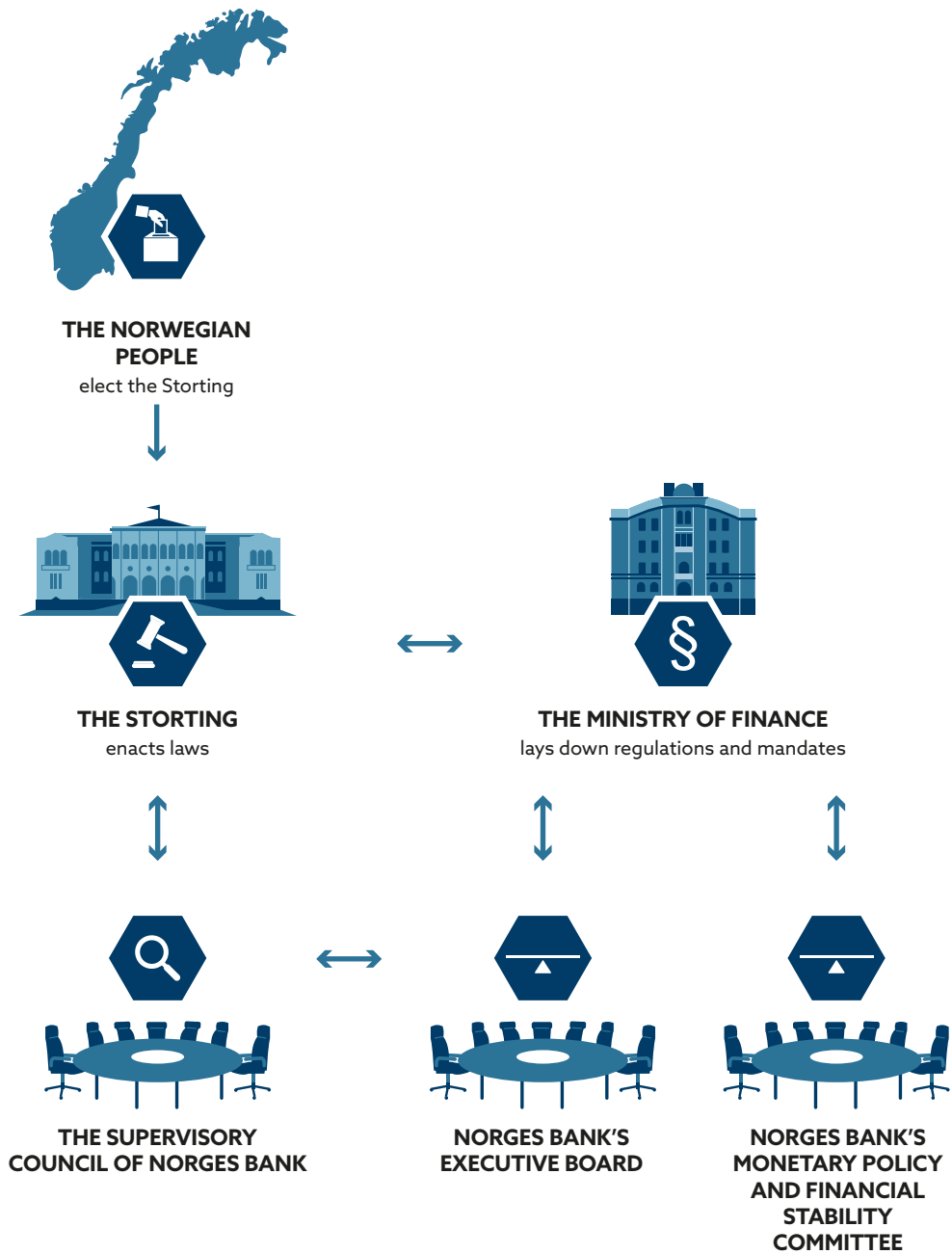
The Executive Board comprises the governor of Norges Bank, the deputy governors and six external board members, all appointed by the King in Council. Two additional board members are selected by and among employees to participate when administrative matters are on the agenda. The governor chairs the Executive Board.

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 ensuring the sound and efficient organisation of the Bank's operations. The Board draws up the strategy for Norges Bank and annually prepares a draft budget for the coming financial year, the annual report and the financial statements. The Executive Board ensures that the Banks' operations, accounts and asset management are subject to adequate control, including appropriate risk management and internal control systems. Internal Audit provides the Executive Board with independent assessments of risk management and internal control. The Executive Board has ultimate responsibility for the management of the GPFG and for central banking matters that are not within the remit of the Monetary Policy and Financial Stability Committee.

The Monetary Policy and Financial Stability Committee comprises the governor, the deputy governors and two external members. The external members are appointed by the King in Council. The governor chairs the Committee. The Committee is responsible for Norges Bank's executive and advisory authority in monetary policy, and is responsible for the use of instruments to achieve the objectives of monetary policy. The Committee contributes to the work to promote financial stability by providing advice and using the instruments at its disposal.

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 Supervisory Council adopts Norges Bank's annual budget, approves the financial statements and selects the auditor. The Supervisory Council is served by a General Secretariat, which performs secretariat and supervisory tasks on behalf of the Council.



Risk management and internal control

Norges Bank carries out systematic risk management and internal control along “three lines of defence”.

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 based on defined targets and strategies. The Bank’s executive managers continuously assess the internal control system, and a summarised assessment of internal control across all areas of the Bank’s operations is made once a year.

The Executive Board has the primary responsibility for risk management and for the sound organisation of Norges 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”:

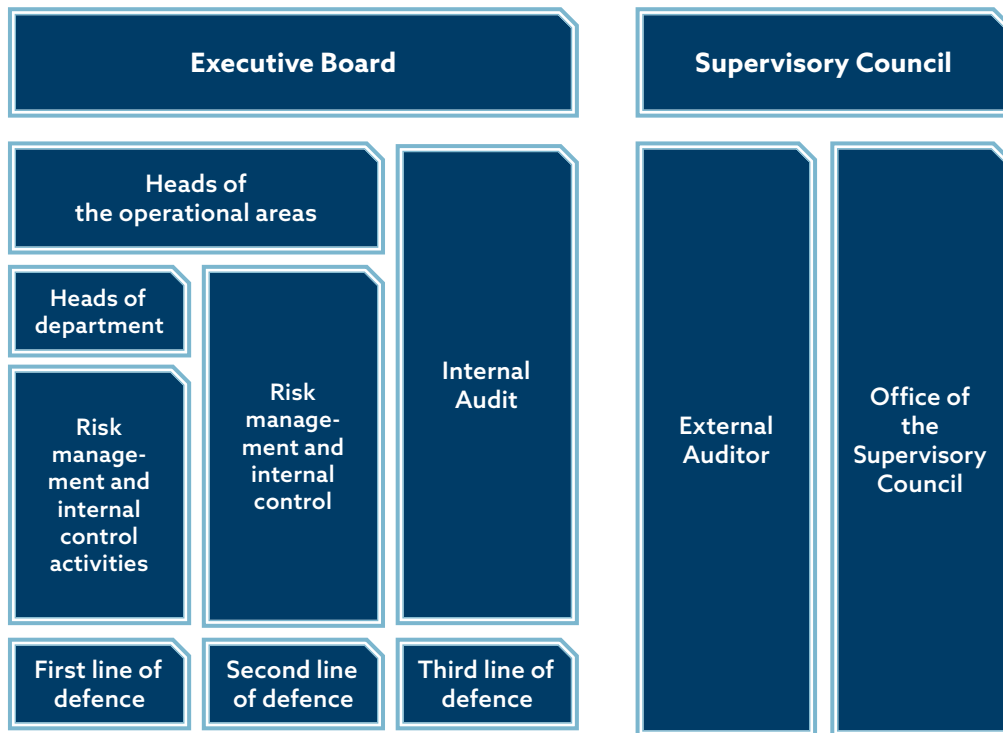
First line of defence: Operative risk management and control activities. All managers are responsible for risk management within their areas of responsibility and authority. Risk assessment and compliance are required to be an integral part of the Bank’s business processes and include the management of outsourced services. Staff in the first line of defence report to the head of the relevant department.

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. These functions coordinate reporting to the Bank’s executive management and the Executive Board. 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. The Internal Audit annual plan is approved by the Executive Board, and the head of Internal Audit reports to the Executive Board.

The system with three lines of defence provides for a satisfactory division of responsibilities between decision-makers and controlling and reporting functions and their independence.

The Supervisory Council of Norges Bank, which reports directly to the Storting (Norwegian parliament), supervises the Executive Board’s management and control of Norges Bank. 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 submits an annual report to the Storting.



A transparent central bank

Norges Bank is committed to being a transparent central bank. The Bank's use of instruments is to be communicated transparently, be understood and be predictable for stakeholders and defined target groups.

Norges Bank has extensive contact with society at large, including academia, public authorities, employer and employee organisations, pupils/students, the business sector and the general population. The governor and deputy governors visit all the regions of Norway every year and even made some visits in 2020, despite restrictions related to the Covid-19 pandemic. The Bank communicates through its publications, its website, speeches and lectures, seminars and press conferences.

Publications

Norges Bank publishes the Bank's assessments and analyses in its *Monetary Policy Report*, *Financial Stability Report*, *Norway's financial system* and *Financial Infrastructure Report*, as well as in semi-annual reports on the Government Pension Fund Global (GPF). Transparency with regard to the management of the GPF helps to underpin the GPF's legitimacy as financial investor and fosters the confidence of its owner, the general public and the Bank's investee companies and markets.

Norges Bank published 44 reports, 30 papers and 37 posts on the Bank's Bankplassen blog.

Press conferences and knowledge-sharing

In 2020, Norges Bank held 15 press conferences and press seminars. Owing to the media attention surrounding the Bank's extraordinary monetary policy measures and the appointment of a new CEO of NBIM, handling the media required a comprehensive response. More than half of the press enquiries about the GPF were from international media.

Norges Bank prioritises teaching and knowledge-sharing with young people. The Education Centre is an interactive learning centre for upper secondary school pupils located at the Bank's head office. The Centre is intended to stimulate learning and reflection on fundamental economic questions and thus increase interest in the field of economics. During the Covid-19 pandemic, the Education Centre premises have been closed to visitors, but Centre staff have instead visited upper secondary schools.

Speeches and lectures

The Bank's executive management prioritises lectures to communicate with the general public about Norges Bank's activities. Regular lectures are given in all regions of Norway, the cities of Oslo, Bergen, Stavanger and Trondheim, and at international meetings and conferences. The lectures are aimed at the business sector, academia, diplomats, students, school pupils and the general public. The lectures are published on Norges Bank's website in Norwegian and English. In 2020, the Governor and Deputy Governors gave 22 speeches and lectures. Owing to the pandemic, some lectures scheduled for 2020 were cancelled, while others were given online.





One of the Education Centre's visits to an upper secondary school.

Research

Research at Norges Bank is largely focused on monetary policy, financial stability and investment management. The research is recognised by international and Norwegian research communities and informs the Bank's policy decisions.

In 2020, 16 articles written by Norges Bank's researchers were accepted for publication in peer-reviewed journals. The Research Council of Norway divides peer-reviewed journals into two levels, Level 1 and Level 2, with Level 2 as the highest. In 2020, 70% of the research articles were published in Level 2 journals. Current research activity from all units in Norges Bank is documented in the Norges Bank Working Papers series. Eighteen papers were published in this series in 2020. An overview of published articles can be found on Norges Bank's website.

Norges Bank's research community acts as a link between the Bank and academia. In 2020, the Bank's researchers had extensive contact with researchers from universities and other central banks through joint research projects and presentations of work in progress at Norwegian and international conferences and seminars. Due to the ongoing pandemic, these activities took place virtually. In addition to internal presentations at Norges Bank by the Bank's own researchers, research work is

presented at weekly seminars and in conferences and courses held at Norges Bank. In 2020, 18 research seminars were organised, with external researchers presenting their work and participating in meetings with Bank staff. From mid-March 2020, research seminars have been held virtually, and three virtual conferences were also held in autumn 2020.

Norges Bank supports research projects to understand and contribute to improving market standards in asset management. In 2020, support was provided for three new research projects at the European Corporate Governance Institute, École Polytechnique Fédérale de Lausanne and Oxford University. The projects will explore how changes in ownership affect companies and how institutional investors can influence corporate governance. The Bank continued to provide support for a research project at New York University examining the financial impacts of climate change.

NBIM published five historical reviews of different parts of the management of the GPF and arranged four corresponding NBIM Talks.

The Norwegian Finance Research Conference was held for the ninth time.

International cooperation

Norges Bank cooperates extensively with other central banks and international organisations. The Bank works with a variety of international organisations:

Cooperation with the International Monetary Fund (IMF)

Norges Bank administers Norway's rights and obligations ensuing from Norway's membership of the IMF. Governor Øystein Olsen was appointed by the Government to represent Norway on the IMF's Board of Governors, which normally meets once a year at the IMF's Annual Meeting. By agreement, Norges Bank advises the Ministry of Finance on Norwegian viewpoints on issues to be brought before the IMF Executive Board.

The primary funding source for IMF loans is quota subscriptions, which all the member countries are obligated to pay. Norges Bank has a standing commitment to furnish foreign exchange equivalent to Norway's quota for the IMF to lend to other member countries. Norges Bank puts additional foreign exchange reserves at the disposal of the IMF in the form of special drawing rights (SDRs). In December, Norges Bank signed a new bilateral loan agreement with the IMF.

Technical assistance to Bank of Mozambique

Since 2017, Norges Bank has, in cooperation with the IMF and funded by the Ministry of Foreign Affairs, based an advisor in Maputo to provide technical assistance with the aim of modernising the Bank of Mozambique's functions. Since March 2020, the assistance from Norges Bank has been provided online and has covered the entire field of central banking. In autumn 2020, agreement was reached to extend the project with a second phase scheduled to end in 2023 Q3, modelled according to phase 1, which ran from 2017 to 2020 Q3.

The Bank for International Settlements (BIS)

Norges Bank is co-owner of the BIS, which is tasked with promoting cooperation among central banks. In addition to providing banking services to central banks, the BIS is a research body and a discussion forum for member banks. The Governor of Norges Bank regularly takes part in BIS meetings. In the light of the Covid-19 pandemic, the regular central bank governor meetings have been held online since March.

The BIS also hosts extensive committee work aimed at strengthening global financial stability. The BIS' hosting function is often referred to as the "Basel process" because meetings hosted by the BIS are held in Basel, Switzerland.

Norway's participates in EU supervisory work

The European Systemic Risk Board (ESRB) is an EU body that monitors and assesses threats to financial stability in the EU and that seeks to limit systemic risk by issuing solid policy recommendations and warnings about negative developments. Norges Bank's ESRB membership is non-voting and subject to certain other limitations. Norges Bank also participates without voting rights in meetings of the European Banking Authority (EBA).

Financial Stability Board

The Financial Stability Board (FSB) is a body established by the G20 that provides analyses and assessments in the field of finance for the G20 process. The Governor of Norges Bank attends meetings of the FSB's Regional Consultative Group for Europe (RCGE), along with the Director General of Finanstilsynet and the Secretary General of the Ministry of Finance. The group exchanges intelligence and views between those European countries that take part in the FSB and some of those that do not.

Nordic-Baltic cooperation on financial market issues

Norges Bank participates in the Nordic-Baltic Macroprudential Forum (NBMF), where central banks and supervisory authorities discuss matters related to systemic risk and cross-border banking activities in the region. Norges Bank also participates in the Nordic Baltic Stability Group (NBSG), which is a forum for finance ministries, central banks and supervisory authorities in the Nordic and Baltic countries. The NBSG's primary task is to strengthen contingency arrangements in order to deal with cross-border threats to financial stability in the region.

Norges Bank's membership of the Network for Greening the Financial System (NGFS)

In December 2018, Norges Bank became a member of the NGFS. The NGFS is a network for central banks and supervisory authorities for sharing knowledge on how financial authorities and the financial sector should take environmental and climate risk into account. Norges Bank participates in the workstreams on macrofinancial conditions and on monetary policy and sustainable financial conditions.

5 | Strategy and future prospects

Strategy 2022 - One bank _____ 40

Strategy 2022 – One bank

Norges Bank's Strategy 2022 applies to the period 2020-2022. The following is a status report on the actions taken by Norges Bank in 2020 to achieve the objectives in Strategy 2022 – One bank.

In light of the Bank's experiences with a new governance model, changes in Norges Bank's executive management and the Covid-19 situation, an evaluation of the need to update Strategy 2022 was carried out in autumn 2020. In the Executive Board's assessment, the need for adjustments can be met and operationalised using the Bank's action plans, without having to adjust the contents of the strategy.



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SUCCEEDING TOGETHER

Objectives and measures

Our most important resource is our staff. With the Government Pension Fund Global (GPF) under the aegis of the Bank, we are a global organisation with a third of our employees located outside Norway and with employees representing almost 40 nationalities. The aim is for all of us to work together as a team, while also allowing different parts of the organisation to retain their distinctive professional characteristics and specialist expertise.

To accomplish this, we need to focus on professional development in both existing and new fields. We must be able to challenge one another, think creatively and develop our skills in pace with the challenges we face. At the same time, we need to communicate clearly, internally and externally, to ensure that all employees throughout the organisation and across nationalities are familiar with and abide by our values and objectives.

The way we work will be characterised by team spirit and a willingness to change. We will:

- achieve results based on high professional standards, integrity and mutual respect
- build an identity and culture based on common values
- provide opportunities for new ways of working to promote innovation and cooperation
- further develop digital platforms for interaction and efficiency
- encourage employees to pursue professional development
- be a preferred employer, have a systematic recruitment strategy and strive for gender equality and diversity.

Our communication will be transparent, accountable and clear both within and outside our organisation. We will:

- be open about our work and our performance
- aim to communicate to a wide audience in order to increase public knowledge of what the Bank does
- consider new forms of communication to reach new target groups.

Actions

We have:

- started to use a variety of digital platforms to reach out to the general public
- emphasised transparent and accountable communication on Norges Bank's website, at press conferences and in media relations
- strengthened internal communication on digital platforms and developed new digital arenas for professional and social interaction. Internal communication was prioritised to ensure continuous updates on containment measures in Norway and for the Bank's offices abroad.
- established joint introduction activities for new employees across all areas of the Bank
- established a diversity and inclusion initiative. A number of events were held focused on topics related to gender, ethnicity and sexual orientation.
- established a joint digital learning platform (Academy) for the Bank's employees
- relaunched the Norges Bank Investment Management (NBIM) trainee programme to foster workplace diversity.

A WELL-RUN BANK

Objectives and measures

In the preparatory work on the new central bank act, the authorities emphasised the Executive Board's responsibility for the efficient organisation of the Bank. As general manager of Norges Bank, the governor carries out this responsibility on behalf of the Executive Board. The central bank act also requires the Board to recruit a general manager for NBIM with responsibility for the overall performance of the GPFG.

Organising the Bank's activities in well-run units will be a primary task for the Bank's Board and management in the coming years. We will take advantage of synergies and economies of scale within the organisation. We have established a new unit providing shared support functions – Norges Bank Administration (NBA) – to promote efficiency and strengthen a common organisational culture.

At the same time, it is essential that the different parts of the Bank retain their distinctive professional characteristics and responsibility for their performance. The division of duties between the Bank's operational areas should reflect and hone the skills that the Bank's specialists need to perform their tasks.

In Norges Bank's specialist fields, digitalisation and automation are part of everyday life. The Bank's IT systems are closely aligned with its specialist tasks and are an integral part of operations. NBIM has recently completed a major upgrade of its IT systems, and Norges Bank Central Banking Operations (NBCBO) will undertake a similar project over the next three years. Developing well-run and secure IT solutions is crucial to the reliability and efficiency of the Bank's operations in the future.

We will further develop a well-run and secure central bank. We will:

- develop robust governance processes for the Executive Board and for the new Monetary Policy and Financial Stability Committee
- adapt the organisation in light of the new central bank act and new governing bodies
- ensure an efficient division of tasks between the Bank's operational areas
- limit the Bank's costs by taking advantage of synergies and economies of scale
- implement new and cost-efficient IT solutions that protect the Bank's day-to-day operations and secure systemically critical systems
- continue the Bank's work on its environmental and sustainability strategy
- protect the Bank's employees and assets.

Actions

We have:

- approved new rules of procedure for both the Executive Board and the Monetary Policy and Financial Stability Committee and a new division of duties and responsibilities between the Committee and the Executive Board
- changed the job descriptions of the Governor and the CEO of NBIM to reflect the new division of duties and responsibilities after the establishment of NBA

- conducted external comparisons of the Bank's use of resources with that of other similar organisations, including management costs for the GPFG and for the unlisted real estate portfolio. The Bank compares favourably with other organisations in these external comparisons.
- NBCBO has launched a major programme to upgrade the Bank's IT systems platform. The programme will be completed in 2022. Initiatives to develop ICT security continued in 2020, with particular focus on strengthening the Cyber Security Operations Centre to detect and manage cyber security incidents.
- strengthened the Bank's work on climate and sustainability. A reference group was established to coordinate and follow up the Bank's strategy and external reporting in this area was further developed.
- implemented changes in procurement procedures and travel policy, and invested in video conferencing equipment to safeguard and integrate climate and sustainability considerations into everyday operations.

LONG-TERM AND RESPONSIBLE INVESTMENT MANAGEMENT

Objectives and measures

The management objective of the GPFG is to achieve the highest possible return after costs at an acceptable level of risk. Within this overall financial objective, the GPFG is to be a responsible investor.

The GPFG is a large global fund with a long-term investment horizon and plays an important role in economic policy. Under the new central bank act, the GPFG will continue to be managed by Norges Bank.

The GPFG invests across several asset classes in a large number of countries and currencies. The fund's strategic equity allocation is 70%. New developments in the global economy, such as trade barriers, low interest rates, changing technology paradigms and climate change will affect the GPFG. We should be prepared for large fluctuations in the GPFG's value.

The investment strategy is characterised by index-tracking at low cost. We will further develop an organisation that is focused on making sound investment decisions and is willing and able to manage risk and changing market conditions.

The strategy for 2020–2022 sets out the strategic direction of the fund and builds on the strategy for 2017–2019. We will:

- issue advice on the GPFG's investment strategy, based on professional financial market analyses and our experience as a market participant
- utilise a set of complementary investment strategies to generate excess return after costs
- further develop our investment strategies based on thorough financial analysis and new sources of information
- invest in real estate and renewable energy infrastructure to improve the trade-off between return and risk
- safeguard the GPFG's long-term economic interests by exercising our ownership rights
- cultivate NBIM as an investment management organisation with a performance-oriented investment culture and a clear division of responsibility
- pursue cost-effective investment management where costs are scrutinised in the context of improving investment risk-return.

Actions

We have:

- sent a letter to the Ministry of Finance with advice on the GPFG's benchmark index for emerging equity markets and on technical adjustments of the GPFG's benchmark index for bonds, as well as a letter on the impact of the Covid-19 pandemic on the GPFG's portfolio and management.
- made a number of adjustments to the GPFG's portfolio.
- established capacity for investment in infrastructure for renewable energy and evaluated potential investments.
- voted at 11 873 general meetings, held 2 869 meetings with companies and participated in 16 public consultations on the subject of active ownership. Five position papers were published on key corporate governance issues. A solution was established to publish the Bank's voting intentions prior to general meetings and this will be adopted at the beginning of 2021.



AT THE FOREFRONT OF CENTRAL BANKING

Objectives and measures

The objective of central banking operations is to keep inflation low and stable and contribute to stability in the real economy and to promote a robust and efficient financial system.

The global economy is characterised by change and may be affected by a variety of shocks. The possibility of an international economic downturn owing to geopolitical unrest and trade tensions between the major economies appears to pose the largest risk in the coming years. On the back of already low interest rates, a pronounced global downturn could pose greater challenges to monetary policy than previously. Persistently low interest rates could also increase financial system vulnerability.

More long-term developments are also important for the conduct of monetary and macroprudential policies. The importance of petroleum activities for value creation in Norway will gradually diminish. In addition, we face demographic changes and climate risk that may have a substantial impact on the economy and the financial system. New technology contributes to innovation in the payment system and allows for the emergence of new operators. Norges Bank's mission is to promote secure and efficient solutions for society as a whole.

New methods and economic models are under continuous development around the world, and an ever-increasing body of micro data from various sources is available to the Bank. The Bank's aim is to be at the forefront in the use of relevant models and methods.

We will perform our tasks in line with international best practice. We will:

- have contingency plans for an economic downturn and persistently low global interest rates
- give priority to analyses of long-term developments for key economic variables and for the conduct of monetary policy
- utilise new data and methods to develop stronger analytical tools
- communicate decisions and advice clearly to a wider audience
- be a driving force for improved Norwegian krone reference rates
- contribute to an efficient division of responsibilities between monetary, fiscal and macroprudential policies
- contribute to efficient, secure and robust payment and settlement systems between banks and the general public
- meet society's need for cash in a manner that ensures preparedness and promotes efficiency
- conduct research on central bank digital currency and other solutions that could improve efficiency and contingency arrangements in the payment system.

Actions

We have:

- utilised new sources of information and models to better understand economic developments. For example, the Bank has used current transaction data from Nets and Vipps to analyse household consumption developments during the Covid-19 pandemic, improved projections of banks' losses on corporate loans and developed models using heterogeneous agents.
- further developed monetary policy communication by providing a more detailed account of monetary policy assessments and changed the structure and format of the monetary policy reports to make them more reader-friendly.
- published updated economic projections more frequently than normal to improve understanding of economic developments through spring 2020.
- A reformed version of the overnight rate Nowa was approved as the alternative Norwegian krone reference rate. Norges Bank administers Nowa according to established principles for calculating Nowa.
- Climate risk was integrated into Norges Bank's analysis of banks' credit risk associated with corporate lending.
- facilitated more relevant and extensive anti-money laundering controls in cases related to the exchange of banknotes and compensation.
- established a project in collaboration with Finanstilsynet (Financial Supervisory Authority of Norway) to draft a proposal for the implementation in Norway of the European Central Bank's framework for testing financial sector cyber resilience (TIBER-EU).
- strengthened cyber security supervision and oversight and the supervision of key ICT providers and data centres.
- launched an improved infrastructure for real-time payments. All Norwegian banks can now offer payments where funds are immediately available in the payee's accounts (24/7).
- continued work to strengthen the protection of Norges Bank's settlement system (NBO) against adverse events, particularly cyber attacks.

6 | Annual reports

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Financial Stability Committee for 2020 _____ 76

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 Council. The governor is chair and the two deputy governors are first deputy chair and second deputy chair of the Executive Board. In addition, two board members are selected by and among employees to participate when administrative matters are on the agenda.

The Executive Board has four preparatory and advisory committees, whose work strengthens and streamlines the Executive Board's discussions:

Audit Committee

The Audit Committee was established in 2006. 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 and Internal Audit serves as the Committee's secretariat.

The Audit Committee meets with the external auditor at least once a year, without the participation of Norges Bank's executive management or administration.

Remuneration Committee

The Remuneration Committee was established in 2009 to contribute to thorough and independent discussions of matters pertaining to Norges Bank's salary and remuneration schemes.

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 was established in 2015 and is a preparatory committee for the Executive Board in matters relating to Norges Bank's responsible investment activities and decisions about the observation and 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 Ministry's guidelines for the observation and exclusion of companies from the GPF investment universe.

The Ownership Committee comprises three members and is chaired by the deputy governor of Norges Bank with special responsibility for the GPF. NBIM functions as the Committee's secretariat.

Risk and Investment Committee

The Risk and Investment Committee was established in 2015 to strengthen and streamline 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 special responsibility for the GPF. The General Secretariat functions as the Committee's secretariat.

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 Monetary Policy and Financial Stability Committee and Second Deputy Chair of the Executive Board.

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.



Karen Helene Ulltveit-Moe

Appointed board member for the period 1 January 2014 – 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 was formerly affiliated with the NHH Norwegian School of Economics and 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. Professor Ulltveit-Moe also 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, industrial organisation, tax policy and industrial policy. Professor Ulltveit-Moe 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 1 January 2018 – 15 May 2022. Member of the Ownership Committee and the Remuneration Committee of the Executive Board.

Kristine Ryssdal is General Counsel and Executive Vice President of HR 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 is a member of the board at Borregaard ASA, previously 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 for the period 4 March 2016 – 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 for the period 1 January 2020 – 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 Nordic Trustee and board member at Investinor and AS Værdalsbruket. 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 Real Estate 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.



Nina Udnes Tronstad

Appointed board member for the period 1 January 2020 – 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 the Norwegian Export Credit Guarantee Agency (GIEK), Prosafe, Fishency Innovation and Polarcus, 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, 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.

Benedicte Schilbred Fasmer

Member of the Executive Board for the period 1 April 2020 – 15 May 2020.



Egil Herman Sjursen

Appointed board member for the period 30 October 2020–15 May 2024. Member of the Ownership Committee of the Executive Board.

He stepped down as Chief Executive Officer of Holberg Fondsforvaltning 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. Sjursen 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 Sjursen 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. Sjursen holds a postgraduate degree in social sciences (cand. polit.), with a major in economics, from the University of Bergen.

Egil Matsen

Deputy governor until 31 March 2020.

Jon Nicolaisen

Deputy governor until 4 December 2020.

EMPLOYEE-ELECTED BOARD MEMBERS**Mona Sørensen**

Appointed employee-elected board member for the period 1 January 2016 – 31 December 2021.

Norges Bank employee from 1991. 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 for the period 1 January 2021 – 31 December 2021. Member of the Remuneration Committee of the Executive Board.

NBIM employee from 2013. 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. She was employee-elected board member in 2020.

Work of the Executive Board in 2020

Under the new Central Bank Act of 2020, responsibility for monetary policy and for Norges Bank's work to promote financial stability by providing advice and using the instruments at its disposal was transferred to the Monetary Policy and Financial Stability Committee. The Executive Board continues to have overall responsibility for the management and operation of Norges Bank, with the exception of matters that are assigned to the Monetary Policy and Financial Stability Committee.

In recent years, the Executive Board has held 16 to 18 meetings per year and considered close to 250 matters. The Executive Board held 20 meetings and considered 222 matters in 2020. Meetings also take 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. The seminars are particularly used for investment management

topics. 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 2016-2019 was relatively evenly distributed between central banking operations and investment management. In 2020, approximately 75% of the Board's time was spent on investment management. This is in line with the intention of the new central bank act where the Executive Board has an increased focus on investment management and where the Monetary Policy and Financial Stability Committee has been assigned responsibility for areas that were previously the responsibility of the Executive Board.

Table 2 on the next page shows a selection of key matters considered by the Executive Board in 2020.

Table 1 Work of the Executive Board 2016–2020

	2016	2017	2018	2019	2020
Number of Executive Board meetings	17	17	18	18	20
Number of Executive Board seminars	11	9	10	11	4
Number of matters considered by the Executive Board	248	248	232	242	222
Preparatory committee meetings:					
- Audit Committee	7	7	7	5	7
- Remuneration Committee	3	4	6	4	5
- Ownership Committee	7	5	5	5	7
- Risk and Investment Committee	10	9	6	7	10

Table 2 Key matters considered by the Executive Board in 2020

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Decisions											
Recruitment/appointment of new CEO of NBIM						Recruitment/appointment of new CEO of NBIM					
				Investments in renewable energy infrastructure				Investments in renewable energy infrastructure			
Decisions on observation and exclusion of companies from the GPFG						Decisions on observation and exclusion of companies from the GPFG			Decisions on observation and exclusion of companies from the GPFG		
				Financial Infrastructure Report							
Strategy and governance											
				Foreign exchange reserves strategy				Foreign exchange reserves strategy			
				Budget 2021				Budget 2021			
		Organisation						Organisation			
Strategy and advice on investment management								Strategy and advice on investment management			
								Statements and consultations			
Reporting, control and follow-up											
Quarterly reporting – GPFG and Norges Bank's foreign exchange reserves						Quarterly reporting – GPFG and Norges Bank's foreign exchange reserves					
Semi-annual reporting – NBCBO and Norges Bank						Semi-annual reporting – NBCBO and Norges Bank					
Annual reporting – Norges Bank and GPFG											
Supervisory and audit follow-up				Supervisory and audit follow-up				Supervisory and audit follow-up			
Day-to-day operation and follow-up of NBCBO and NBIM						Day-to-day operation and follow-up of NBCBO and NBIM					

Annual Report of the Executive Board for 2020

A dramatic year

On 1 January, a new Central Bank Act entered into force, resulting in a new governance structure and the establishment of a committee for monetary policy and financial stability. Nevertheless, it was the Covid-19 pandemic that had the largest impact on Norges Bank in 2020.

The Covid-19 pandemic led to a severe downturn in the Norwegian economy in 2020. Economic activity fell abruptly in March and April, and unemployment rose to historically high levels. There was also considerable financial market volatility.

The Monetary Policy and Financial Stability Committee reduced the policy rate from 1.5% to 0% in the course of spring. In addition, a number of measures were implemented to improve the functioning of financial markets. The Committee advised the Ministry of Finance to reduce the level of the countercyclical capital buffer for banks from 2.5% to 1%. The Ministry followed Norges Bank's advice. See the Annual Report of the Monetary Policy and Financial Committee for 2020 on page 18.

Investments in the Government Pension Fund Global (GPF) were affected by the global economic crisis, and the GPF's returns varied widely during 2020. When the Covid-19 pandemic spread in March, the value of the GPF's equity investments fell markedly over a short period of time. At year-end 2020, the market value of the GPF was NOK 10 914bn and the return on the GPF in 2020 was equivalent to NOK 1 070bn. In a year with operational challenges and in part difficult market conditions, the return on the GPF before management costs was 0.27 percentage point higher than the GPF's benchmark index.

Withdrawals by the Norwegian government totalled NOK 302bn after payment of management costs.

In parallel with the economic crisis, the Executive Board completed a thorough and important recruitment process. On 26 March, Nicolai Tangen was presented as Yngve Slyngstad's successor as CEO of Norges Bank Investment Management (NBIM). Tangen was chosen based on his leadership skills and experience in international investment management. Tangen's contract of employment was signed on 27 May. The appointment led to questions from the Supervisory Council, the media and politicians about impartiality and the risk of conflicts of interest relating to the position of CEO and Tangen's financial assets. A revised contract was signed on 24 August after the announcement by Tangen of a substantial transfer and changes to his financial ownership interests and assets. Tangen took up the position of CEO on 1 September.

On 1 April, Egil Matsen resigned as Deputy Governor, and Deputy Governor Jon Nicolaisen took over his tasks related to the management of the GPF. At the same time, Ida Wolden Bache became the new Deputy Governor with special responsibility for central banking operations. Jon Nicolaisen announced his intention to resign on 4 December.

2020 was a demanding year for Norges Bank's employees. The economic crisis required an extra effort by staff. At the same time, the health crisis challenged the way the Bank organised its work. Operations and analyses were performed remotely in collaboration with certain key persons who were physically at the Bank. Several of the overseas offices were

closed for long periods. Despite this, the Bank's employees performed their tasks with a high degree of professionalism throughout the year.

Norges Bank had 13 confirmed infections of Covid-19 in 2020.

Management of the GPFG

Norges Bank is responsible for the management of the GPFG, with a view to achieving the highest possible return over time within the constraints laid down in the mandate from the Ministry of Finance. Norges Bank pursues a variety of investment strategies. For the period from 2013, these strategies are grouped into three main categories: fund allocation, security selection and asset management. The different strategies build on the GPFG's special characteristics as a large, long-term investor with limited liquidity needs.

Management of the GPFG in 2020

At year-end 2020, the market value of the GPFG was NOK 10 914bn. Changes in market value reflect return on investments, transfers to or withdrawals from the GPFG and changes in the value of the Norwegian krone measured against the currencies the GPFG is invested in. The return in 2020 was equivalent to NOK 1 070bn. Movements in the krone exchange rate increased the market value of the GPFG by NOK 58bn, although this has no bearing on the GPFG's international purchasing power.

Withdrawals by the Norwegian government totalled NOK 302bn after payment of management costs. Withdrawals increased substantially during 2020 to finance the extra costs related to managing the Covid-19 pandemic.

In 2020, the return on the GPFG before management costs was 10.9% measured in the GPFG's currency basket. Equities returned 12.1% and bonds 7.5%. Investments in unlisted real estate returned -0.1%.

The return on the GPFG varied considerably during the year. When the coronavirus pandemic spread in March 2020, the value of the GPFG's equity investments dropped sharply. This caused a decrease in the equity share in the fund's strategic benchmark index and triggered a gradual rebalancing back to 70%. In 2020 Q1, the return on the GPFG was the lowest in its history, both in kroner and in percentage terms. Both the strong recovery in equity prices during spring and withdrawals of capital from the GPFG by the government reduced the need to purchase equities, and the equity share was back to 70% by the end of Q2.

There were substantial variations in equity returns between sectors, which also contributed to equities in different regions performing differently. Containment measures in response to the coronavirus pandemic contributed to negative returns on both listed and unlisted real estate investments.

The Covid-19 outbreak and the partial shut-down of Norges Bank's offices in Norway and abroad presented challenges for the management of the GPFG. The Executive Board recognises that Norges Bank has been able, at all times, to perform its mission and has managed the GPFG in line with approved strategies. In a year of operational challenges and sometimes demanding market conditions, the return on the GPFG before management costs was 0.27 percentage point higher than that on the GPFG's benchmark index.

The return contributions from the various strategies in 2020 show that fund allocation contributed negatively to the relative return, while asset management and security selection both contributed positively. The single largest contribution to relative return was from internal security selection in equity and fixed income management. Management costs amounted to 0.05% of assets under management.

The contributions to the relative return from equity, fixed income and real estate management, show a negative contribution from real estate management, reflecting the poor performance of the sector in 2020, but positive contributions from both equity and fixed income management.

Performance measured over time

The Executive Board emphasises the importance of assessing the performance of the GPFG over time. Viewed over the full period from 1998 to 2020 the annual return on the GPFG has been 6.3%. The annual net real return, after deductions for inflation and management costs, has been 4.4% in the same period. The annual return before management costs has been 0.25 percentage point higher than the return on the benchmark index set by the Ministry of Finance for the period.

In the period from 2013, the annual excess return before management costs has been 0.20 percentage point. The contributions from the three groups of strategies show that fund allocation has contributed negatively to the relative return during the period, while asset management and security selection have both contributed positively.

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 the aim that expected relative volatility (tracking error) does not exceed 1.25 percentage points.

Expected relative volatility was 0.56 percentage point at the end of 2020, up from 0.33 percentage point a year earlier. The increase is not primarily a result of wider deviation between the GPFG and the benchmark index, but is due to the increase in measured risk owing to the fluctuations observed in the market during 2020. Measured over the full period from 1998 to 2020, realised relative volatility has been 0.66 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 2013–2020 annual management costs averaged 0.06% of assets under management. In 2020, total management costs amounted to NOK 5.3bn, or 0.05% of assets under management. Investment management costs are low compared with other fund managers.

In line with the management mandate from the Ministry of Finance, the GPFG's performance and the Executive Board's assessment of the performance are presented in an annual report on the management of the GPFG. The Executive Board is satisfied that return has been good both in 2020 and over time, and



Signing of Nicolai Tangen's contract of employment with Øystein Olsen and the Executive Board

higher than the return on the benchmark index, against which the return is measured.

Advice and new CEO

An important part of the Executive Board's work relating to the GPFG is to advise on the further development of the GPFG's management. The Executive Board responded to a number of enquiries from the Ministry of Finance related to the GPFG's strategy in the course of 2020. Among other things, Norges Bank reported on its experiences of the operational management of the GPFG since the outbreak of the Covid-19 pandemic.

Under the Central Bank Act, the Executive Board shall appoint a general manager of NBIM. In March 2020, the Executive Board presented Nicolai Tangen as the new CEO of NBIM. Tangen took up the position of CEO on 1 September 2020.

Foreign exchange reserves

Norges Bank holds foreign exchange reserves for the purpose of crisis management. These reserves are to be available for use in foreign exchange market transactions, as part of the conduct of monetary policy, with a view to promoting financial stability and meeting

Norges Bank's international commitments. The importance of investing the reserves in liquid assets is given considerable weight. The aim of the management of the foreign exchange reserves is to attain the highest possible return within the management framework.

The foreign exchange reserves are divided between a fixed income portfolio and an equity portfolio. In addition, the foreign exchange reserves include a petroleum buffer portfolio, which is intended to receive 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 between foreign currency and NOK, and to conduct transfers to and from the GPFG. The petroleum buffer portfolio is invested in short-term fixed income instruments.

Principles for management of the foreign exchange reserves

Norges Bank's Executive Board lays down the principles for the management of the Bank's foreign exchange reserves. The principles determine the investment universe and the benchmark index for the equity and fixed income portfolios, as well as the strategic equity allocation and maximum expected relative volatility. The Executive Board annually assesses the strategy and framework for the management of the foreign exchange reserves.

In accordance with the Executive Board's principles, rebalancing is to take place 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, such a rebalancing was implemented in December by transferring NOK 27bn from the equity portfolio to the fixed income portfolio.

Management of the foreign exchange reserves in 2020

At year-end 2020, the market value of the foreign exchange reserves was NOK 598.4bn. The total for the equity portfolio was NOK 118.6bn, for the fixed income portfolio NOK 459.8bn and for the petroleum buffer portfolio NOK 20.0bn. The value of the foreign exchange reserves increased by NOK 51.3bn in the course of 2020. Return in international currency terms increased the value of the foreign exchange reserves by NOK 36.2bn, while an appreciation of the krone reduced the value of the reserves by NOK 5.1bn. Net inflows increased the value of the foreign exchange reserves by NOK 20.2bn. The net inflows were primarily a result of the transfers from the GPFG to the petroleum buffer portfolio. In 2020, Norges Bank conducted foreign exchange interventions by exchanging EUR for NOK, a measure which reduces the value of the foreign exchange reserves.

Movements in the krone exchange rate will primarily affect Norges Bank's equity and will not affect the Bank's ability to meet foreign currency commitments.

The return on the foreign exchange reserves, excluding the petroleum buffer portfolio, was 5.9% measured in foreign currency in 2020. The return on equity investments was 14.9%, while the return on fixed income investments was 3.1%. Equity investments amounted to 20.5% of the total equity and fixed income portfolio at year-end 2020.

The equity portfolio earned a negative excess return of 0.03 percentage point relative to the benchmark index. The excess return on fixed income investments was 0.01 percentage point. In the assessment of the Executive Board, reserve management performance in 2020 and over the past 10 years has been positive.

Payment system

Norges Bank facilitates a secure and efficient system for settling payments and issues banknotes and coins. Norges Bank is tasked with overseeing the payment system and other financial infrastructure and contributing to contingency arrangements. Under the Payment Systems Act, Norges Bank is the supervisory authority for interbank systems.

The operation of the financial infrastructure has been stable during the Covid-19 pandemic. The Executive Board considers the operation of the Norwegian financial infrastructure to be secure and efficient.

Norges Bank's settlement system

Settlement between banks and other institutions with an account at Norges Bank takes place in Norges Bank's settlement system (NBO). Most payments in NOK are ultimately settled in NBO. With the exception of two brief disruptions in external electronic communication, the operation of Norges Bank's settlement system was stable through 2020. The settlement system handled a daily average of approximately NOK 421bn in payment transactions. At year-end 2020, banks' sight deposits and reserves on deposit with Norges Bank totalled NOK 40.6bn.

The Executive Board is satisfied that NBO's operation was stable in 2020 and without severe disruptions in settlement or secured lending.

Better solutions for fast payments

A well-functioning solution for real-time payments is an important part of an efficient payment system. In 2017, Finance Norway and Norges Bank launched a project to introduce an improved infrastructure for payments between bank customers with manageable risk for banks. Banks adopted the new system in 2020.

The share of payments settled in real time will likely increase in the coming years. There is therefore a continuing need to further develop payment infrastructure. In 2020, Norges Bank explored whether the Bank should offer real-time gross interbank settlement of retail payments in central bank money or whether the current settlement solution should be enhanced based on the current division of responsibility between Norges Bank and the banking industry. This will be explored further in 2021.

Cash

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

Under the Central Bank Act, cash is legal tender. Over time, Norges Bank has observed a trend where many physical points of sale do not accept payment in cash. Norges Bank has previously stated in a letter of 31 January 2019 to the Ministry of Finance that the scope of the provision of the Financial Contracts Act regarding the right of consumers in all cases

to effect settlement with the payee in legal tender should be clarified.

On 2 September 2020, the Ministry of Finance tasked Finanstilsynet (Financial Supervisory Authority of Norway) with surveying and assessing banks' total provision of cash services and sharing data and assessments with Norges Bank. The work is to be completed by end-February 2021. The results of the assessments will provide a basis for determining whether new measures or regulatory changes are needed to ensure cash availability.

New payment solutions and a central bank digital currency

In recent years, new payment operators and new payment solutions have entered the payments market. Fintech giants may become more influential in the payment system at the expense of banks and other financial institutions. Payment infrastructure providers are also undergoing structural changes, as global operators are taking positions in Norway and the Nordic region.

The structural changes in the payment system raise questions around 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 precautionary approach. The Bank wants to be prepared to be able to introduce a central bank digital currency (CBDC) if it is necessary for an efficient and secure payment system. In the first half of 2021, Norges Bank will decide on how work on a CBDC will continue.

Cyber security

The payment system is increasingly digital. Increasing risk associated with cybercrime and potential attacks against key ICT systems are a challenge to payment system efficiency and security. In 2018, the European Central Bank (ECB) published TIBER-EU, a framework for testing financial sector cyber security. Several of Norway's neighbours, including Denmark, Sweden and Finland have implemented national TIBER frameworks. Norges Bank and Finanstilsynet (Financial Supervisory Authority of Norway) have invited the industry and relevant authorities to a dialogue in the work to draw up a national framework proposal (TIBER-NO) to also test the cyber resilience of financial sector undertakings in Norway.

On a number of occasions, Norges Bank has recommended further study of how key ICT providers and data centres can best be supervised. In 2020, the European Commission conducted a consultation on regulatory changes to enhance the cyber resilience of the financial sector. The Ministry of Finance asked for input on the Norwegian position. In a letter of 14 February 2020 to the Ministry, Norges Bank noted that the European Commission addresses many of the same issues raised by Norges Bank about ICT service providers.

Personnel

Norges Bank's employees

At year-end 2020, Norges Bank had 925 permanent employees, of which 518 were in Norges Bank Investment Management (NBIM), 257 in Norges Bank Central Banking Operations (NBCBO) and 143 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 35 countries and offices in Oslo, London, New York, Shanghai and Singapore.

The share of women on the permanent staff of Norges Bank at year-end 2020 was 33%. In the various areas of the Bank, the share of women was 25% in NBIM, 33% in NBCBO and 57% in NBA.

The Executive Board has set a minimum target of 40% female employees as an overall long-term goal. This objective is integrated into strategic work and action plans and is given emphasis in the planning and execution of recruitment processes.

Employees during the Covid-19 pandemic

2020 was a challenging year for all Norges Bank staff. The economic crisis required an extra effort by employees, far beyond what is typical for a normal year. At the same time, the health crisis complicated working conditions. Employees worked remotely during much of the year, and a number of the foreign offices were closed for long periods. Market operations and analyses were conducted remotely in collaboration with certain key persons who were at times physically present at the Bank. The Bank's employees nevertheless performed their tasks throughout the year with a high degree of professionalism.

Health and safety

Norges Bank's priority is protecting the health and safety of all those who work in the Bank. Once the Covid-19 pandemic was confirmed, many measures were immediately implemented to secure the health of the Bank's employees. For example, house rules on social distancing and hygiene were introduced, occupancy limits were designated for all meeting rooms, hand sanitiser was made

available throughout the Bank and the canteen was reorganised to ensure food safety and social distancing. When Norway locked down on 12 March, Norges Bank introduced mandatory remote working in periods of high infection rates and partial remote working in periods of low infection rates. To ensure a safe meeting place, a system for digital meetings with a high security level was quickly scaled up. The Governor and Deputy Governors' planned speeches during the most critical periods were cancelled or moved online, as were all of the Bank's in-house social activities.

Thirteen Norges Bank employees were infected with Covid-19, and there was no known spread of the virus within the Bank in 2020.

In 2020, seven incidents/injuries directly relating to work conducted at Norges Bank's premises were reported. None of the workplace accidents or injuries was serious, and no occupational injuries were reported to the Norwegian Labour Inspection Authority in 2020. Sickness absence remained stable in 2020 at a low level of 1.7%.

Collaboration with trade unions

Norges Bank's management has close and regular contact with the trade unions at the Bank. The Bank engages in negotiations and discussions to create the basis for a well-functioning workplace.

The collaboration with the trade unions was particularly important in 2020, as the Bank's employees were working under challenging conditions. As a result of close and constructive contact between the Bank's management and the trade unions, joint efforts have resulted in conditions that are as satisfactory as possible.



The Governor's annual address on 13 February 2020

Corporate governance, risk management and internal control

Corporate governance

The work to implement the new Central Bank Act and put in place a new governance model was given high priority. The Bank's governance model and organisational structure now conforms to the new Act. In early 2020, rules of procedure were adopted for both the Executive Board and the Monetary Policy and Financial Stability Committee, as well as the division of duties and responsibilities between the Committee and the Executive Board.

In 2019, the Executive Board approved the establishment of the new area Norges Bank

Administration (NBA). NBA was officially launched on 10 December 2019. The reorganisation entailed a merger of the NBCBO Corporate and Shared Services Department and some support functions in NBIM to form the new area. NBA performs Bank-wide tasks on behalf of the Governor, making the most of overall expertise, strengthening a shared culture, promoting cost-efficient solutions and underpinning the Bank as a single institution. The establishment of NBA has led to changes in the division of duties and responsibilities between the Governor, as general manager of Norges Bank, and the CEO of NBIM. The Executive Board has approved new job descriptions for the

Governor and the CEO of NBIM that reflect the new division of duties and responsibilities.

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

Norges Bank's use of resources is 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 2020, several cost comparisons were completed for expenses related to the management of the Government Pension Fund Global (GPFG). The Executive Board is satisfied with the Bank's favourable results in these comparisons. In 2020, the Executive Board focused in particular on cost-efficiency. The Executive Board followed up the budgeting process closely, and planning and the budget for 2021 were discussed at several Executive Board meetings in the second half of 2020. In September, the Executive Board also discussed a plan for realising efficiency gains from a new organisation of administrative functions in NBA.

Risk management and internal control

Norges Bank complies with the regulation on risk management and internal control at Norges Bank issued by the Ministry of Finance. In addition, the Ministry of Finance lays down a number of guidelines for the management of the GPFG, which include asset allocation and a 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 2020.

The reporting and follow-up of incidents constitute an important part of the measures to improve operations and internal control. Significant risks are followed up through regular reporting and the follow up of the Executive Board's measures. For NBIM, the Executive Board has decided that over a 12-month period, the probability that operational risk factors will result in a gross loss of NOK 750m or more must not exceed 20%. This limit is referred to as the Board's risk tolerance. In 2020, operational risk exposure was within the Board's risk tolerance.

Information security and stable IT systems

Norges Bank's operations are IT- and information-intensive. The transaction processes on which financial reporting is based are highly automated. The Bank's IT systems are largely standard systems adapted to the Bank's needs and are supplied and operated by third parties.

Stable IT systems are essential if Norges Bank is to perform its social mission. Norges Bank works systematically to ensure a high level of operational stability and has robust processes in place for handling deviations and changes. Operational stability is critical for managing the GPFG, which performs close to 1 300 transactions daily. Norges Bank's settlement system (NBO) is the Bank's most critical system, whose purpose is to settle payments securely and efficiently between banks with an account in Norges Bank. An objective is for the settlement function in NBO to be stable and without material deviations.

In NBCBO, a project is under way to modernise the IT platform and replace the operating services provider. In addition, the internal IT organisation has added staff to further enhance control of onsite and security-related functions. All project contracts have now been signed, and the project is in its implementation phase. This is in line with the project timetable, with scheduled completion in 2022.

Norges Bank works continuously to ensure satisfactory processes and adequate staffing in the Bank's ICT function. The Bank faces a complex threat landscape, and as a provider of critical infrastructure, Norges Bank will be a target of sophisticated threat actors. Risk reduction measures are continuously identified and implemented. A number of training activities are organised, such as phishing drills and e-learning modules, to boost employee awareness. 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 managing information and IT security risk.

To deal with critical and serious operational and security incidents, round-the-clock surveillance has been established. There were no security incidents with serious consequences in 2020.

The Covid-19 pandemic has led to extensive use of remote work and video conferencing. There has been a particular focus on the security of remote work arrangements. During the pandemic there has been a rise in the number of cyber attacks. However, owing to robust controls, none of these attacks had serious consequences.

Norges Bank processes personal data for various purposes, including statistics compilation and analyses, sending out e-mail news alerts, processing queries and receiving visits by the public, for administrative procedures and to safeguard the Bank's security. Personal data are processed in accordance with the Personal Data Act and other relevant rules. Pursuant to the new Central Bank Act, the Bank may obtain data from even more sources. These also include personal data. Specific security controls and procedures have been established for storing and processing sensitive personal data.

The Executive Board maintains a high level of IT and information security awareness, including monitoring outsourced IT functions. 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. Based on reporting by the administration and Internal Audit, the Executive Board submits an annual assessment of the risk situation to the Supervisory Council. No material deficiencies in the risk management and control regime were identified in 2020, and the Executive Board assesses the control environment and control systems at Norges Bank as satisfactory.

Verification

The calculation of the GPF's performance results is verified by an independent third party in compliance with the Global Investment Performance Standards (GIPS). The GIPS verification report is in compliance with GIPS.

Balance sheet composition and financial outlook

Norges Bank's balance sheet

Norges Bank's balance sheet comprises a number of items directly related to the Bank's tasks. The balance sheet total at year-end 2020 was NOK 11 679bn. The balance sheet is dominated by the GPFG and the foreign exchange reserves, while deposits from the government and banks, cash in circulation and claims on and liabilities to the IMF are other large items.

The Ministry of Finance has placed a portion of the government's assets in a separate account in Norges Bank (the GPFG's krone account). The Bank reinvests these funds, in its own name, in accordance with a management mandate from the Ministry of Finance. The net value of the investment portfolio is presented on a separate line as an asset in Norges Bank's balance sheet. The value of the krone account will always equal the value of the investment portfolio less accrued management fee.

At year-end 2020, the market value of the GPFG's investments was NOK 10 914bn. Accrued management costs were NOK 5.3bn.

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, which includes the financial statements of 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 Bank's foreign exchange reserves are the 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 595.9bn at year-end 2020 compared with NOK 546.3bn at year-end 2019.

See the relevant sections of the *Report* for more details on the management of the GPFG on page 3 and the foreign exchange reserves on page 5.

Through the government's consolidated account system, all government liquidity is collected in government accounts at Norges Bank. At year-end 2020, deposits amounted to NOK 313bn. This is thus the largest liability item in the balance sheet, except for the GPFG krone account. This item fluctuates considerably through the year owing to substantial incoming and outgoing payments over the government's accounts. The average amount on deposit was around NOK 260bn in 2020, compared with NOK 190bn in 2019. The primary reason for the increase is the larger amounts transferred from the GPFG to the government's accounts in 2020, but the government's deposits are affected by many factors, and the change cannot entirely be attributed to the extraordinary transfers from the GPFG.

Banknotes and coins in circulation are a liability item for Norges Bank. This amount is driven by the public's demand for cash. Over the past few years, the lower demand for cash has reduced this liability item. At year-end 2020, banknotes and coins in circulation amounted to NOK 41bn, compared with NOK 41.6bn at year-end 2019.

Deposits from banks, which comprise sight deposits, reserve deposits and F-deposits, are



The Executive Board in a new meeting arena

managed by Norges Bank through its liquidity management policy. At 31 December 2020, these deposits amounted to NOK 52.8bn, compared with NOK 58.9bn at year-end 2019.

Norges Bank also administers Norway's financial obligations and rights ensuing from participation in the International Monetary Fund (IMF). Norges Bank therefore has both claims on and liabilities to the IMF. See Note 17 in the notes to the financial statements for more details. At year-end 2020, net positions with the IMF amounted to a claim of NOK 17.2bn, compared with NOK 11.8bn at year-end 2019.

The Covid-19 pandemic has affected the balance sheet

The Covid-19 pandemic had a considerable impact on Norges Bank's balance sheet through 2020.

Norges Bank has provided extraordinary liquidity to the banking system in the form of extraordinary F-loans. These loans are extended to ensure that the policy rate passes through the money market rates. At 31 December 2020, F-loans to banks amounted to NOK 80.2bn, compared with NOK 6.6bn at year-end 2019. F-loans increase the balance sheet item *Lending to banks*. Surplus liquidity was withdrawn using daily F-deposits and amounted to NOK 12bn at year-end 2020, compared with NOK 18bn at year-end 2019.

F-deposits affect the balance sheet line *Deposits from banks*.

Owing to considerable market demand for US dollars, temporary swap lines were established with the US Federal Reserve. The arrangement ensures that Norwegian banks can be provided with USD F-loans. Norges Bank borrows the equivalent amount from the Federal Reserve, that the banks are allotted in the F-loan auctions. At year-end 2020, there are no outstanding USD F-loans, nor does Norges Bank hold any loans from the Fed.

Financial outlook

This balance sheet composition will normally generate an expected 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.

However, market interest rates are currently very low, even long rates. The low market rates imply a lower current return and contribute to reducing return expectations for fixed income securities in the period ahead. The potential for further price gains on fixed income investments is limited, while the potential for price losses from rising market interest rates is considerable. Since a large portion of the foreign exchange reserves and some of the GPFG are invested in bonds, it must be expected that movements in market interest rates ahead may reduce the overall return for a period.

The Covid-19 pandemic plunged the world economy into a deep crisis in 2020. Financial markets saw considerable volatility through the year, marked variation across industries and countries and extraordinary government support measures. Equity markets in a number of countries have posted positive returns, and several ended the year at historic highs. However, the outlook for the global economy remains shrouded in uncertainty, owing in part to further uncertainty regarding Covid-19. Developments in 2020 are a reminder that market values may vary substantially ahead, also to the downside.

As a long-term investor, the Bank seeks to understand how climate change affects the pricing of assets, and how it best can manage appurtenant risks. Climate risks affect companies' capacity to generate shareholder value in both the short and long term, and may arise in different ways. Understanding risks of this kind may contribute to risk management and investment decisions.

Future increases in the value of the GPFG will be affected by, among other things, transfers to/from the fund. The level of the transfers ahead is uncertain, partly owing to oil price volatility.

Movements in the krone exchange rate can also have a substantial impact on the value of the foreign exchange reserves and of the GPFG in NOK terms. The Bank must be prepared for considerable volatility from year to year in the return on the foreign exchange reserves and on the GPFG.

Managing financial risk

Norges Bank attaches considerable weight to managing and controlling financial risk. The Executive Board has issued principles for risk management, which are further defined in rules and guidelines for the operational areas.

Investment risk includes market risk, credit risk and counterparty risk. The Bank employs several measurement techniques, processes and systems to control investment risk. Robust and widely accepted risk management systems and processes are complemented by internally developed measurement techniques and processes.

Valuations, performance measurement, management and control of risk in investment management are required to comply with internationally recognised standards and techniques. See the notes to the financial statements for more details.

Income statement

Total comprehensive income

Norges Bank's total comprehensive income for 2020 shows a profit of NOK 28.8bn, compared with a profit of NOK 43.8bn in 2019. Net income from financial instruments was NOK 29.9bn in 2020, compared with NOK 44.6bn in 2019. Equity investments posted a gain of NOK 18.1bn, while fixed income investments posted a gain of NOK 12.6bn. Net income from financial instruments also includes a loss of NOK 0.5bn as a result of foreign currency effects owing to a weaker krone. Foreign currency effects in 2019 resulted in a gain of NOK 7bn.

The GPFG's total comprehensive income amounted to NOK 1 122.4bn, comprising a gain on the portfolio of NOK 1 127.7bn net of

management costs of NOK 5.3bn. Total comprehensive income was recognised against the GPFG's krone account at 31 December 2020. The return on the portfolio, after management costs reimbursed to Norges Bank have been deducted, is transferred in its entirety 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 within an upper limit. The Bank was reimbursed in the amount of NOK 5.3bn in 2020, compared with NOK 4.3bn in 2019. 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 121m in 2020, compared with NOK 139m in 2019.

Operating expenses

Operating expenses amounted to NOK 6.5bn in 2020, compared with NOK 5.4bn in 2019. The increase in expenses is primarily the result of a NOK 1.1bn increase in fees for external asset managers owing to a higher excess return on the GPFG, a higher share of capital allocated to external asset managers and currency effects. Personnel expenses rose by NOK 82m, primarily owing to higher performance-based pay, higher pension costs, ordinary wage growth and currency effects. This was partly offset by lower travel expenses and somewhat fewer employees. In addition, expenses were reduced in connection with the procurement of banknotes and the use of consultant services and owing to lower depreciation. Costs for custody services rose.

NOK 5.3bn of the expenses in 2020 is related to management of the GPFG, including personnel costs, custody and settlement services, IT expenses, analytical research services and fees for external asset managers. The internal operating expenses (excluding fees for external asset managers) for the management of the GPFG are in accordance with Norges Bank's maximum target for internal operating expenses of five basis points.

Equity

Norges Bank's equity at 31 December 2020 was NOK 276.8bn, compared with NOK 263.2bn at 31 December 2019. The Adjustment Fund and the Transfer Fund comprise the Bank's equity. At year-end 2020, the Adjustment Fund stood at NOK 246.5bn and the Transfer Fund at NOK 30.3bn. Norges Bank's equity was 35.9% of the balance sheet total, excluding the GPFG, compared with 40.9% in 2019. The Executive Board deems that equity is sufficient to fulfil the Bank's purpose (cf Section 3-11, Sub-section 1, of the Central Bank Act).

Distribution of total comprehensive income

The distribution of Norges Bank's total comprehensive income follows guidelines laid down by Royal Decree of 13 December 2019, pursuant to Section 3-11, Sub-section 2, of the Central Bank Act.

The guidelines state that total comprehensive income must 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 28.8bn is to be transferred as follows: NOK 22.7bn to the Adjustment Fund and NOK 6.1bn to the Transfer Fund. NOK 15.2bn will be transferred from the Transfer Fund to the Treasury.

Oslo, 4 February 2021

Øystein Olsen
(Governor/Chair of the Executive Board)
Ida Wolden Bache
(Deputy Chair)
Karen Helene UlltveitMoe
Kristine Ryssdal
Arne Hyttnes
Hans Aasnæs
Nina Udnes Tronstad
Egil Herman Sjursen
Mona Helen Sørensen
(Employee representative)
Truls Oppedal
(Employee representative)

Norges Bank's Monetary Policy and Financial Stability

In 2020, a committee with specific responsibility for monetary policy and financial stability was established. 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 for terms of four years. The governor chairs the Committee and the two deputy governors are first and second deputy chairs.

There was only one deputy governor at the end of 2020 after the resignation of Jon Nicolaisen from the position of deputy governor on 4 December 2020.

The Committee had 26 meetings and considered 104 matters within its area of responsibility in 2020.

Table 3 Work of the Committee in 2020

	2020
Total effective meeting and seminar time	100 hours
Of which (% of total time spent):	
- Monetary policy stance, incl. work on monetary policy reports	57%
- Work on promoting financial stability, incl. advice on the countercyclical capital buffer	27%
- Other topics within the Committee's remit	10%
- Other topics (governance documents, minutes of meetings, the Committee's own operations etc.)	6%

Governor Øystein Olsen
Deputy Governor Egil Matsen (until 31 March)
Deputy Governor Ida Wolden Bach (from 1 April)
Deputy Governor Jon Nicolaisen (until 4 December)

Ingvild Almås

Appointed committee member for the period 1 January 2020 – 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.

Jeanette Fjære-Lindkjenn

Appointed Committee member for the period 1 January 2020 – 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.





From left: Ingvild Almås, Jeanette Fjære-Lindkjenn, Øystein Olsen, Jon Nicolaisen and Ida Wolden Bache

Annual Report of the Monetary Policy and Financial Stability Committee for 2020

The Storting (Norwegian parliament) passed a new Central Bank Act on 28 May 2019. The new act established a committee for monetary policy and financial stability. The Monetary Policy and Financial Stability Committee became operative on 1 January 2020.

The Committee is Norges Bank's executive and advisory authority in monetary policy, including the use of instruments to reach monetary policy objectives. Its aim is to contribute to promoting financial stability by providing advice and using the instruments at its disposal.

Policy rate decisions are usually made at scheduled monetary policy meetings. In 2020, eight such meetings were scheduled, but the Covid-19 pandemic led to the replacement of the regular meeting in March with two extraordinary meetings.

2020 – a dramatic year

The Norwegian economy was assessed to be near a cyclical peak in December 2019. The outlook changed dramatically in a short period of time. The Covid-19 pandemic led to a deep downturn in the Norwegian economy in 2020. Economic activity fell abruptly in March and April, and unemployment rose to historically high levels. There was also considerable turbulence in financial markets.

The Monetary Policy and Financial Stability Committee reduced the policy rate from 1.5% to 0% in the course of spring. A number of measures were also implemented to improve the functioning of financial markets. After the krone had reached record-weak levels against a number of currencies, Norges Bank undertook NOK purchases to support a well-functioning NOK market. The Committee advised the Ministry of Finance to reduce the level of the countercyclical capital buffer for banks from 2.5% to 1%. The Ministry followed the Committee's advice.

The market volatility subsided in the course of spring, and the krone appreciated. The appreciation coincided with a rise in oil prices. Through the year, economic activity increased and unemployment declined. After strict containment measures had led to a pronounced decline in private consumption, household consumption of goods picked up markedly. Through autumn, infection rates increased in Norway, and new containment measures led to a drop in household demand. The pandemic and the measures to contain it also dampened the willingness and ability of mainland firms to invest. The drop in foreign tourists caused a decline in exports, and low travel activity caused a decline in imports.

Housing market activity fell in March and April, and house prices edged down. Through spring and summer, housing market activity and house price inflation picked up. Developments likely reflect lower lending rates and a temporary expansion of the flexibility quota in the regulation on requirements for new residential mortgage loans. House prices continued to rise markedly through autumn.

In the first months of 2020, consumer price inflation (CPI) slowed markedly, reflecting a fall in electricity prices. The CPI adjusted for tax changes and excluding energy products (CPI-ATE) picked up through spring and summer and remained above the inflation target of 2%, primarily owing to higher imported goods inflation.

In its monetary policy assessments through 2020, the Committee gave weight to the fact that the Norwegian economy was in the midst of a deep downturn. In the Committee's assessment, a lower policy rate would dampen the downturn in the Norwegian economy, which would in turn reduce the risk of unemployment becoming entrenched at a high level. In its assessment of the inflation outlook, the Committee gave weight to the likelihood that the pick-up in underlying inflation was temporary. In its discussion of the balance of risks, the Committee was concerned that a long period of low interest rates increases the risk of a build-up of financial imbalances.

Prior to the reduction in March, the countercyclical buffer requirement was set at 2.5%, against the background of a build-up of financial imbalances over a long period. In December, the Committee signalled that the buffer would return to 2.5% in the period

ahead and that it would advise increasing the buffer in the course of 2021. The Committee assessed the Norwegian financial system as having weathered the Covid-19 pandemic well, supported by government measures, but that the outlook for financial stability was somewhat weakened owing to considerable uncertainty regarding the future path of the pandemic and the impact on the economy and financial markets.

Monetary policy

International economy

The outbreak of Covid-19 and the measures to contain it led to a severe downturn in the global economy in 2020. In many countries, the decline in GDP in 2020 Q2 was the largest ever recorded. The activity level picked up during summer, but higher infection rates and stricter containment measures held back the recovery through autumn. The rollout of vaccines increases the likelihood of a substantial upswing in global economic activity in 2021.

Global consumer price inflation fell markedly when the Covid-19 pandemic broke out and strict containment measures were introduced. Inflation picked up somewhat through summer. For 2020 as a whole, underlying inflation among trading partners was lower than in 2019 and below the inflation targets.

The sharp global downturn led to a marked contraction in global oil consumption and low oil prices. Total oil production was substantially higher than consumption, with little spare storage capacity. Oil spot prices fell from over USD 65 per barrel in December 2019 to below USD 10 in the second half of April. Prices rose markedly thereafter. This upswing reflects the pickup in oil consumption as

economic activity rebounded. At the same time, a number of OPEC and non-OPEC countries set oil production limits. Oil prices rose further through autumn, owing in part to positive news about vaccines. At the end of 2020, oil prices were just above USD 50 per barrel. Futures prices indicate approximately unchanged oil prices in the coming years.

The Covid-19 outbreak led to substantial volatility in financial markets. Equity indexes fell, and bond and money market risk premiums rose.

The authorities in many countries implemented powerful fiscal policy measures to limit the economic impact of the outbreak. Central banks reduced policy rates and took extensive measures to stabilise financial markets. The measures included the provision of liquidity in the form of loans to the banking system and programmes involving purchases of government bonds and corporate bonds. In many countries, the measures deployed were more extensive than during the financial crisis. Expected money market rates among Norway's trading partners fell markedly. At the same time, long-term rates also fell considerably. Market-implied rates at year-end indicated expectations of very low interest rates among Norway's main trading partners for a long time ahead.

Financial conditions

When the pandemic hit the Norwegian economy at the beginning of March, the policy rate was 1.5%. It quickly became clear that the Committee had to act. Prior to the decisions made in March and in the weeks that followed, the Monetary Policy and Financial Stability Committee met frequently, often at short notice. The policy rate in Norway was lowered

by 0.50 percentage point to 1.0% at an extraordinary meeting on 12 March, and further to 0.25% shortly thereafter at a second extraordinary meeting on 19 March. At the monetary policy meeting on 6 May, the Committee decided to reduce the policy rate to zero percent. At the same time, the Committee stated that in its current assessment of the outlook and balance of risks, the policy rate would most likely remain at that level for some time ahead.

In Norway, too, there was substantial volatility in financial markets in spring 2020. Risk premiums in the Norwegian money market rose sharply in the period to mid-March. Partly reflecting higher money market premiums, the policy rate cut in March did not result in a corresponding reduction in interest rates facing businesses and households. Like other central banks, Norges Bank implemented a number of measures to ensure the pass-through of the lower policy rate to money market rates and the improvement of funding market liquidity. Among other things, Norges Bank offered banks extraordinary liquidity in both NOK and USD. At their highest, extraordinary loans outstanding amounted to just under NOK 250bn. In advance of the monetary policy meeting in May, financial market volatility diminished and money market and bond premiums fell. Banks reduced mortgage lending rates, which reached historically low levels. However, banks reduced mortgage lending rates by less than the reduction in the policy rate. This may reflect banks' reluctance to charge negative deposit rates and their simultaneous desire to maintain margins between lending and deposit rates.



Press conference of 13 March

The krone depreciated at the beginning of 2020. A marked fall in oil prices and heightened uncertainty surrounding the Covid-19 outbreak caused the depreciation to accelerate in March. Between 18 and 19 March, the krone depreciated by approximately 14%, as measured by the import-weighted exchange rate (I-44), and reached record-weak levels against a number of currencies. The NOK market functioned very poorly. On 19 March, Norges Bank announced that, given the extraordinary conditions in the foreign exchange market, there might be a need to

intervene in the market by purchasing NOK. In order to support a well-functioning NOK market, Norges Bank made extraordinary NOK purchases totalling NOK 3.5bn in the foreign exchange market in March. The krone then strengthened. The appreciation coincided with a rise in oil prices and reduced uncertainty in global financial markets. At the end of 2020, the krone exchange rate was approximately 3% weaker than at the beginning of the year, measured by the I-44.

Even though Norwegian banks at the beginning of 2020 were solid and had sufficient capital to weather a severe downturn, there were fears that tighter bank lending could amplify the downturn. On 13 March, Norges Bank therefore advised the Ministry of Finance to reduce the countercyclical capital buffer requirement from 2.5% to 1% with immediate effect. At the same time, banks were encouraged to take account of the extraordinary situation in decisions on dividend payouts for 2019. The Ministry of Finance reduced the buffer the same day. Extensive government measures, solid profitability and ample access to wholesale funding enabled banks to continue to maintain credit supply to both households and businesses through 2020.

Norwegian economy

After some years of solid growth, mainland economic growth declined through autumn 2019, and in December 2019, the Norwegian economy was assessed to be near a cyclical peak. There were prospects that unemployment would remain low and that inflation would remain close to target, while the assessment of the outlook and the balance of risks indicated that the policy rate would remain close to 1.5%. Economic growth was expected to slow in the years ahead, partly as a result of weaker prospects for petroleum investment.

The economic outlook changed dramatically in a short period of time. Norwegian economic activity fell abruptly in 2020 Q2 as a result of the Covid-19 pandemic. The virus outbreak and extensive containment measures led to production halts and lower activity across a range of businesses. Norwegian mainland GDP was around 11% lower in April than in

February. The economic downturn was also amplified by the sharp contraction among Norway's trading partners in the wake of the Covid-19 outbreak and the pronounced fall in oil prices.

Many workers were furloughed or made redundant. Unemployment rose to very high levels. The stringent containment measures led to a sharp decline in private consumption. There was also a shift away from services and towards goods. Travel plans had to be put on hold and much of the cultural sector was shut down.

Following a marked decline in the Norwegian economy in March and April, economic activity picked up towards summer, and the recovery continued through Q3. Unemployment declined.

Higher household demand gave a boost to mainland economic activity. Household consumption of goods picked up markedly, but overall consumption remained low, which is mirrored by a marked rise in household saving. Higher saving was partly due to limitations on households' spending options. However, higher saving also reflects considerable uncertainty about the economic outlook. High household saving through 2020 provides room for strong consumption growth ahead.

The fall in oil prices, heightened uncertainty and containment measures led to a decline in petroleum investment in 2020 after strong growth in 2019. The pandemic and the containment measures also dampened the willingness and ability of mainland firms to invest.

Exports fell in 2020. Much of the decline reflected the drop in the number of foreign tourists in Norway. Oil service exports fell sharply owing to substantial cuts in investment plans in the global oil industry. In the same way as exports, imports were impacted by closed borders and the low number of Norwegian households travelling abroad, resulting in a fall in imports.

Through autumn, infection rates in Norway rose, and a new round of far-reaching containment measures were introduced in November. Household demand fell, and the economic recovery was put on hold. In November, the enterprises in Norges Bank's Regional Network reported that they expected weak growth in activity ahead.

The number of furloughed workers increased again owing to higher infection rates and stricter containment measures. Towards the end of 2020, there was a marked increase in the number of long-term unemployed, particularly among youth.

Housing market activity fell in March and April, and house prices edged down. Through spring and summer, housing market activity and house price inflations picked up, likely reflecting lower lending rates and a temporary expansion of the flexibility quota in the regulation on requirements for new residential mortgage loans. House prices continued to rise markedly through autumn. In December, the 12-month rise in house prices was 8.7%. House price inflation increased in all parts of the country but was highest in Oslo.

Following a rise over the past three years, wage growth slowed again slightly in 2020. The decline in wage growth must be viewed in

the light of a sharp rise in unemployment caused by the Covid-19 outbreak, as well as markedly weaker business sector profitability.

In the first months of 2020, CPI inflation slowed markedly, reflecting a fall in electricity prices. The rise in the CPI adjusted for tax changes and excluding energy products (CPI-ATE) picked up through spring and summer and remained above the inflation target of 2%, primarily owing to higher imported goods inflation. Higher imported inflation reflects the krone depreciation early in the year. Annual consumer price inflation was 1.3% in 2020. Adjusted for tax changes and excluding energy products, inflation was 3.0%. Norges Bank's Expectations Survey in 2020 Q4 indicated that inflation expectations in the somewhat longer term are well anchored around the inflation target.

Trade-offs facing monetary policy

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.

In its discussions of the trade-offs facing monetary policy through 2020, the Committee gave weight to the fact that the Norwegian economy was in the midst of a deep downturn. The Committee's assessment was that a lower policy rate could contribute to dampening the Norwegian economic downturn. In the discussions, substantial weight was given to developments in the real economy and the labour market. In its assessment, the Committee placed weight on the contribution of low interest rates to



Online Committee meeting

speeding up the return to more normal output and employment levels, which in turn reduces the risk of unemployment becoming entrenched at a high level. In its assessment of the inflation outlook, the Committee gave weight to the likelihood that the pick-up in underlying inflation was temporary. The appreciation of the krone through 2020 and prospects for low wage growth suggested that inflation would moderate. In its discussion of the balance of risks, the Committee was concerned that a long period of low interest rates increases the risk of a build-up of financial imbalances.

After the pandemic hit Norway, the Committee's assessment was that the overall outlook and balance of risks implied a very expansionary monetary policy stance. In the Committee's assessment, the sharp economic downturn and considerable uncertainty surrounding the outlook suggested keeping the policy rate on hold until there are clear signs that economic conditions are normalising. The Committee did not envisage making further policy rate cuts.

In the first half of 2020, the policy rate path was revised down considerably. In the light of Covid-19 and the extraordinary situation in the

Norwegian economy, a monetary policy update was prepared with updated projections for the monetary policy meeting in May.

The forecast in the December 2020 *Monetary Policy Report* implied a policy rate of zero percent for over a year ahead, followed by a gradual rise from the first half of 2022 as activity approaches a more normal level. With such a policy rate path, there were prospects that capacity utilisation would gradually increase and that the output gap would close during 2022. Following a fall in GDP in 2020, solid growth in the Norwegian economy was expected in the coming years. According to the projections, an upturn in household consumption in particular will contribute to the economic recovery. With increasing economic activity, labour demand was also expected to rise so that employment rises and unemployment declines. However, the long-term consequences of the downturn were expected to result in somewhat higher unemployment at the end of 2023 than prior to the pandemic.

Ample spare capacity in the economy, prospects for low wage growth and the appreciation of the krone since March were expected to lead to a fall in inflation ahead. Nevertheless, in the Committee's assessment, there was limited risk that inflation would become too low as long as capacity utilisation was rising. Inflation was projected at somewhat above 1.5% at the end of 2023.

Financial stability and the decision basis for the countercyclical capital buffer

On the advice of the Committee, the Ministry of Finance decided to reduce the countercyclical capital buffer to 1% in March. The buffer was kept unchanged thereafter, in

line with Norges Bank's advice. The lower buffer requirement reduced the risk of tighter bank lending standards, which could amplify the downturn.

In December, the Committee announced that on the basis of its current assessment of economic developments and prospects for bank losses and lending capacity, it would advise increasing the buffer in the course of 2021. Economic activity has picked up since March, and bank losses have declined. Banks are well equipped to absorb higher losses while maintaining credit supply. The Committee underscored that the outlook for losses was shrouded in considerable uncertainty.

Credit losses will probably be lower in 2021 than in 2020, but will remain markedly above the average for the past 20 years. It will probably take time for economic activity to return to pre-pandemic levels. Prior to the reduction in March, the countercyclical capital buffer requirement was set at 2.5 percent against the background of a build-up of financial imbalances over a long period. In December, the Committee stated that the buffer would return to 2.5% in the period ahead.

The Committee's assessment in *Financial Stability Report 2020* was that the Norwegian financial system had weathered the Covid-19 pandemic well with the support of government measures, but that the outlook for financial stability is nevertheless somewhat weakened owing to considerable uncertainty regarding the future path of the pandemic and its impact on the economy and financial markets. High household debt and high property prices are still assessed as the

key vulnerabilities in the Norwegian financial system, and the Committee placed weight on the fact that vulnerabilities could increase with persistently high house price inflation. The Committee supported a continuation of the requirements for prudent lending standards and recommended that the temporarily expanded flexibility quotas should not be extended beyond 2020 Q3.

The Committee further emphasised banks' capacity to absorb losses in an economic downturn is important for the stability of the financial system. Norwegian banks satisfy the capital requirements by an ample margin and have been capable of lending to households and businesses during the Covid-19 pandemic. Losses increased in 2020, but much of the losses were related to loans to oil service companies, which continue to face a difficult situation following the oil price fall in 2014. The baseline scenario in the stress test in *Financial Stability Report 2020* showed that banks had enough capital to absorb higher losses than they had in 2020. This means that banks are able to draw on buffer capital to avoid tightening lending, even in a situation of weakening economic developments and losses that are higher than assumed by Norges Bank. In such a situation, the authorities could also reduce the countercyclical capital buffer to enable banks to maintain credit supply.

The Committee also pointed out that considerably stricter capital and liquidity requirements since the financial crisis in 2008/2009 had strengthened the financial system, but that the market turbulence in March uncovered some new challenges. Margin requirements in derivatives trades have helped reduce the risk that insolvency spreads through the network of derivatives

contracts. At the same time, requirements for daily margin payments to counterparties entail a liquidity risk, and the Committee emphasised the importance that parties to derivatives contracts take account of this risk. The substantial movements in financial markets in March led to a high volume of margin calls, both in Norway and globally. In Norway, the sharp krone depreciation presented challenges to Norwegian asset managers. Liquidity challenges also affected other participants negatively, since they contributed to higher risk premiums in the bond market. Norges Bank will continue to assess the systemic risk associated with derivatives and, if necessary, propose changes to the rules for asset managers' risk management.

The Committee also focused on the effects that climate change and the transition to a low-carbon economy have on the financial system and specified the importance of banks taking account of climate risks in their risk assessments of both new and existing loans. The Committee regarded developments in the value of the oil and gas industry as the biggest risk facing Norway, but also pointed out that Norwegian banks hold loans to international shipping, which may face stricter climate regulations in the coming years.

Oslo, 4 February 2021

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7 | Corporate social responsibility and sustainability

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Corporate social responsibility and sustainability

Norges Bank performs its mission by promoting economic stability in Norway and managing substantial assets on behalf of the Norwegian people.

In its activities, Norges Bank is committed to maintaining high ethical standards, respecting human rights, acting in a socially responsible manner and complying with current legislation and rules. The Bank takes climate challenges seriously. Norges Bank does not accept any form of discrimination or corruption.

Norges Bank's corporate social responsibility includes responsible investment activities, transparent and clear communication, research and knowledge-sharing, ethical business conduct and the promotion of gender equality, diversity and a sound working environment.

CORPORATE SOCIAL RESPONSIBILITY REPORTING REQUIREMENTS IN ACCOUNTING ACT (SECTION §3-3C)

Large companies are required to "submit reports on the company's actions to take account of human rights, labour rights and social conditions, the external environment and anti-corruption as an integral part of their business strategies and day-to-day operations and vis-à-vis stakeholders".

This report gives an account of Norges Bank's approach to its mission in the context of corporate social responsibility (CSR):

- The most important element of Norges Bank's CSR strategy is its mission to promote economic stability in Norway and ensure efficiency and reliability in investment management.
- In addition, the Bank's influence on human rights, labour rights and social conditions, the external environment and anti-corruption is mainly exerted through its responsible investment activities.
- Norges Bank's CSR strategy also includes transparent and clear communication, research and knowledge-sharing, ethical business conduct and the promotion of gender equality and a sound working environment.

Climate change and the performance of Norges Bank's mission

Climate change and measures to mitigate its effects affect the Norwegian and global economy and hence Norges Bank's core tasks.

The earth is gradually becoming warmer. Global warming leads to more extreme weather events and gradually rising sea levels. The goal of the Paris Agreement is to limit global warming to 2°C and preferably not more than 1.5 °C. To achieve this, greenhouse gas emissions must be cut sharply. Norway has committed to reducing emissions by at least 50% of 1990 levels by 2030 and aims to be a low-carbon economy in 2050. Meeting this objective requires an economic transition – through policy measures, changes in preferences and technology.

Climate risk, ie uncertainty associated with future, unexpected climate-related events, has long been on the agenda in the management of the Government Pension Fund Global (GPF). Work on climate-related topics is a more recent initiative for the rest of the Bank and there is still a great deal we do not know about the economic and financial consequences of climate change. Increasing Norges Bank's expertise on climate-related issues will be in focus across all the Bank's tasks and mandates in the period ahead.

Climate change and monetary policy

Climate change and adjusting to a low-carbon economy affect large parts of the Norwegian economy and thereby monetary policy. Climate change may lead to more extreme weather events, such as periods of drought

and flooding, which can destroy crops, buildings and infrastructure. Measures to slow global warming may also affect the structure of the economy. Policy measures, such as higher carbon prices, may for example influence both overall inflation and activity in a number of sectors. Flexible inflation targeting is a good starting point for managing new developments and shocks generated by climate change.

Norges Bank is working on advancing the level of expertise and understanding of how climate-related changes influence the macroeconomy and monetary policy, both internally and through international cooperation. In 2020, Norges Bank contributed to the Network for Greening the Financial System's (NGFS) report [Climate change and monetary policy: initial takeaways](#). Norges Bank's Regional Network also had a special feature entitled, Climate-related adjustments in the business sector. There were blog posts on [Bankplassen.no](#) and a research project with the title, [Climate risk and commodity currencies](#).¹

Climate risk and financial stability

Climate change and the transition to a low-carbon economy will be one of the greatest challenges facing Norwegian firms in the years ahead. Borrowers who are unable to tackle

¹ For more information, see: Brekke, H. and S. K. Erlandsen (2020) "Klimatilpasninger i næringslivet" [Climate-related adjustments in the business sector]. Blog post on the Bankplassen blog, 19 May (Norwegian only).

NORGES BANK'S MEMBERSHIP OF THE NETWORK FOR GREENING THE FINANCIAL SYSTEM (NGFS)

Norges Bank has been a member of the Network for Greening the Financial System (NGFS) since 2018. NGFS is a network of central banks and supervisory authorities that build knowledge by exchanging experiences and best practices and conducting analyses and applying methods for managing environmental and climate risks relevant to financial authorities and the financial sector. In 2020, Norges Bank was involved in work on NGFS reports on climate risk and scenario analysis, climate change and its relevance for monetary policy and on responsible investment. At the end of 2020, NGFS had 83 members (central banks and supervisory authorities) and 13 observers (international organisations).

For more information on NGFS and its work, see ngfs.net.

these changes adequately will pose risks to the banking sector.

Norwegian banks are primarily exposed to transition risks through lending to firms with high emissions that thus risk being subject to higher taxes or having to depreciate assets. Four sectors stand out as sources of high emissions: transport, manufacturing, international shipping and oil-related

industries. These sectors account for a moderate share of Norwegian banks' lending.

Physical risks are also relevant for Norwegian banks. In climate models focusing on a higher average global temperature, Norway is one of very few countries that might experience a productivity increase if the temperature rises. This does not mean that Norway is insulated against the negative effects of physical climate change. First, Norway is also affected by the increase in extreme weather events caused by a higher temperature. Second, climate change could entail changes in local climate and biological systems that could have unforeseen consequences. Furthermore, Norway will be affected via the impact of climate change on more vulnerable countries. Norwegian banks must also be prepared for the possibility that their exposures may also be affected indirectly.

Climate change is a global challenge that must primarily be addressed by the political authorities, using instruments other than those available to central banks. Central banks and supervisory authorities can, within their mandates, promote financial stability by ensuring that the financial sector includes climate risks in risk assessments and communicates relevant information and ensuring that all risks are backed by sufficient capital.

Furthermore, Norges Bank is planning to conduct a more quantitative assessment of climate risk for Norwegian banks. The Bank is also closely following international work on new reporting requirements and continues to participate in the NGFS workstream on financial stability.

See further discussion in *Financial Stability Report 2020*.

Responsible investment, Government Pension Fund Global (GPFG)

The GPFG is required to be a responsible investor. The Executive Board has laid down principles for responsible investment at Norges Bank. Responsible investment supports the GPFG's objective of the highest possible return over time within the limits of the management mandate in two ways: first, by promoting long-term economic development through the GPFG's investments, and second, by reducing the financial risk associated with the environmental and social conduct of the GPFG's investee companies. Corporate governance, the environment and social conditions that could have an impact on the GPFG's return over time are also assessed. This is integrated into the GPFG's work on standards and into its active ownership and investment activities.

The Ministry of Finance has established guidelines for the observation and exclusion of companies from the GPFG. The guidelines contain criteria for exclusion based on companies' products or on conduct. The Council on Ethics and Norges Bank are responsible for following up these guidelines. Decisions on 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. The Council on Ethics is an independent body established by the Ministry of Finance.

The investment management mandate requires responsible investment to be an integral part of the management of the GPFG.

The GPFG is tasked with safeguarding and building financial wealth for future generations. The GPFG's long-term return is dependent on sustainable growth, well-functioning markets and good corporate governance. Responsible investment is also included in Norges Bank's annual report on the management of the GPFG. The Bank's work on responsible investment can be divided into three main areas:

1. Setting standards
2. Exercising ownership rights
3. Investing responsibly

Setting standards

Norges Bank seeks to contribute to well-functioning markets and good corporate governance. Standards provide consistency across markets and can raise the bar for all companies.

Norges Bank contributes to developing relevant international standards, participates in consultations and engages regularly with international organisations and regulators in major markets. Norges Bank participated in 16 public consultations relating to responsible investment in 2020. All of the Bank's consultation responses are published on www.nbim.no. The consultations addressed important issues, such as common standards for sustainability reporting, shareholder rights and sustainable business practices.

Norges Bank's *Asset Manager Perspective* on sustainability reporting was published in 2020. Better sustainability reporting is a priority for the GPFG. As an investor, the GPFG depends on accurate, relevant and timely information on its investee companies. The GPFG wants to understand the environmental and social

issues that could affect the companies' long-term profitability and how the companies manage relevant risks and opportunities. Norges Bank observed that the quantity of reporting is increasing, but that further standardisation was needed to ensure relevance and comparability. Reporting requirements based on globally accepted, financially material and standardised sustainability metrics were called for.

There is increasing focus on sustainable development and companies' role in society. During 2020, the Bank responded to 13 consultations on sustainability reporting in the markets in which the GPFPG is invested.

The GPFPG has drawn up clear expectations of its investee companies since 2008. The purpose is to explain the Bank's expectations regarding how the companies address relevant global challenges in their business. The expectations form a basis for the GPFPG's dialogue with companies, and the companies' work is measured annually against the Bank's expectations. Expectations on climate change and human rights were updated in 2020. The GPFPG also published five new position papers on board independence, unequal voting rights, equity issuances, related-party transactions and corporate sustainability reporting.

Exercising ownership rights

Norges Bank is responsible for promoting good corporate governance in the GPFPG's investee companies. Voting is one of the most important tools the GPFPG has as a shareholder for safeguarding the GPFPG's assets. At year-end 2020, the GPFPG owned a stake in 9 123 companies across the globe. Norges Bank voted on 121 619 resolutions at 11 871 general meetings in 2020. The Bank voted in line with

the board's recommendation in 95.1% of the resolutions and at 73.4% of the general meetings, which was on a par with the Bank's voting in 2019. The GPFPG aims to be consistent and predictable in its voting. Consistency means that the voting decisions taken by the GPFPG can be explained by the GPFPG's principles. Predictability means that the companies can understand why the GPFPG votes the way it does. The voting guidelines are publicly available. In 2020, the GPFPG began to publish an explanation when it voted against the board's recommendation. The explanations are based on the GPFPG's public voting guidelines and are intended to promote greater transparency around the GPFPG's priorities as a shareholder.

As a long-term investor, the GPFPG engages in regular dialogue with the largest companies to promote good corporate governance and responsible business practices. The GPFPG held a total of 2 877 meetings with 1 209 companies. The size of the GPFPG's investments provides access to company board members, senior management and specialists. The GPFPG is interested in understanding how companies are governed and how they address key sustainability issues. In addition to meetings, the GPFPG also communicates with investee companies in writing. The GPFPG had written contact with 650 companies in the portfolio in 2020.

Norges Bank collaborates with companies, investors and other stakeholders to improve the information made available to the market and promote responsible business practices. This is particularly relevant where a number of companies in the same industry or value chain face the same challenges.

The GPFG annually assesses companies' reporting on governance structure, strategies, risk management and targets against the GPFG's published expectations. Norges Bank conducted a total of 4 158 such assessments in 2020. The GPFG assessed the reporting of 1 521 companies on climate change, 694 on human rights, 494 on children's rights, 500 on water management, 250 on anti-corruption, 250 on ocean sustainability, 249 on deforestation and 200 on tax.

The companies assessed represented 74.8% of the equity portfolio's market value at year-end 2020.

The GPFG contacts companies with weak or limited reporting and encourages them to make improvements by, for example, participating in established reporting initiatives. In 2020, the Bank sent letters to 127 companies about their reporting on topics covered by the GPFG's expectation documents.

A larger improvement was observed on average among the companies contacted by the GPFG about poor sustainability reporting in 2019 than among those that were not contacted. The average improvement in performance at the companies contacted was 9.8 percentage points. The overall improvement at the companies covered by the GPFG's assessments was 6.5 percentage points. The difference was greatest for companies contacted about tax transparency, climate change and deforestation, and smallest for human rights and water management. Overall, the GPFG noted improvements at 50% of the companies contacted.

Norges Bank supports initiatives whereby companies join forces to find common standards for sustainable business conduct. These initiatives work best when a number of companies in a particular industry or value chain face the same challenges. The starting point for the Bank's expectations of companies is that boards should establish suitable strategies, control functions and reporting procedures.

Investing responsibly

Responsible investment is an integral part of the GPFG's investment strategy, which aims to identify long-term investment opportunities and reduce the GPFG's exposure to unacceptable risks.

Norges Bank sees opportunities in investing in companies with solutions that promote more environmentally friendly economic activity. These investments could have positive effects on other companies and society in general, including reduced emissions, lower energy costs and more efficient use of resources. Companies producing these technologies could in turn profit from changes in demand and market regulation. The GPFG invests in such companies partly through dedicated environment-related mandates.

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

companies and in-depth analysis are cornerstones of the Bank's ownership work.

The GPFG has analysed the carbon footprint of portfolio companies since 2015. This analysis provides an insight into the level of greenhouse gas emissions from the GPFG's investee companies and can also shed light on risks and opportunities across industries. Reporting on greenhouse gas emissions 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, the GPFG equity portfolio's total emissions amounted to 92.4m tonnes of CO₂ equivalents in 2020. This is almost double Norway's total emissions in 2020 of 50.3m tonnes of CO₂ equivalents, as reported by Statistics Norway. Emissions from companies in the GPFG's equity portfolio were 14% lower than in 2019 and 12% lower than for the benchmark index.

The companies in the GPFG's equity portfolio emitted around 133 tonnes of CO₂ equivalents per USD million of revenue. This is referred to as the equity portfolio's carbon intensity and was 9% below that of the benchmark index in 2020.

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

The corporate bond portfolio's carbon intensity is 14% below that of the benchmark index. This is mainly because the GPFG's investments in industrial companies have a

lower carbon intensity than the benchmark index.

The GPFG identifies long-term investment opportunities by analysing investee companies' operations and the impact they have on the climate and the environment, and sees opportunities in companies that contribute to more environmentally friendly economic activity. At the end of 2020, the GPFG had invested NOK 100bn in shares in 90 companies under dedicated environmental mandates.

Equity investments under the environmental mandates returned 34.3% in 2020. The annualised return on the equity investments since the GPFG's inception in 2010 has been 9.5%. The environmental mandates are now managed entirely in-house. The GPFG invests in three main types of environmental activity. Companies must have at least 20% of their business in one of these defined environmental segments to be included in the GPFG's investment universe. These three segments are: 1) low-carbon energy and alternative fuels, ii) clean energy and energy efficiency and iii) natural resource management.

Norges Bank may decide to divest from companies if, after an overall assessment, the Bank no longer wishes to be a shareholder for ethical or sustainability reasons. Exclusions on ethical grounds are made in line with guidelines issued by the Ministry of Finance. Risk-based divestment may be appropriate if the GPFG considers that the company poses a particularly high long-term risk, where investment is not substantial and where active ownership is not considered a viable approach. By not investing in such companies,

the GPFG's exposure to unacceptable risks is reduced.

In 2020, the GPFG divested from 32 companies following risk assessments related to environmental, social and governance issues. The GPFG has divested from a total of 314 companies since 2012. Risk-based divestments have made a positive contribution to the cumulative return on the equity portfolio of around 0.41 percentage point, or 0.02 percentage point annually, since 2012.

For more information on the GPFG's responsible investment activities, see the *Responsible Investment Report* published by Norges Bank.

Responsible investment, Norges Bank's foreign exchange reserves

Norges Bank has a consistent approach to responsible investment and climate risk management. The main purpose of the bond portfolio in the foreign exchange reserves is to ensure that the foreign exchange reserves are sufficiently liquid for Norges Bank to fulfil the objectives of monetary policy, promote financial stability, meet Norway's international commitments as a member of the IMF and promote well-functioning markets. This is why Norges Bank exclusively invests the foreign exchange reserves in sovereign bonds with relatively low credit risk and whose liquidity characteristics are deemed satisfactory to meet the objectives of the foreign exchange reserves. Climate-related issues will therefore have little bearing on the composition of the bond portfolio in the foreign exchange reserves. Based on the percentage holdings in the individual companies, total emissions in the equity portfolio were 1.1m tonnes of CO₂ equivalents in 2020.

The equity portfolio of the foreign exchange reserves is managed by Norges Bank Investment Management (NBIM) in accordance with the guidelines laid down by the Governor of Norges Bank. The equity portfolio is managed responsibly in the same manner as the GPFG's equity portfolio. NBIM exercises active ownership and addresses climate risk in its management of the foreign exchange reserves and the GPFG by setting clear expectations of companies, voting at all general meetings where the GPFG is a shareholder and conducting a dialogue with selected companies.

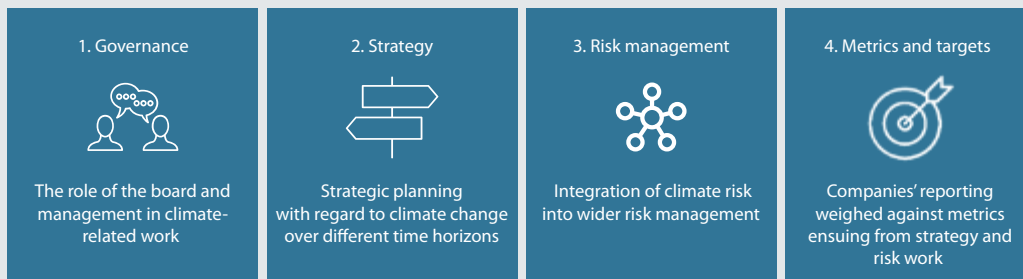
Decisions on risk-based divestment from individual companies that NBIM finds appropriate for the GPFG's equity portfolio are also applied to the equity portfolio of the foreign exchange reserves.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

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 (FSB) in 2016 and submitted its recommendations in 2017. The recommendations specify what should be reported within four areas: governance, strategy, risk management, and metrics and targets. Norges Bank supports the intention of the recommendations and is of the opinion that the framework will promote more universal and consistent reporting across jurisdictions. Norges Bank has supported projects that underpin the TCFD framework.

An overview of Norges Bank's status for 2020 in relation to the recommendations in the TCFD framework is given below:

TCFD - MAIN AREAS



1. Governance

Disclose the organisation's governance around climate-related risks and opportunities, including the role of the board and management.

In 2018, the Executive Board developed a strategy for climate and sustainability that sets out environmental objectives and measures for the organisation. The implementation of this strategy is integrated in Norges Bank's governance system, executed by the various departments and formulated in action plans. A reference group for climate and sustainability has been established, chaired by a deputy governor of Norges Bank.

Climate change has been a focus area for the management of the GPFG since 2006. The Executive Board of Norges Bank has laid down principles for the responsible management of the GPFG, has oversight over the GPFG's responsible investment strategy and reviews the annual responsible investment report. The Executive Board makes decisions on observation and exclusion of companies from the GPFG. The guidelines for observation and exclusion also include a conduct-based climate criterion. 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. Norges Bank has a consistent strategy for responsible investment and climate risk management. The same principles and process for responsible investment management are applied in the management of the equity portfolio of the foreign exchange reserves.

In 2019, the Executive Board presented a report to the Ministry of Finance on its climate risk work in the GPFG. The Executive Board decides which companies should be put under observation or excluded from the GPFG. The guidelines also include a conduct-based climate criterion.

2. Strategy

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

Climate change and measures to mitigate its effects have an impact on the Norwegian and global economy and hence on Norges Bank's performance of its core tasks: monetary policy, financial stability and the management of the GPFG.

Climate change is one of a number of risk factors affecting the management of the GPFG and the foreign exchange reserves. The GPFG has dedicated environment-related investment mandates. Climate scenario analyses are conducted to advance the understanding of the GPFG's resilience to, for example, a rise in global temperatures. The GPFG's investment universe and benchmark index presuppose certain climate-relevant adaptations. Companies involved in coal mining and coal-fired utilities are excluded from the GPFG's investment universe according to set thresholds. Oil and gas exploration and production companies have been removed from the GPFG's benchmark index.

3. Risk management

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

In 2020, Norges Bank continued its efforts to increase knowledge about climate risk in its organisation. A suite of complementary tools is used to identify and assess climate risk to which the GPFG is exposed.

Climate risk has been discussed in the reports [Financial Stability 2019](#) and [Financial Stability 2020](#). The [Financial Stability 2021](#) report will present a more quantitative assessment of climate risk for Norwegian banks. Norges Bank participated in the preparation of the NGFS report [Climate change and monetary policy: initial takeaways](#) which was published in June 2020. The report shows the breadth of questions that should be analysed to better understand how climate change affects the macroeconomy and monetary policy.

4. Metrics and targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, including information on Scope 1, Scope 2 and Scope 3 greenhouse gas (GHG) emissions.

Norges Bank has received Norwegian Eco-lighthouse certification and has oversight over and measures various key metrics, including GHG emissions from its own activities. (For more information on Norges Bank's carbon account for the operation of the Bank's head office, see page 98.)

Norges Bank has measured and published the carbon footprint of the GPFG's equity portfolio since 2015. The TCFD's recommendations for asset managers are followed when calculating the GPFG's carbon footprint and when measuring the carbon footprint of the foreign exchange reserves equity portfolio. As the understanding of the implications of climate change for financial investments develops, the GPFG will explore how specific climate-related targets can contribute to the efficient management of these risks.

For more detailed information on the management of the GPFG, see the *Responsible Investment Report* published by Norges Bank.

Norges Bank's climate and sustainability strategy

Norges Bank's climate and sustainability strategy sets out environmental objectives and measures for Norges Bank's activities. There is no time horizon. Specific objectives and measures will be adjusted to preconditions and options in various operational areas and locations.

1. Norges Bank will contribute to sustainable developments within the framework of its mission and responsibilities.

- A. We will ensure that environmental considerations are integrated throughout.
- B. We will assess our interface with the external physical environment.
- C. We will use targeted measures to limit the Bank's negative effect on the environment.
- D. We will provide the facilities to enable employees and suppliers to make greener choices.

2. Established environmental management practices will be integrated in the management of the Bank.

- A. We will conduct operations in line with recognised environmental standards.
- B. We will be environmentally responsible and promote health in the workplace.
- C. We will choose cost-effective environmental measures that meet the Bank's needs.

3. Norges Bank staff will have environmental competence in the operational areas where this is appropriate.

- A. We will contribute to the spread of knowledge concerning the importance of climate change for economic developments and stability.
- B. We will use our environmental competence to understand our own effect on the environment and identify measures.
- C. We will assess environmental factors in investment management in order to protect the GPFG's assets in the long term.

4. Norges Bank will be transparent about its environmental responsibility.

- A. We will inform the public through transparent and active communication.
- B. Our communication will contribute to knowledge-based social debate.

Norges Bank's operations from a sustainability perspective

Norges Bank's carbon account

Norges Bank is a certified Eco-lighthouse.¹ The certification applies to the operation of the head office at Bankplassen 2 and provides access to tools for measuring and improving the organisation's environmental performance.

As part of the Eco-lighthouse certification, Norges Bank prepares an annual carbon account for the operation of the head office. The account includes direct emissions (scope 1), indirect emissions (scope 2) and other indirect emission sources (scope 3). The aim is to include more indirect sources of emissions





over time, such as emissions related to cloud-based IT services. Norges Bank recently introduced a requirement for green construction and operation of data centres to ensure that resources are used efficiently and renewably sourced.

Table 4 presents the carbon account for Norges Bank's head office for 2019 and 2020.

Norges Bank's largest source of emissions from its own operations is official air travel. In 2020, this source accounted for a total of 54% (64% in 2019) of overall emissions. The decline in emissions between 2019 and 2020 largely reflects the Covid-19 pandemic.

¹ For more information, see the [Eco-lighthouse website](#).

Table 4 Greenhouse gas emissions in tonnes CO₂

		2019	2020	
	Direct emissions (scope 1)	Official travel by car	25	34
		Heating of head office (diesel)	2	4
	Indirect emissions (scope 2)	Remote heating	154	69
		Electricity	1 310	1 092
	Other indirect emissions (scope 3)	General waste (compressed)	29	23
	Other indirect emissions (scope 3)	Official air travel*	2 760	1 430
Total greenhouse gas emissions in tonnes CO₂		4 280	2 651	

* Emissions from official air travel refers to all Norges Bank employees

A range of measures have been introduced in recent years to improve environmental performance. Recycling has increased partly owing to the deployment of centralised recycling stations in office areas. The share of meeting rooms equipped for video conferencing has increased substantially. Disposable food and drink containers have been replaced with greener alternatives at the head office and the largest offices abroad.

The most important ongoing emission reduction measures are the continued use of video conferencing in lieu of official air travel, the replacement of ventilation generators and other technical installations with more energy-efficient versions and expanded environmental requirements for all relevant procurement.

Responsible procurement and supplier follow-up

Norges Bank is subject to public procurement regulations. In 2020, the Bank procured goods and services totalling approximately NOK 4.3bn. Important procurement categories are external management, IT system development and operations, and goods and services related to the operation of offices.

All suppliers with access to the Bank's premises or systems are responsible for ensuring that their employees performing services or work for the Bank are aware of the ethical rules covering issues such as human rights, labour rights, corruption, discrimination and gifts. Norges Bank is responsible for requiring wage and working conditions under the regulation on terms and conditions for wages and working conditions in public contracts. Suppliers and any subsuppliers must be able to present documentation of

their compliance with wage and working conditions. In 2020, 26 controls were carried out and three violations were found. These were rectified as requested by Norges Bank. The Public Procurement Act includes a requirement that limits the number of tiers in the supply chain for procurement from sectors where work-related crime is a particular challenge. Norges Bank accepts no more than two tiers of subsuppliers.

Norges Bank wants a responsible and sustainable supply chain and sets environmental requirements for procurement where relevant. Examples of such requirements may be documentation of implemented measures to limit the supplier's own negative environmental impact, or relevant environmental information on products and services such as the use of chemicals and waste management. Suppliers and contract terms and conditions are regularly followed up to identify any violations, and measures are implemented when necessary.

The work of monitoring sustainability risk and responsible investment is described in greater detail in the section on responsible investment of the GPFG and the foreign exchange reserves and applies to all the GPFG's investee companies, including those managed externally. In emerging markets, the GPFG mostly uses external managers. Some of these markets have inherently higher sustainability risk.

Managers are required to consider corporate governance and environmental and social conditions in their investment activities. This is followed up as a part of the GPFG's annual assessment of managers. Assessments are

also made of the managers' approach to corporate social responsibility as a part of the selection process. Sustainability risk in the underlying investee companies is also assessed. Evaluations of over 1 300 companies in emerging markets were conducted in 2020.

Responsible real estate investment in the Government Pension Fund Global (GPF)

Norges Bank Investment Management (NBIM) integrates sustainability measures into business plans for the GPF's properties and collaborates with other investors to develop tools for measuring climate risk in real estate markets.

The sustainability performance of the real estate portfolio is measured against the Global Real Estate Sustainability Benchmark (GRESB) on an annual basis. The real estate portfolio scored 79 out of a possible 100 points in 2020, a decline from 80 points in 2019. In 2020, 82% of the GPF's portfolio of large office and retail buildings were green-certified, up from 79% in 2019. In addition, 34 logistics properties were green-certified for sustainable design and construction.

Real estate investments are exposed to climate risk. NBIM estimates that 4% of the portfolio, in value terms, is located in areas where flooding has occurred along the coast or in rivers at least once in the past 100 years. In 2020, an external analysis was commissioned of the future vulnerability of the most exposed real estate investments in the US, which concluded that the long-term risk of floods in some areas could become substantial in the most extreme climate scenario.

National and local authorities have increasingly begun implementing long-term plans for reducing greenhouse gas emissions that will impact the real estate sector. Through collaboration with other investors, the Bank has supported the Carbon Risk Real Estate Monitor (CRREM), a research project that, in 2020, published emission paths in the period to 2050 for selected real estate markets that are consistent with a carbon budget in line with the Paris Agreement. NBIM uses this tool in its wider work of measuring climate risk in the real estate portfolio.

Ethical conduct for Norges Bank's Executive Board and employees

As central bank and manager of the GPF, Norges Bank has been given considerable authority and trust. It is important to safeguard Norges Bank's reputation and promote a high level of ethical awareness and integrity among the Bank's employees. The Executive Board has laid down ethical principles to promote a uniform attitude to ethical issues at Norges Bank. The ethical principles were last amended on 24 June 2020, with effect from 15 August 2020. The reason for the most recent changes was a need for adjustments owing to the reorganisation of the Bank of 10 December 2019 and the new central bank act of 1 January 2020. Some clarifications and changes of relevant provisions in the principles have also been made.

These principles reflect the Bank's commitment to maintaining high ethical standards, respecting human rights, exercising corporate social responsibility and complying with current legislation. The ethical rules for example apply to employees' own-account trading, activities outside the Bank, gifts and loyalty to the Bank in general.

The Ministry of Finance has laid down a regulation on impartiality and conflicts of interest for members of Norges Bank's Executive Board and the members of the Monetary Policy and Financial Stability Committee. In spring 2020, Norges Bank revised its own rules for external members of these two bodies on issues including impartiality and conflicts of interest and restrictions on own-account trading.

Norges Bank does not accept any form of corruption. An anti-corruption framework and programme has been established. Key elements of the anti-corruption work are management leadership, risk management, ethical rules, processing whistleblower reporting, purchasing procedures, background checks of staff and suppliers, financial reporting and systematic training and controls. In 2020, 90 of NBIMs operational support employees took part in training that focused on handling conflicts of interest and anti-corruption. In 2020, no cases related to corruption were confirmed.

Norges Bank places considerable emphasis on training staff and fostering awareness of the most important areas of ethical risk. All new employees complete a training programme to ensure that they know and understand the rules, which includes one-on-one training, e-learning and an introductory dilemma training course. To ensure that all employees have the necessary knowledge of the rules, a compulsory test is conducted using an e-learning tool. By completing an annual test, employees confirm that they have read and understood the rules and are aware of the consequences of non-compliance.

The Executive Board has laid down principles for internal disclosure of wrongdoing (whistleblowing) at Norges Bank. Whistleblowing procedures have been established whereby employees and supplier personnel can anonymously report unethical or unlawful conduct. Employees and supplier personnel are encouraged to report any wrongdoing. Whistleblowing reports are processed in line with established case processing rules. One whistleblowing report was submitted in 2020.

Working at the Bank

Norges Bank's staff are central to the Bank's operations. Norges Bank works systematically to attract and recruit top candidates from leading national and international specialist environments. The Bank is a knowledge-based institution that expects high standards of its staff with regard to expertise and performance. The Bank promotes continuous career development with a focus on challenging professional tasks in day-to-day work and through 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.

Diversity and gender equality

Diversity in the workforce is the best starting-point for further development of an international organisation. The Bank seeks diversity in the form of skills, experience and outlook by recruiting from across nationalities, genders, age, background and education. To strengthen this work, a diversity and inclusion initiative was launched across the Bank's operational areas in 2020. Working with external organisations and networks provides a valuable exchange of experience and opportunities to learn from the best.

A long-term initiative to increase the diversity of applicants to the Bank is the Education Centre, an interactive learning centre for upper secondary school pupils. The Centre's purpose is to stimulate learning and reflection on fundamental economic questions and thereby

increase interest in the field of economics and Norges Bank as an employer.

In 2020, the number of student internships at Norges Bank increased, with a view to promoting diversity, new ideas and perspectives and contributing to challenging established practices. The relaunch of NBIM's trainee programme is an example of how the Bank works actively to attract a broad range of applicants.

When appropriate, the Bank can engage retired staff on a temporary basis to retain experienced labour and allow staff to continue to be part of working life after retirement.

Norges Bank works systematically towards achieving a 40% minimum of both genders. At the end of 2020, the total share of women on the staff of Norges Bank was 33%, of which the share was 25% in NBIM, 33% in NBCBO and 57% in NBA. In 2020, 48% of new hires in NBIM were women, which shows that the strategic work of promoting gender balance has produced results.

Wages reflect the duties and responsibilities of a position. Wages are determined on a case by case basis and also reflect the position holder's expertise, experience and performance. Table 5-7 shows the Bank's breakdown of gender and wages in different job categories. The overview shows fixed salaries at end-2020 for permanent staff at the head office. All employees working with investment decisions are entitled to

Table 5 Gender balance and wages in different job categories at Norges Bank

Norges Bank	Median wage		Share of employees		Wage gap		
	Men	Women	Men	Women	Men	Women	Gap
Department Director	1 750 606	1 467 593	82%	18%	100%	84%	16%
Head of Section	1 300 000	1 150 000	73%	27%	100%	88%	12%
Special Advisor	1 159 860	1 033 498	74%	26%	100%	89%	11%
Senior Advisor	895 467	860 217	65%	35%	100%	96%	4%
Advisor	672 500	670 000	51%	49%	100%	100%	0%
Executive officer	634 213	657 866	47%	53%	96%	100%	4%
Total Norges Bank	970 000	835 000	65%	35%	100%	86%	14

Table 6 Gender balance and wage in different job categories at Norges Bank Investment Management¹

Norges Bank	Median wage		Share of employees		Wage gap		
	Men	Women	Men	Women	Men	Women	Gap
Head of Section	1 550 000	1 345 000	83%	17%	100%	87%	13%
Special Advisor	1 312 500	1 175 000	82%	18%	100%	90%	10%
Senior Advisor	950 000	935 000	70%	30%	100%	98%	2%
Advisor	680 000	720 000	63%	37%	94%	100%	6%
Total NBIM	1 047 500	930 000	74%	26%	100%	89%	11%

¹ There are too few of each gender in the most senior job categories at NBIM for this part to be publicly disclosed for privacy reasons. Correspondingly, there are too few of each gender with performance-based pay in the different job categories for this part to be publicly disclosed.

Table 7 Gender balance and wage in different job categories at Norges Bank Central Banking Operations and Norges Bank Administration

Norges Bank	Median wage		Share of employees		Wage gap		
	Men	Women	Men	Women	Men	Women	Gap
Department Director	1 371 427	1 370 767	76%	24%	100%	100%	0%
Head of Section	1 115 516	1 085 391	63%	37%	100%	97%	3%
Special Advisor	1 059 103	985 020	70%	30%	100%	93%	7%
Senior Advisor	852 743	800 000	59%	41%	100%	94%	6%
Advisor	617 000	661 510	44%	56%	93%	100%	7%
Executive officer	634 213	655 956	48%	52%	97%	100%	3%
Total NBCBO and NBA	907 276	784 105	59%	41%	100%	86%	14%

performance-based pay, regardless of gender. In order for these to be disclosed, there must be at least five of each gender. There are too few of each gender with performance-based pay in the different job categories to publicly disclose this wage overview. Correspondingly, there are too few of each gender in the most senior job categories at NBIM for that part to be publicly disclosed. There are no differences in other staff benefits.

Tables 5-7 show that there is variation across operational areas and job categories. Wage differences between women and men at the executive level, particularly in NBIM, partly reflects the shorter seniority of the women in executive positions. The gender balance reflects the competitive situation in the market. Fewer women than men apply for executive positions in the Bank and for financial sector positions in general. At the end of 2020, the gender balance for the two lowest job categories was in line with the targets. The Bank will step up efforts to encourage promotion of women in middle management and strengthen its focus on recruiting external female candidates.

Table 8 shows the share of employees in Oslo that are temporary, on parental leave or voluntarily working part-time.

On average, women in Norges Bank had 23 weeks of parental leave in 2020, while men averaged 11 weeks. These figures only show the number of weeks of parental leave in 2020 and not the total number of weeks of leave taken by the individual employee.

The main priority areas for reaching the target of 40% women and increased diversity are recruitment, reputation management, career development, flexibility and the working environment.

- Recruitment**
 The bank is making targeted efforts to ensure greater diversity in the recruitment process, both among staff on the employer side and in the pool of candidates called in for interviews. Efforts are being made to formulate job advertisements to attract more women via the Bank's marketing profile, and external recruitment agencies are being required to focus on greater diversity and women candidates. Further, checkpoints have been introduced in the recruitment process to ensure that applicants are treated objectively and fairly, as well as guidelines for wage setting and wage reporting to prevent gender discrimination.

Table 8 Share of employees in Oslo that are temporary, on parental leave or voluntarily working part-time.

Temporary employees as a percentage of all employees		Average parental leave in number of weeks		Voluntarily working part-time as a percentage of all employees	
Men	Women	Men	Women	Men	Women
5%	4%	11	23	4%	5%

- **Reputation management**

The Bank pursues a conscious strategy to highlight the important roles held by women at the Bank by ensuring that they are well represented at events where Norges Bank is represented. Female staff are encouraged to participate in networks and external events such as career conventions, giving presentations at relevant academic institutions and events such as the Norwegian Association of Economists' "Kandidattreff" (a yearly event providing an arena for employers and students to meet) and Women's Finance Day.

- **Career development**

To achieve the desired gender balance, the Bank must retain female staff in the organisation and ensure equal opportunities related to, among other things, professional development and career. The Bank works to raise awareness among executives of the importance of providing female employees with the challenges that qualify them for higher positions. Promotions are discussed in management groups to ensure diversity and equality across operational areas.

Workforce planning, with successor planning for executive and key positions, will be a priority in 2021. This will provide the Bank with better tools to assess competence within the organisation and work systematically to develop women for more senior positions.

Norges Bank has a scheme whereby employees temporarily work in other departments or are seconded to another institution. This is important for building a culture where staff can gain new

experience and new perspectives. Being part of a new environment promotes the development of professional and cultural competence as well as insight into and understanding of the diversity in our organisation.

- **Flexibility**

Guidelines will be introduced so that employees can continue to enjoy greater flexibility after the pandemic. Greater emphasis on flexible workdays with the opportunity to work more from home, for example, makes it more attractive for employees with caring responsibilities to take on new roles at a higher level.

- **Working environment**

The annual staff survey provides feedback on whether the Bank is a working environment where employees enjoy their work and that facilitates an appropriate work-life balance. This includes risk analysis related to gender discrimination.

In 2020, an independent survey on harassment was established to raise awareness on the subject. The plan for 2021 is for all Norges Bank employees to complete internal courses on diversity and inclusion, including awareness-raising to prevent harassment and discrimination in the workplace. At the Bank's New York office, this is mandatory annual training.

As a measure to promote diversity and inclusion and to create a family-friendly culture, a 16-week gender-neutral leave of absence in connection with childbirth has been introduced, which is longer than legally required in the countries where the Bank has offices.

Salary and remuneration arrangements

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 salary levels at Norges Bank are expected to be competitive, but not industry-leading. Norges Bank employs external consultants to perform annual comparisons of salary levels with other employers. The Executive Board's Remuneration Committee, which comprises three of the Board's external members, ensures that matters pertaining to salary and remuneration schemes are thoroughly and independently discussed.

The Executive Board sets a salary ceiling for the executive management of NBCBO and salary bands for the NBIM executive management team. The governor of Norges Bank determines annual salaries for executive managers and others in NBCBO 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.

Salaries for employees working directly on investment decisions and certain other employees may be performance-based. Principles for the performance-based pay scheme have been established in regulations issued pursuant to the Securities Fund Act with necessary adjustments. Performance-based pay is designed to promote and provide incentives for sound risk management and control, counteract excessive risk-taking and

avoid conflicts of interest. Performance-based pay is calculated based on performance as measured against set targets for the performance of the GPF, of the group and of the individual employee. Accrued performance-based pay is paid over several years, with 50% paid the year after it is accrued while the remaining 50% is held back and paid over the following three years. For employees with performance-based pay greater than 100% of their fixed salary, 40% is paid the year after it is accrued, while the remaining 60% is held back and paid over the following three years. The amount held back is adjusted for the return on the GPF. Members of the NBIM leader groups and the executive management of NBCBO do not receive performance-based pay.

Health, environment and safety

Owing to the Covid-19 pandemic, most Norges Bank employees worked remotely for much of the time in 2020. Considerable effort has been made to provide support to employees and executives in a difficult situation, including through managerial training. The goal has been to promote solid work routines, create digital fora and inspire social activity. There has also been close collaboration with the Bank's health service to provide ergonomics support for those working remotely in order to reduce the risk of musculoskeletal disorders.

Norges Bank's priority is protecting the health and safety of all those who work in the Bank. In 2020, seven workplace accidents or injuries directly relating to work conducted at Norges Bank's office premises or conference and holiday facilities were reported. No workplace

accidents or injuries were reported as occupational injuries to the Norwegian Labour Inspection Authority in 2020.

The Bank's safety representatives carry out the important work of safeguarding the interests of employees in matters relating to the working environment. They are consulted in the planning and follow-up of measures relevant to the working environment. The employees in each safety area elect their safety representative. The senior safety representative, who is on the Bank's Working Environment Committee, is subsequently elected from among the elected safety representatives.

The Bank has well-equipped fitness facilities for employees and has provided facilities so that employees can cycle to work. In the ongoing upgrade of the head office, focus is given to improving the indoor climate and increasing flexibility.

In autumn 2020, a new staff survey was conducted that provides better opportunities for analysis and benchmarking. The Bank's Working Environment Committee, comprising management and employee representatives, assesses the working environment and climate of collaboration at the Bank as positive.

Sickness absence and inclusion in the workplace

Sickness absence at the Bank remained stable at a low level of 1.7% in 2020. This is a decline from 2019 (2%), owing to fewer registered self-certified sickness absences, which are likely the result of extensive remote working during

the pandemic. The IA agreement 2019-2022 now covers working life throughout Norway and underpins the work of preventing sickness absence. The Bank has extended the 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 services to prevent sickness absence resulting from remote working to obtain other accommodations than normally provided in the Bank's offices. The Bank accommodates older employees to enable them to extend their professional careers in line with national objectives. Remodelling projects at the Bank are based on the principles of universal design and the Bank provides protective equipment as needed.

The annual staff survey is conducted to collect feedback on the working environment, in order to ensure that employees enjoy working at the Bank and that the Bank provides the basis for a good work-life balance.

Collaboration with 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.

Supplementary reporting by Norges Bank

ANNUAL REPORTING FOR 2020



NORGES BANK'S PUBLICATIONS IN 2020

<p>Monetary Policy Report with financial stability assessment</p>	<p>Financial Infrastructure Report</p>	<p>Norway's financial system</p>	<p>Financial Stability Report</p>
<p>Norges Bank Papers</p>	<p>Regional Network Report (summary)</p>	<p>Management of Norges Bank's foreign exchange reserves</p>	
<p>Expectations Survey</p>	<p>Norges Bank's Survey of Bank Lending</p>	<p>Half-year report, Government Pension Fund Global</p>	

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Income statement

2020

2019



NET INCOME
from financial instruments

NOK 30bn

NOK 38bn



**FOREIGN EXCHANGE
GAINS/LOSSES**

NOK -1bn

NOK 7bn



110



PROFIT/LOSS, GPFG

NOK 1 122bn

NOK 1 815bn



**PROFIT/LOSS, GPFG
TRANSFERRED -TO/FROM
KRONA ACCOUNT**

NOK -1 122bn

NOK -1 815bn



OTHER INCOME
- of which management fee,
GPFG

NOK 5.4bn
5.3bnNOK 4.5bn
4.3bn

OPERATING EXPENSES
- of which management
costs, GPFG

NOK -6.5 bn
NOK -5.3bnNOK -5.4 bn
NOK -4.3bn

**TOTAL COMPREHENSIVE
INCOME**

NOK 29bn

NOK 44bn



**TRANSFER TO
THE TREASURY**

NOK 15bn

NOK 20bn

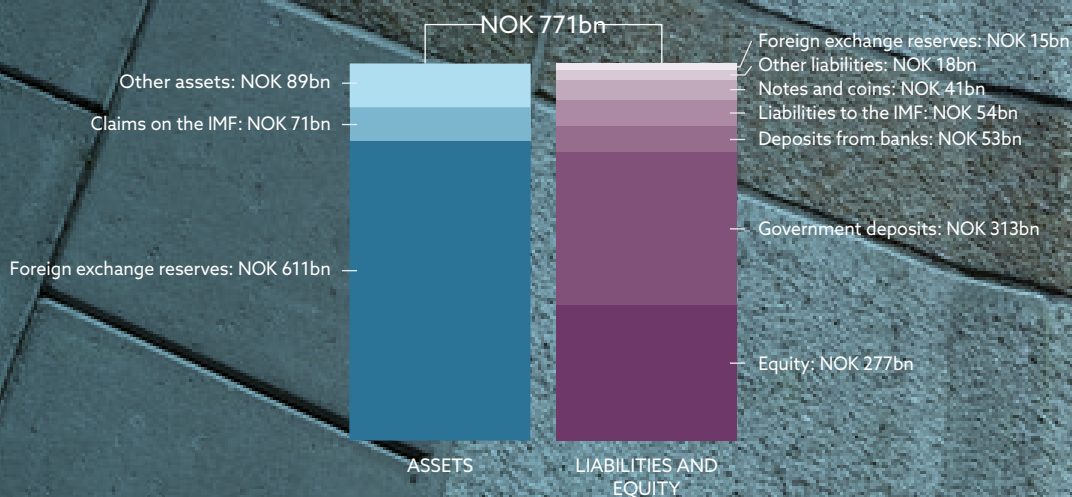
Main points

Balance sheet

NORGES BANK



NORGES BANK EXCL. GOVERNMENT PENSION FUND GLOBAL



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.



112

Costs are allocated to these primary tasks:

1. Management of the Government Pension Fund Global (GPF)
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. The allocation of common costs is based on an assessment of cost drivers. The size of the allocation key represents the best estimate of actual resource use.

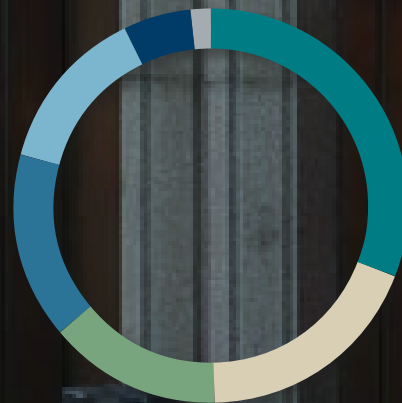
The Bank's total operating expenses in 2020 were NOK 6 481m. Management of the GPF was by far the most resource-intensive task and accounted for NOK 5 305m or 82% of the Bank's total costs. Costs for Norges Bank's other primary tasks amounted to NOK 1 176m.

Costs by primary task



- GPFG
- Central banking operations

Costs by primary task
excl. GPFG



- Monetary policy
- Banknotes and coins
- Financial stability
- Interbank settlement
- Foreign exchange reserves
- Government debt management
- Treasury single account

Annual financial statements 2020



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ANNUAL FINANCIAL STATEMENTS 2020

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Income statement

Amounts in NOK millions	Note	2020	2019
NET INCOME/-EXPENSE FROM FINANCIAL INSTRUMENTS			
Net income/-expense from:			
-Equities	3	18 070	28 660
-Bonds	3	12 618	12 265
-Financial derivatives		591	-728
-Secured lending	9	-10	342
-Secured borrowing	9	-40	-
Interest income and expense from deposits and short-term borrowing		-30	21
Interest income from lending to banks	18	206	69
Interest expense on deposits from banks and the Treasury	18	-973	-3 042
Net interest income from the IMF	17	57	102
Tax expenses	3	-45	-50
Other financial income/-expenses		-1	-10
Net income/-expense from financial instruments before foreign exchange gains/losses		30 443	37 629
Foreign exchange gains/-losses	8	-499	7 007
Net income/-expense from financial instruments		29 944	44 636
MANAGEMENT OF THE GOVERNMENT PENSION FUND GLOBAL (GPFG)			
Total comprehensive income, GPFG	20	1 122 356	1 814 470
Withdrawn from/-transferred to the krone account of the GPFG	20	-1 122 356	-1 814 470
OTHER OPERATING INCOME			
Management fee, GPFG	13	5 305	4 312
Other operating income	15	121	139
Total other operating income		5 426	4 451
OPERATING EXPENSES			
Personnel expenses	12	-2 084	-2 001
Other operating expenses	15	-4 178	-3 129
Depreciation, amortisation and impairment losses	14	-219	-289
Total operating expenses		-6 481	-5 419
Profit/-loss for the period		28 889	43 669
STATEMENT OF COMPREHENSIVE INCOME			
Profit/-loss for the period		28 889	43 669
Change in actuarial gains/-losses	11	-65	114
Total comprehensive income		28 824	43 783

Balance sheet

Amounts in NOK millions	Note	31 Dec. 2020	31 Dec. 2019
ASSETS			
Financial assets			
Deposits in banks		24 920	17 231
Secured lending	9,10	18 340	7 665
Unsettled trades		888	642
Equities	4	114 931	121 295
Equities lent	4,9,10	4 600	6 303
Bonds	4	448 105	406 898
Financial derivatives		12	9
Claims on the IMF	17	71 081	69 075
Lending to banks	18	80 168	6 560
Other financial assets	13	5 683	4 804
Total financial assets		768 728	640 482
Net value, GPFG			
Net value, GPFG¹	20	10 908 457	10 083 771
Non-financial assets			
Pensions	11	155	331
Non-financial assets	14	2 119	2 294
Total non-financial assets		2 274	2 625
TOTAL ASSETS		11 679 459	10 726 878

¹ Net value, GPFG equals the fund's market value less accrued, not paid, management fees.

Amounts in NOK millions	Note	31 Dec. 2020	31 Dec. 2019
LIABILITIES AND EQUITY			
Financial liabilities			
Secured borrowing	9,10	23	100
Unsettled trades	9,10	14 383	11 716
Financial derivatives		10	2
Other financial liabilities		2 942	2 248
Liabilities to the IMF	17	53 925	57 235
Deposits from banks	18	52 807	58 888
Deposits from the Treasury	18	313 131	187 727
Notes and coins in circulation	16	41 006	41 613
Total financial liabilities		478 227	359 529
Deposits in krone account, GPFG			
Deposits in krone account, GPFG	20	10 908 457	10 083 771
Other liabilities	19	15 956	20 414
Total liabilities		11 402 640	10 463 714
Equity		276 819	263 164
TOTAL LIABILITIES AND EQUITY		11 679 459	10 726 878

Oslo, 4 February 2021



Øystein Olsen
(Governor/Chair)



Ida Wolden Bache
(Deputy Chair)



Karen Helene Ulltveit-Moe



Kristine Ryssdal



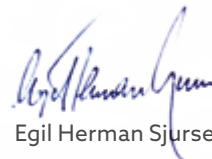
Arne Hyttnes



Hans Aasnæs



Nina Udnes Tronstad



Egil Herman Sjursen



Mona Helen Sørensen
(Employee representative)



Truls Oppedal
(Employee representative)

Statement of cash flows

Amounts in NOK millions, inflows (+)/outflows (-)	2020	2019
Operating activities		
Receipts of dividend from equities	2 674	2 854
Receipts of interest from bonds	6 208	5 995
Net receipts of interest and fee from secured lending and borrowing	18	381
<i>Receipts of dividend, interest and fee from holdings of equities and bonds</i>	<i>8 900</i>	<i>9 230</i>
Net cash flow from purchase and sale of equities	23 808	-2 093
Net cash flow from purchase and sale of bonds	-25 527	-2 642
Net cash flow financial derivatives	1 672	-760
Net cash flow related to deposits in banks	564	23
Net cash flow secured lending and borrowing	-1 332	2 849
Net cash flow related to other expenses, other assets and other liabilities	-13 272	-13 422
Net cash flow related to other financial assets and other financial liabilities	-85 292	11 401
Net cash flow to/-from the Treasury	-171 364	17 725
Inflow from the Norwegian government to the GPFG	-5 032	-32 051
Withdrawals by the Norwegian government from the GPFG	301 800	14 400
Management fee received from the GPFG	4 312	4 544
Net cash flow from operating activities	39 237	9 204
Investing activities		
Net cash flow related to non-financial assets and liabilities	-38	-149
Net cash flow from investing activities	-38	-149
Financing activities		
Cash flow to the Treasury from the Transfer Fund	-19 706	-14 798
Net cash flow from financing activities	-19 706	-14 798
Net change in cash		
Deposits in banks at 1 January	17 230	23 208
Net increase/-decrease of cash in the period	19 493	-5 743
Net foreign exchange gains and losses on cash	-11 803	-235
Deposits in banks at 31 December	24 920	17 230



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 2019	209 490	29 597	239 087
Total comprehensive income	14 261	29 522	43 783
31 December 2019 before transfer	223 751	59 119	282 870
Transferred to the Treasury	-	-19 706	-19 706
31 December 2019	223 751	39 413	263 164
1 January 2019	223 751	39 413	263 164
Total comprehensive income	22 730	6 094	28 824
31 December 2020 before transfer	246 481	45 507	291 988
Transferred to the Treasury	-	-15 169	-15 169
31 December 2020	246 481	30 338	276 819



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

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 for 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 Storting (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 shall invest the krone account 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 for the GPF. 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 on the management mandate for the GPF, Norges Bank's governance structure and risk management (see Note 20.8 *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 2020 were approved by the Executive Board on 4 February 2021 and approved by the Supervisory Council on 24 February 2021. 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 significant accounting policies, significant estimates and critical accounting judgements that are relevant to the financial statements as a whole. Additional accounting

policies, significant estimates or critical 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 regarding future events that affect recognised 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

Pursuant to Section 4-3 of the Central Bank Act, the annual financial statements of Norges Bank have been prepared in accordance with the Accounting Act and *Provisions concerning annual financial reporting for Norges Bank* (the Provisions), laid down by the Ministry of Finance.

The Provisions require that Norges Bank's financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, with the additions and exceptions pursuant to the Accounting Act and the Provisions. Norges Bank's financial statements include the financial reporting for the GPF (Note 20 *Government Pension Fund Global* (GPF)).

The financial statements are presented in a manner that is most relevant to an understanding of the Bank's financial performance, in line with IAS 1.

The annual financial statements are prepared with a closing date of 31 December, and are presented in Norwegian kroner (NOK) and unless otherwise stated, rounded to the nearest million. Rounding differences may occur.

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

The accounting policies applied are consistent with the policies applied in the previous accounting year. No new or amended IFRS standards or interpretations that became effective for the accounting year beginning on

1 January 2020 that have had a material impact on the financial statements.

3. New and amended standards and interpretations effective in 2021 or later

Issued IFRSs, amendments to existing standards and interpretations issued with an effective date from 2021 or later are expected to be immaterial or not applicable to the Bank's financial reporting on the implementation date.

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 20.12 *Secured lending and borrowing* for details on transferred assets that are not derecognised.

Financial liabilities are derecognised when the obligation is extinguished, ie 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 established by the management of Norges Bank Investment Management. These mandates and strategies, including the risk management strategies, require financial assets to be managed and evaluated on a fair value basis. The financial assets in the GPFG are therefore measured at fair value through profit or loss. 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 in 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 unlisted real estate are made through subsidiaries of Norges Bank, which are exclusively established as part of the management of the fund. These subsidiaries are recognised in the financial reporting for the GPFG, pursuant to Section 3-4 of the Provisions. 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 participation in the entity and is able to influence these returns through its power over the entity. For further information, see Note 20.15 *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 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 and are presented in the balance sheet as *Unlisted real estate*. See Note 20.6 *Unlisted real estate* 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.

! Accounting judgement

The GPFG is an investment entity based on the following:

- a) The GPFG obtains funds from the Norwegian government, a related party and its sole owner, and delivers professional investment services in the form of management of the fund, to the Norwegian government,
- b) It commits to the Norwegian government that it will invest solely for capital appreciation and investment income,
- c) It measures and evaluates returns for all 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	2020	2019
Dividends	2 689	2 837
Realised gain/-loss	12 326	1 029
Unrealised gain/-loss	3 055	24 794
Income/-expense from equities before foreign exchange gains/losses	18 070	28 660

Table 3.2 Income/expense from bonds

Amounts in NOK millions	2020	2019
Interest	5 962	6 035
Realised gain/-loss	41	-413
Unrealised gain/-loss	6 615	6 643
Income/-expense from bonds before foreign exchange gains/losses	12 618	12 265

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 2020 was NOK 42.5m, compared with NOK 50.4m in 2019.

Tax paid in Japan and Germany amounts to NOK 27.1m and NOK 7.4m, respectively. Norway's tax treaties with these countries entail a tax rate of 15%. Tax expense in other respects refers to smaller amounts divided among several other jurisdictions.

Accounting policies for taxation are further detailed in Note 20.9 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 (ADRs/GDRs) 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. 2020		31 Dec. 2019	
	Fair value including dividends	Accrued dividends	Fair value including dividends	Accrued dividends
Equities	119 531	84	127 598	114
Total equities	119 531	84	127 598	114
<i>Of which equities lent</i>	4 600	-	6 303	-

Table 4.2 Bonds

Amounts in NOK millions	31 Dec. 2020			31 Dec. 2019		
	Nominal value ¹	Fair value including accrued interest	Accrued interest	Nominal value ¹	Fair value including accrued interest	Accrued interest
Bonds	444 843	448 105	1 527	393 793	406 898	1 773
Total bonds	444 843	448 105	1 527	393 793	406 898	1 773
<i>Of which bonds lent</i>	-	-	-	-	-	-

¹ 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% of the share capital, with the remaining 75% 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. 2020	31 Dec. 2019
Shares in the BIS	200	200
Share capital in the BIS not paid, not recognised	397	391
Dividend received from the BIS	-	25



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 GPFG. 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					2020	
Income statement	Equities	Portfolios Fixed Income	Petroleum buffer	Total foreign exchange reserves	Other	Total
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 and short-term borrowing	-	-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
Net income/-expense from financial instruments before foreign exchange gains/losses	18 031	13 191	-28	31 194	-751	30 443
Foreign exchange gains/-losses	395	5 341	-5 696	40	-539	-499
Net income/-expense from financial instruments	18 426	18 532	-5 724	31 234	-1 290	29 944

Amounts in NOK millions					2019	
Income statement	Equities	Portfolios Fixed Income	Petroleum buffer	Total foreign exchange reserves	Other	Total
Netto inntekt/-kostnad fra:						
- Equities	28 635	-	-	28 635	25	28 660
- Bonds	-	12 265	-	12 265	-	12 265
- Financial derivatives	-71	-657	-	-728	-	-728
- Secured lending	36	126	180	342	-	342
Interest income and expense from deposits and short-term borrowing	-1	14	6	19	2	21
Interest income from lending to banks	-	-	-	-	69	69
Interest expense on deposits from banks and the Treasury	-	-	-	-	-3 042	-3 042
Net interest income from the IMF	-	-	-	-	102	102
Tax expense	-50	-	-	-50	-	-50
Other financial income/-expenses	-5	3	-3	-5	-5	-10
Net income/-expense from financial instruments before foreign exchange gains/losses	28 544	11 751	183	40 478	-2 849	37 629
Foreign exchange gains/-losses	1 278	5 290	286	6 854	153	7 007
Net income/-expense from financial instruments	29 822	17 041	469	47 332	-2 696	44 636

Table 5.2 Foreign exchange reserves by portfolio

Amounts in NOK millions					31 Dec. 2020	
Balance sheet	Equities	Portfolios Fixed income	Petroleum buffer	Total foreign exchange reserves	Other	Total
FINANCIAL ASSETS						
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
Total financial assets	119 434	470 129	21 770	611 333	157 395	768 728
FINANCIAL LIABILITIES						
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
Total financial liabilities	828	10 344	4 276	15 448	462 779	478 227
Net foreign exchange reserves	118 606	459 785	17 494	595 885		

Amounts in NOK millions					31 Dec. 2019	
Balance sheet	Portfolios			Total foreign exchange reserves	Other	Total
	Equities	Fixed income	Petroleum buffer			
FINANCIAL ASSETS						
Deposits in banks	15	10 204	6 571	16 790	441	17 231
Secured lending	100	1 726	5 839	7 665	-	7 665
Unsettled trades	-	642	-	642	-	642
Equities	121 094	-	-	121 094	201	121 295
Equities lent	6 303	-	-	6 303	-	6 303
Bonds	-	406 898	-	406 898	-	406 898
Financial derivatives	7	1	1	9	-	9
Claims on the IMF	-	-	-	-	69 075	69 075
Lending to banks	-	-	-	-	6 560	6 560
Other financial assets	64	9 770	-9 770	64	4 740	4 804
Total financial assets	127 583	429 241	2 641	559 465	81 017	640 482
FINANCIAL LIABILITIES						
Secured borrowing	100	-	-	100	-	100
Unsettled trades	-	5 877	5 839	11 716	-	11 716
Financial derivatives	1	1	-	2	-	2
Other financial liabilities	194	-	1 129	1 323	925	2 248
Liabilities to the IMF	-	-	-	-	57 235	57 235
Deposits from banks	-	-	-	-	58 888	58 888
Deposits from the Treasury	-	-	-	-	187 727	187 727
Notes and coins in circulation	-	-	-	-	41 613	41 613
Total financial liabilities	295	5 878	6 968	13 141	346 388	359 529
Net foreign exchange reserves	127 288	423 363	-4 327	546 324		

Note 6 Fair value measurement



Accounting policy

All assets and liabilities presented as *Equities, Bonds, Unlisted real estate, Financial derivatives, Secured lending and borrowing, Deposits in banks, and Cash collateral posted and received* 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 official closing rates and quoted market prices. 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, and is described in Section 5 of this note.

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 the observability of the market inputs used in the fair value measurement:

- 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. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
Equities	118 810	126 981	521	416	-	-	119 331	127 397
Bonds	444 776	404 932	3 329	1 966	-	-	448 105	406 898
Financial derivatives (assets)	12	9	-	-	-	-	12	9
Financial derivatives (liabilities)	-10	-2	-	-	-	-	-10	-2
Other ¹	-	-	28 447	12 022	-	-	28 447	12 022
Total	563 588	531 920	32 297	14 404	-	-	595 885	546 324
Total (percent)	94.6%	97.4%	5.4%	2.6%	-	-	100%	100%

¹ 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.

At year-end 2020, the valuation uncertainty for the foreign exchange reserves was generally unchanged compared with year-end 2019. The majority of foreign exchange reserves is associated with low valuation risk and is classified as Level 1. 99.6% of equity holdings and 99.3% of

bond holdings are classified as Level 1, and valuation is thus based on quoted market prices. The increase in the share classified as Level 2 is due to the increase in money market instruments compared with 2019.



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, ie 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 in NBIM and Norges Bank Markets and ICT 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 those mentioned in Table 6.1. These are investments undertaken by Norges Bank in its role as Norway's central bank of Norway to discharge 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 are 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 (obligatorily or on the basis of the business model), 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 measured 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	Classification of financial instruments				31 Dec. 2020
	Balance sheet	Based on business model	Obligatorily	Amortised cost	Total
FINANCIAL ASSETS					
Deposits in banks		24 920	-	-	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
Total financial assets		611 522	12	157 194	768 728
FINANCIAL LIABILITIES					
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
Total financial liabilities		15 438	10	462 779	478 227

Amounts in NOK millions 31 Dec. 2019

Balance sheet	Classification of financial instruments			Total
	Based on business model	Obligatorily	Amortised cost	
FINANCIAL ASSETS				
Deposits in banks	17 231	-	-	17 231
Secured lending	7 665	-	-	7 665
Unsettled trades	642	-	-	642
Equities	121 295	-	-	121 295
Equities lent	6 303	-	-	6 303
Bonds	406 898	-	-	406 898
Financial derivatives	-	9	-	9
Claims on the IMF	-	-	69 075	69 075
Lending to banks	-	-	6 560	6 560
Other financial assets	64	-	4 740	4 804
Total financial assets	559 657	9	80 816	640 482
FINANCIAL LIABILITIES				
Secured borrowing	100	-	-	100
Unsettled trades	11 716	-	-	11 716
Financial derivatives	-	2	-	2
Other financial liabilities	1 323	-	925	2 248
Liabilities to the IMF	-	-	57 235	57 235
Deposits from banks	-	-	58 888	58 888
Deposits from the Treasury	-	-	187 727	187 727
Notes and coins in circulation	-	-	41 613	41 613
Total financial liabilities	13 139	2	346 388	359 529

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.

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 streamline 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.

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%.

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 GPF. 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.

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.

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. 2020		31 Dec. 2019	
		Market value in percent	Market value	Market value in percent	Market value
EQUITY PORTFOLIO					
Equities	Americas	69%	81 335	66%	84 462
	Europe	20%	23 997	22%	28 001
	Asia and Oceania	11%	13 274	12%	14 825
Total equity portfolio		100%	118 606	100%	127 288
FIXED INCOME PORTFOLIO					
Bonds	US	48%	224 700	48%	203 230
	France	18%	84 496	19%	80 190
	Germany	15%	68 413	14%	58 605
	UK	8%	34 734	8%	33 370
	Japan	8%	33 823	8%	31 503
	China	0%	1 938	-	-
Total bonds		97%	448 104	96%	406 898
Deposits		3%	11 681	4%	16 465
Total fixed income portfolio		100%	459 785	100%	423 363
PETROLEUM BUFFER PORTFOLIO					
Deposits		100%	17 494	100%	-4 327
Total petroleum buffer portfolio			17 494		-4 327
Total foreign exchange reserves		100%	595 885	100%	546 324

Table 7.2 Equity portfolio by industry

Amounts in NOK millions	31 Dec. 2020		31 Dec. 2019	
	Market value	Share	Market value	Share
Technology	26 589	22%	22 370	18%
Financials	20 637	17%	26 148	20%
Health care	15 342	13%	16 436	13%
Consumer services	15 321	13%	14 534	11%
Industrials	15 221	13%	16 086	13%
Consumer goods	13 429	11%	13 622	10%
Basic materials	4 240	4%	4 783	4%
Oil and gas	2 999	3%	6 616	5%
Utilities	2 808	3%	3 341	3%
Telecommunications	2 660	2%	3 355	3%
Cash	-641	-1%	-2	0%
Total equity portfolio	118 606	100%	127 288	100%

Table 7.3 Foreign exchange reserves 10 largest holdings of equities

			31 Dec. 2020
Amounts in NOK millions	Sector	Market value	Share ¹
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%
Total		22 191	18.7%

¹ Market value's percentage share of the equity portfolio's total market value.

			31 Dec. 2019
Amounts in NOK millions	Sector	Market value	Share ¹
Apple Inc	Technology	3 941	3.1%
Microsoft Corp	Technology	3 580	2.8%
Alphabet Inc	Technology	2 418	1.9%
Amazon.com Inc	Consumer services	2 291	1.8%
Facebook Inc	Technology	1 469	1.2%
Berkshire Hathaway Inc	Financials	1 321	1.0%
JPMorgan Chase & Co	Financials	1 314	1.0%
Johnson & Johnson	Health care	1 165	0.9%
Visa Inc	Financials	983	0.8%
Nestlé SA	Consumer goods	947	0.7%
Total		19 429	15.2%

¹ 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 Norges Bank's investments will change in a positive or negative direction owing to movements in foreign exchange rates and the value of these investments is therefore 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, which in turn affects earnings. Modified duration is a measure of the investments'

interest rate sensitivity. At year-end, modified duration was 3.86 for the fixed income portfolio. In isolation, this means that a 1% fall in yields corresponds to a 3.86% rise in bond prices. By comparison, modified duration at year-end 2019 was 3.72.

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 0.5 percentage point for the equity and fixed income portfolios, respectively. This implies that that the relative return on the portfolios is expected to lie within the range of ± 0.5 percentage point in two out of three years.

For both the equity and fixed income portfolios, a parametric risk model is used. For the fixed income portfolio, weekly return data are used where recent observations are given more weight than old ones. For the equity portfolio, the model uses equally weighted weekly return data from the past three years.

These types of 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

	Expected volatility							
	31 Dec. 2020	Min 2020	Max 2020	Avg. 2020	31 Dec. 2019	Min 2019	Max 2019	Avg. 2019
Equity portfolio	14.8%	10.6%	14.9%	13.5%	10.6%	10.6%	12.2%	10.9%
Fixed income portfolio	13.9%	6.4%	22.5%	13.1%	6.7%	6.4%	8.4%	7.1%

	Expected relative volatility, basis points							
	31 Dec. 2020	Min 2020	Max 2020	Avg. 2020	31 Dec. 2019	Min 2019	Max 2019	Avg. 2019
Equity portfolio	8	5	29	7	9	6	10	8
Fixed income portfolio	2	1	15	3	2	1	7	4

At year-end 2020, expected absolute volatility was measured at 14.8% for the equity portfolio and 13.9% for the fixed income portfolio. This means that yearly value fluctuations on the order of NOK 18bn and NOK 64bn, respectively, can be expected. At year-end 2019, the corresponding expected value fluctuations were NOK 13bn and NOK 28bn, respectively. At year-end 2020, expected relative volatility for the equity and fixed income portfolios was 8 and 2 basis points, respectively, compared with 9 and 2 basis points, respectively, at year-end 2019.

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 an external credit rating agency. 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

Amounts in NOK millions	Credit rating	31 Dec. 2020		31 Dec. 2019	
		Market value	Share	Market value	Share
US	AAA	224 700	50%	203 230	50%
Germany	AAA	68 413	15%	58 605	14%
France	AA	84 496	19%	80 190	20%
UK	AA-	34 734	8%	33 370	8%
China	A+	1 938	0%	-	-
Japan	A	33 823	8%	31 503	8%
Total bonds		448 104	100%	406 898	100%

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.

The management of the foreign exchange reserves uses a large number of counterparties. This helps 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 a credit rating from 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 2020, 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 Counterparties¹ by credit rating

	Non brokers		Brokers	
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
AAA	3	1	-	-
AA	24	29	17	13
A	57	45	34	36
BBB	14	10	18	20
BB	2	2	5	9
B	1	-	5	6
Total	101	87	79	84

¹ Counterparties in the category "Brokers" are defined as equity and bond brokers and futures brokers. Counterparties in other transactions are classified as "Non 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. Leverage was 0% at year-end 2020, compared with 0% at year-end 2019.

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.

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.

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. 3/2020 from August 2020. 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.

Table 7.7 Expected credit loss

Amounts in NOK millions	31 Dec. 2020		31 Dec. 2019	
	Carrying amount	Expected credit loss	Carrying amount	Expected credit loss
Loans to and net claims on the IMF	17 156	-	11 840	-
Lending to banks	80 168	-	6 560	-
Other ¹	5 488	-	4 570	-
Total	102 812	-	22 970	-

¹ Primarily a 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 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

Amounts in NOK millions	31 Dec. 2020					
	USD	EUR	GBP	JPY	Other	Total
FINANCIAL ASSETS						
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
Total financial assets	328 626	178 311	44 072	46 440	13 884	611 333
FINANCIAL LIABILITIES						
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
Total financial liabilities	8 143	6 253	707	232	113	15 448
Net foreign exchange reserves	320 483	172 058	43 365	46 208	13 771	595 885

Amounts in NOK millions	31 Dec. 2019					
	USD	EUR	GBP	JPY	Other	Total
FINANCIAL ASSETS						
Deposits in banks	5 187	7 592	884	3 127	-	16 790
Secured lending	100	7 565	-	-	-	7 665
Unsettled trades	-	642	-	-	-	642
Equities	78 196	13 640	7 138	9 489	12 631	121 094
Equities lent	2 516	673	271	2 302	541	6 303
Bonds	203 230	138 795	33 370	31 503	-	406 898
Financial derivatives	8	1	-	-	-	9
Other financial assets	2	23	1	-	38	64
Total financial assets	289 239	168 931	41 664	46 421	13 210	559 465
FINANCIAL LIABILITIES						
Secured borrowing	100	-	-	-	-	100
Unsettled trades	3 086	7 935	-	695	-	11 716
Financial derivatives	1	-	-	-	1	2
Other financial liabilities	1 129	93	20	11	70	1 323
Total financial liabilities	4 316	8 028	20	706	71	13 141
Net foreign exchange reserves	284 923	160 903	41 644	45 715	13 139	546 324

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

around NOK 5.5bn, and a corresponding negative impact on the income statement from a 1% appreciation of NOK.

Table 8.2 Exchange rates

	31 Dec. 2020	31 Dec. 2019	Change ¹
Change	8.56	8.79	-3%
Euro	10.48	9.86	6%
Britiske pund	11.70	11.64	1%
Japanske yen (per 100)	8.29	8.09	3%

¹ 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, repurchase or reverse repurchase agreements.

Table 9.1 Income/expense from secured lending and borrowing

Amounts in NOK millions	2020	2019
Income/-expense from secured lending	-10	342
Income/-expense from secured borrowing	-40	-
Net income/-expense from secured lending and borrowing	-50	342

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% 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.

In 2020 a temporary US dollar liquidity swap line was established with the Federal Reserve. Under this arrangement, Norges Bank borrows

USD from the Federal Reserve, against cash collateral in NOK, and lends the USD received to Norwegian banks on the same day. Borrowing is recognised under *Secured borrowing* with the offsetting entry *Cash collateral posted*. Norges Bank receives no net income nor incurs any net expense in connection with this arrangement, since borrowing and lending transactions are in the same amount and at the same interest rate. There are no such borrowing or lending transactions at 31 December 2020. See further information regarding lending to banks in Note 18 *Loans and deposits*.



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 transaction

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Secured lending	18 340	7 665
<i>Of which unsettled trades (liability)</i>	10 409	7 565
Secured lending excluding unsettled trades	7 931	100
Associated collateral in the form of securities (off-balance sheet)		
Equities received as collateral	-	-
Bonds received as collateral	8 206	106
Total security collateral received related to lending	8 206	106

Table 9.3 Transferred financial assets and secured borrowing

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Transferred financial assets		
Equities lent	4 600	6 303
Total transferred financial assets	4 600	6 303
Associated cash collateral, recognised as liability		
Secured borrowing	23	100
<i>Of which unsettled trades (assets)</i>	-	-
Secured borrowing excluding unsettled trades	23	100
Associated collateral in the form of securities (off-balance sheet)		
Equities received as collateral	3 704	5 686
Bonds received as collateral	1 359	1 103
Total security collateral received related to transferred financial assets	5 063	6 789

Cash collateral received is reinvested in its entirety. No securities received as collateral were reinvested at year-end 2020 or 2019.

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.

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.

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 *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 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 columns *Assets/Liabilities 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

Amounts in NOK millions	31 Dec. 2020						
	Gross financial assets as recognised in the balance sheet	Assets not subject to enforce- able netting agree- ments	Amounts subject to enforceable netting agreements				
			Assets in the balance sheet subject to netting	Financial liabilities related to same counter- party	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral
ASSETS							
Secured lending	18 340	10 409	7 931	-	-	7 931	-
Financial derivatives	12	12	-	-	-	-	-
Total	18 352	10 421	7 931	-	-	7 931	-

Amounts in NOK millions	31 Dec. 2020						
	Gross financial liabilities as recog- nised in the balance sheet	Liabilities not subject to enforce- able netting agree- ments	Amounts subject to enforceable netting agreements				
			Liabilities in the balance sheet subject to netting	Financial assets related to same counter- party	Cash collateral posted (recognised as asset)	Security collateral posted (not derecog- nised)	Liabilities after netting and collateral
LIABILITIES							
Secured lending	23	-	23	-	-	23	-
Financial derivatives	10	10	-	-	-	-	-
Total	33	10	23	-	-	23	-

Amounts in NOK millions	31 Dec. 2019						
	Gross financial assets as recognised in the balance sheet	Assets not subject to enforce- able netting agree- ments	Amounts subject to enforceable netting agreements				
			Assets in the balance sheet subject to netting	Financial liabilities related to same counter- party	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral
ASSETS							
Secured lending	7 665	7 565	100	-	-	100	-
Financial derivatives	9	9	-	-	-	-	-
Total	7 674	7 574	100	-	-	100	-

Amounts in NOK millions	31 Dec. 2019						
	Gross financial liabilities as recog- nised in the balance sheet	Liabilities not subject to enforce- able netting agree- ments	Amounts subject to enforceable netting agreements				
			Liabilities in the balance sheet subject to netting	Financial assets related to same counter- party	Cash collateral posted (recognised as asset)	Security collateral posted (not derecog- nised)	Liabilities after netting and collateral
LIABILITIES							
Secured lending	23	-	100	-	-	98	2
Financial derivatives	10	10	-	-	-	-	-
Total	33	10	100	-	-	98	2

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 the year the employee is working up until age 75. Employees contribute 2% 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. 2020	31 Dec. 2019
Members drawing retirement benefits	950	1 021
Active members (including all those affected by restructuring)	758	769
Members who have left the Bank with vested rights	1 038	987
Total number of pension plan members	2 746	2 777

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% take-up rate and early retirement pensions 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 2019 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. 2020	31 Dec. 2019
Discount rate	1.70%	2.30%
Interest rate on assets	1.70%	2.30%
Rate of compensation increase	2.25%	2.25%
Rate of pension increase	1.25%	1.25%
Increase in social security base amount (G)	2.00%	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. 2020	31 Dec. 2019
Change in defined benefit obligation (DBO) incl. payroll tax		
DBO at beginning of year	4 414	4 435
Service cost	139	166
Interest cost	102	113
Plan amendments	89	-
Payroll tax on employer contribution	-14	-29
Benefits paid	-148	-150
Remeasurement loss/-gain	500	-121
DBO at year-end	5 082	4 414
Change in plan assets		
Fair value of assets at beginning of year	4 746	4 577
Interest income	103	113
Employer contribution incl. payroll tax	109	236
Payroll tax on employer contribution	-14	-29
Benefits paid	-141	-144
Remeasurement (loss) gain	435	-7
Fair value of assets at year-end	5 238	4 746
Pension scheme not recognised in the actuarial calculation	1	1
Net amount recognised in the balance sheet	-155	-331

Table 11.4 Specification of funded and unfunded plans

Amounts in NOK millions	31 Dec. 2020			31 Dec. 2019		
	Funded plan	Unfunded plans	Total	Funded plan	Unfunded plans	Total
Accrued benefit obligations	4 873	210	5 083	4 233	182	4 415
Plan assets	-5 238	-	-5 238	-4 746	-	-4 746
Net benefit obligation/-net plan assets	-365	210	-155	-513	182	-331

Table 11.5 Allocation of plan assets for funded plan

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Bonds	2 693	2 399
Equities	1 893	1 786
Real estate	652	561
Total	5 238	4 746

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 101.9m in 2020 and NOK 89.1m in 2019.

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

Table 11.6 Pension expense

Amounts in NOK millions	2020	2019
Service cost and cost of benefit changes	233	171
Service cost incl. interest and payroll tax	139	167
Administration cost incl. payroll tax	5	4
Effect of plan amendments incl. payroll tax	89	-
Financial cost/-income	-6	-4
Net interest cost/-income incl. payroll tax	-6	-4
Net periodic pension cost	227	167
Other comprehensive income (OCI) in the period		
Remeasurement loss/-gain – change in discount rate	545	266
Remeasurement loss/-gain – change in other economic assumptions	-	-433
Remeasurement loss/-gain – change in mortality table	-	-
Remeasurement loss/-gain – change in other demographic assumptions	-	-
Remeasurement loss/-gain – experience adjustments, DBO	-45	46
Remeasurement loss/-gain – experience adjustments, assets	-471	-14
Investment management cost	36	21
OCI losses/-gains in the period	65	-114

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% of fixed salary for employees in London, up to 8% of fixed salary for employees in New York, and up to 20% 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 35.4m in 2020 and NOK 31.6m in 2019. The cost of pension plans for locally employed staff of offices outside of Norway is presented under *Other personnel expenses* in Table 12.1.

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. 2020			
	Discount rate	General compensation increase	ABO pensioners / DBO other ¹	Change ²
Assumptions at 31 Dec. 2020	1.70%	2.25%	5 082	I/A
Discount rate + 0.5%	2.20%	2.25%	4 621	-9.07%
Discount rate - 0.5%	1.20%	2.25%	5 617	10.53%
General compensation increase + 0.5%	1.70%	2.75%	5 265	3.60%
General compensation increase - 0.5%	1.70%	1.75%	4 913	-3.33%

¹ Amounts in NOK millions.

² Percentage change in the pension benefit obligation.



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*).

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. New members of the leader group previously entitled to performance-based pay will receive performance-based pay that has been held back over the following three years. Salary paid to CEO Yngve Slyngstad was NOK 6m up until he stepped down on 31 August, and salary paid to

CEO Nicolai Tangen was NOK 2.7m after he assumed office on 1 September.

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 capped at 100% of fixed salary, but for a limited number of employees at international offices, the cap may be up to 200% of fixed salary. 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% is paid the year after it is accrued, and the other 50% 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% of fixed salary, 40% is paid the year after it is accrued, and other 60% is held back and paid over the following three years.

At year-end 2020, 217 employees of NBIM received performance-based pay, 13 of whom were employed by subsidiaries. Their total upper limit for performance-based pay was NOK 390m. Employees receiving performance-based pay earned on average 71% of the total limit for 2020, based on performance over several years.

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 2020 confirmed that the implementation of the remuneration scheme 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 2020.

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. The maximum bonus payment per year may not exceed the

fixed salary. Two-thirds is paid in the year after it is accrued and the remaining third is held back and paid over the following two years.

Eleven employees had a performance-based pay agreement in 2020. Employees receiving performance-based pay earned on average 29.8% of the total limit for 2020.

Table 12.1 Number of employees/FTEs

Amounts in NOK millions	2020	2019
Salary and fees	1 512	1 426
Employer's social security contributions	178	177
Pension expense, see Note 11 <i>Pension</i>	227	167
Other personnel expenses	167	231
Personnel expenses	2 084	2 001

Table 12.2 Number of employees/FTEs

	31 Dec. 2020	31 Dec. 2019
Number of employees	925	940
Number of FTEs	922	935

Benefits to governing bodies

Supervisory Council

Total remuneration paid in 2020 was NOK 1 117 331. Of this amount, fixed remuneration was NOK 904 100. Remuneration rates for 2020 were set by the Storting as from 1 January 2020 (cf. Recommendation 54 S (2019-2020)).

The remaining NOK 213 331 is other remuneration for attending meetings, including for lost earnings. Total remuneration paid in 2019 was NOK 1 115 960.

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 2020.

Table 12.3 Remuneration to the Supervisory Council and the Permanent Committee

Amounts in NOK millions	2020		
	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	-
Amounts in NOK millions	2019		
	Total remuneration per member	Supervisory Council	The Permanent Committee
Chair	155 900	62 400	93 500
Deputy chair	104 000	41 600	62 400
Three members of the Permanent Committee	93 600	31 200	62 400
10 members of the Supervisory Council	31 200	31 200	-
Two permanent alternates ¹	31 200	31 200	-

¹ In addition, alternates to the Permanent Committee received NOK 3 600 for each meeting.

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 remuner-

ation to members and alternates of the Executive Board and its committees was NOK 2 361 871 in 2020 compared with NOK 2 357 300 in 2019.

Table 12.4 Remuneration to the Executive Board

Amounts in NOK millions						2020
Name	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 Sjørnsen ¹	58 333	58 333	-	-	-	-
Benedicte Schilbred Fasmer ²	55 713	43 750	8 563	3 400	-	-

¹ Appointed on 30 October 2020.

² Served in the period 1 April 2020 to 15 May 2020.

Amounts in NOK millions						2019
Name	Total remuneration	Executive Board	Audit Committee	Remuneration Committee	Ownership Committee	Risk and Investment Committee
Kjetil Storesletten	352 600	266 400	-	-	-	86 200
Karen Helene Ulltveit-Moe	392 400	266 400	79 000	-	47 000	-
Kathryn M. Baker	418 700	266 400	66 100	-	-	86 200
Steinar Juel	358 800	266 400	66 100	26 300	-	-
Kristine Ryssdal	313 400	266 400	-	-	47 000	-
Arne Hyttnes (alternate)	260 700	234 400	-	26 300	-	-
Kristine Landmark (alternate)	260 700	234 400	-	26 300	-	-

Monetary Policy and Financial Stability Committee – external members
The Monetary Policy and Financial Stability Committee was established in. Work is remun-

nerated at fixed annual rates as set by the Ministry of Finance. Total remuneration to members of the Monetary Policy and Financial Stability Committee in 2020 was NOK 640 000.

Table 12.5 Remuneration to the Monetary Policy and Financial Stability Committee

Amounts in NOK millions		2020
Name	Total remuneration	
Ingvild Almås	320 000	
Jeanette Fjære-Lindkjenn	320 000	

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 contractu-

ally 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 millions					2020
	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 ¹	1 538 299	13 408	243 109	-
Chief Executive Officer – NBIM	Nicolai Tangen ²	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	-
Former executives					
Deputy Governor	Jon Nicolaisen ³	1 923 133	179 970	113 830	-
Deputy Governor	Egil Matsen ⁴	519 862	2 283	30 325	-
Chief Executive Officer – NBIM	Yngve Slyngstad ⁵	4 511 094	11 482	433 722	-

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

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

³ Resigned from this position on 4 December 2020. Remuneration shown from the date the resignation became effective.

⁴ Resigned from this position on 30 March 2020. Remuneration shown from the date the resignation became effective.

⁵ Resigned from this position on 31 August 2020. Remuneration shown from the date the resignation became effective.

Amounts in NOK millions					2019
	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Governor	Øystein Olsen	2 450 028	173 643	285 893	-
Deputy Governor	Jon Nicolaisen	2 013 297	21 110	133 750	23 334
Deputy Governor	Egil Matsen	2 010 370	19 989	125 770	-

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

Amounts in NOK millions					2020
	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 ¹	406 250	1 520	55 369	-
Executive Director, Markets and ICT	Olav Andreas Bø	2 058 038	7 432	308 022	-
Former senior executives					
Executive Director, Monetary Policy	Ida Wolden Bache ²	430 956	4 470	79 853	-

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

² Resigned from this position on 31 March 2020. Remuneration shown from the date the resignation became effective.

Amounts in NOK millions					2019
	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan
Executive Director, Financial Stability	Torbjørn Hægeland	1 711 114	22 231	388 198	-
Executive Director, Monetary Policy	Ida Wolden Bache	1 734 767	7 974	245 123	-
Executive Director, Markets and ICT	Olav Andreas Bø	2 016 069	8 504	290 876	-
Executive Director, Corporate and Shared Services	Jane Kristin Aamodt Haugland	1 708 307	15 612	343 408	1 897 149
Executive Director, General Secretariat	Birger Vikøren	1 645 016	12 859	332 594	-
Director, Internal Audit	Ingunn Valvatne	1 750 753	27 429	380 335	798 199
Director, Communications and External Relations	Runar Malkenes	1 415 284	9 692	480 441	-
General Counsel	Marius Ryel	1 799 562	16 343	556 239	-

Remuneration to senior executives in Norges Bank Investment Management

In connection with the appointment of a new CEO of NBIM, a new leader group was established in October 2020. Changes in the leader group are shown in Table 12.8.

Table 12.8 Remuneration to senior executives in Norges Bank Investment Management

Amounts in NOK millions		2020				
	Name	Gross salary	Gross performance pay	Value of other benefits	Pension benefits earned	Employee loan
Chief Executive Officer	Nicolai Tangen ¹	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 ²	814 555	-	2 536	89 114	-
Chief Real Assets Officer	Mie Caroline Holstad ²	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 ^{3,4}	4 091 916	75 934	90 456	409 192	-
Chief Equities Officer	Petter Johnsen ³	8 438 073	-	110 216	843 807	-
Chief Real Assets Strategies Officer	Geir Øivind Nygård ⁴	4 521 252	351 680	7 296	241 751	-
Former senior executives						
Chief Executive Officer	Yngve Slyngstad ⁷	4 511 094	-	11 482	433 722	-
Chief Investment Officer Allocation Strategies	Ole Christian Bech-Moen ⁶	4 486 923	-	6 398	206 374	-
Chief Compliance and Control Officer	Stephen A. Hirsch ⁵	3 217 419	-	8 744	313 892	-
Chief Financial Officer	Hege Gjerde ⁵	2 152 561	-	5 472	255 250	1 250 201
Chief People and Operations Officer	Nina Kathrine Hammerstad ⁵	2 325 845	-	5 564	275 935	-
Chief Investment Officer Real Estate	Karsten Kallevig ⁸	4 009 633	-	5 784	243 940	-

¹ Began in this position on 1 September 2020. Remuneration shown from the date the appointment became effective.

² Began in this position on 6 October 2020. Remuneration shown from the date the appointment became effective.

³ 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.

⁴ The amounts reported in the column Gross performance pay are accrued and have been expensed in earlier periods, but disbursed during the financial year.

⁵ Resigned from this position on 5 October 2020. Remuneration shown up until the resignation became effective.

⁶ Resigned from this position on 14 October 2020. Remuneration shown up until the resignation became effective.

⁷ Resigned from this position on 31 August 2020. Remuneration shown until the resignation became effective.

⁸ Resigned from this position on 30 September 2020. Remuneration shown until the resignation became effective.

Amounts in NOK millions	Name	Gross salary	Gross performance pay	Value of other benefits	Pension benefits earned	Employee loan
Chief Executive Officer	Yngve Slyngstad	6 721 094	-	9 597	590 683	-
Deputy Chief Executive Officer	Trond Grande	4 713 889	-	7 069	357 573	-
Chief Compliance and Control Officer	Stephen A. Hirsch	4 207 019	-	18 330	296 401	-
Chief Corporate Governance Officer	Carine Smith Ihenacho ^{1,2}	3 598 737	57 633	77 587	359 874	-
Chief Financial Officer	Hege Gjerde ¹	2 818 339	202 876	8 120	299 642	1 356 964
Chief Investment Officer Allocation Strategies	Ole Christian Bech-Moen ¹	4 480 911	-	13 363	252 412	-
Chief Investment Officer Asset Strategies	Geir Øivind Nygård ¹	4 554 383	564 447	18 722	211 953	500 000
Chief Investment Officer Equity Strategies	Petter Johnsen ²	7 867 369	-	85 884	786 737	-
Chief Investment Officer Real Estate	Karsten Kallevig ³	5 322 133	-	15 308	331 247	-
Chief Operating Officer	Age Bakker	3 801 524	-	16 384	391 432	-
Chief People and Operations Officer	Nina Kathrine Hammerstad ⁴	3 041 218	-	12 544	290 160	-
Chief Risk Officer	Dag Huse	4 581 515	-	6 960	587 080	-
Former senior executives						
Chief Human Resources Officer	Sirine Fodstad ⁵	1 617 561	-	4 431	177 454	-
Chief Administrative Officer	Mie Caroline Holstad ⁶	887 022	-	4 098	94 067	-
Chief Compliance and Control Officer	Jan Thomsen ⁷	861 678	-	2 232	95 025	-
Chief Investment Officer Europe	Romain Veber ^{1,2,7}	1 253 108	818 562	16 832	125 311	-
Chief Investment Officer US	Per Løken ^{1,7}	650 000	62 373	2 426	58 006	-
Chief Risk Officer	Lars Oswald Dahl ⁷	850 000	-	1 740	96 784	-

- ¹ The amounts reported in the column Gross performance pay are accrued and have been expensed in earlier periods, but disbursed during the financial year.
- ² 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.
- ³ Began in this position on 1 April 2019. Previous leader group position in Norges Bank Real Estate Management leader group. Remuneration shown for all of 2019.
- ⁴ Began in this position on 1 April 2019. Previous leader group position in Norges Bank Real Estate Management. Remuneration shown for all of 2019.
- ⁵ Resigned from this position on 31 May 2019. Remuneration shown up until the resignation became effective.
- ⁶ Previous leader group position in Norges Bank Real Estate Management. Remuneration shown until 31 May 2019.
- ⁷ Previous leader group position in Norges Bank Real Estate Management. Remuneration shown until 31 March 2019.

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% 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 2020 was 1.5%. Total loans to employees at 31 December 2020 were NOK 182.9m, compared with NOK 258m at 31 December 2019.

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*.

The management fee for the year is cash-settled in the following accounting year and is presented at year-end under *Other financial assets*. The asset 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 administration fees invoiced separately to Norges Bank's

subsidiaries in Norway and including performance-based fees to external managers. The management fee was NOK 5 305m in 2020 and NOK 4 312m in 2019. See Note 20.11 *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. 2020	31 Dec. 2019
Non-current assets	1 626	1 808
Gold	291	291
Art and numismatic collections	89	89
Other assets	113	106
Non-financial assets	2 119	2 294

Table 14.2 Non-current assets

Amounts in NOK millions						2020	
	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	-	-	-	-	-	-	
Cost at 31 Dec.	726	3 266	60	268	36	4 356	
- 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	-	-	-	-	-	-	
Depreciation and impairment at 31 Dec.	-588	-1 906	-	-236	-	-2 730	
Carrying amount at 31 Dec.	138	1 360	60	32	36	1 626	
Depreciation schedule, no. of years	3-6	5-75	none	4-10	none		

Amounts in NOK millions						2019	
	Intangible assets	Property, plant and equipment			Plant under construction	Total	
	Software	Buildings	Land	Other			
Cost at 1 Jan.	731	3 143	60	368	153	4 455	
+ Additions for the year	73	80	-	6	-	160	
- Disposals for the year	-79	-35	-	-108	-11	-233	
-/+ Adjustments for the year	-	-	-	-	-	-	
Cost at 31 Dec.	725	3 188	60	267	143	4 382	
- Accumulated depreciation and impairment at 1 Jan.	-494	-1 742	-	-272	-	-2 508	
+ Disposals depreciation for the year	80	35	-	108	-	223	
- Depreciation for the year	-114	-102	-	-73	-	-289	
- Impairment for the year	-	-	-	-	-	-	
Depreciation and impairment at 31 Dec.	-528	-1 808	-	-237	-	-2 574	
Carrying amount at 31 Dec.	197	1 379	60	30	143	1 808	
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 2020 is NOK 0.

Note 15 Other operating expenses and other operating income

Other operating expenses

Table 15.1 Other operating expenses

Amounts in NOK millions	2020	2019
Custody costs	497	453
IT services, systems and data	959	945
Research, consulting and legal fees	350	359
Other costs	362	470
Total other operating expenses excl. external managers	2 168	2 227
Base fees to external managers	728	611
Performance-based fees to external managers	1 282	291
Total fees to external managers	2 010	902
Total other operating expenses	4 178	3 129
Depreciation, amortisation and impairment losses	219	289
Personnel expenses	2 084	2 001
Total operating expenses	6 481	5 419

Table 15.2 Fees, external auditor

Amounts in NOK thousands, inclusive VAT	Norges Bank		Subsidiaries ¹	
	2020	2019	2020	2019
Statutory audit	14 638	15 455	7 991	7 074
Other assurance services ²	4 444	320	101	400
Tax advice	-	-	-	46
Other services	206	-	-	-
Total fees, external auditor	19 288	15 775	8 092	7 519

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

² In 2017, the external auditor assisted 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.

Other operating income

Table 15.3 Other operating income

Amounts in NOK millions	2020	2019
Services, banks	90	66
Services, government (see Note 19 <i>Related parties</i>)	-	42
Rent (see Note 19 <i>Related parties</i>)	27	27
Management fee (see Note 19 <i>Related parties</i>)	2	0
Other income	2	4
Total other operating income	121	139

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*.



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Table 16.1 Notes and coins in circulation

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
DENOMINATION		
50-krone	1 031	1 029
100-krone	2 126	2 194
200-krone	6 380	6 362
500-krone	19 570	16 064
1000-krone	7 560	11 592
Total notes	36 667	37 241
Total coins	4 339	4 372
Total	41 006	41 613

Of notes and coins in circulation at 31 December 2020, NOK 7 475m 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 2020 or 2019. In 2020, withdrawn notes and coins were redeemed in the amount of NOK 7.5m, compared with NOK 10.3m in 2019.

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. 2020
Amounts in NOK millions	Loan resource commitments ¹	Amounts drawn on commitments	Subscription ²	SDRs	Total amount recognised
Financial assets					
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
Claims on the IMF	110 935	5 762	46 461	18 858	71 081
Financial liabilities					
Krone liability to the IMF			34 584		34 584
Equivalent value of SDR allocations				19 341	19 341
Liabilities to the IMF			34 584	19 341	53 925
Net positions with the IMF		5 762	11 877	-483	17 156

¹ 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.

² 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.

					31 Dec. 2019
Amounts in NOK millions	Loan resource commitments ¹	Amounts drawn on commitments	Subscription ²	SDRs	Total amount recognised
Financial assets					
IMF subscription (quota)			45 791		45 791
Holdings of Special Drawing Rights (SDRs)				20 283	20 283
Loans to the IMF - NAB	23 954	1 256			1 256
Loans to the IMF - Bilateral borrowing agreement	73 080	-			-
Loans to the IMF - PRGT	7 308	1 745			1 745
Claims on the IMF	104 342	3 001	45 791	20 283	69 075
Financial liabilities					
Krone liability to the IMF			38 172		38 172
Equivalent value of SDR allocations				19 063	19 063
Liabilities to the IMF			38 172	19 063	57 235
Net positions with the IMF		3 001	7 619	1 220	11 840

¹ 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.

² 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 2020, SDR 1 was equal to NOK 12.37.

Norges Bank's potential credit exposure to the IMF is considerable. However, the risk associated with loans to the IMF is very low. See Note 7 Investment risk for a discussion of the credit risk associated with loans to the IMF

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 2020 was SDR 3 755m, unchanged from 2019.

Holdings and equivalent value of Special Drawing Rights (SDRs)

SDRs are periodically allocated to IMF member countries, most recently in 2009. 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 2020, a total of SDR 1 563m had been allocated to Norway, unchanged from 2019. Norway's holdings of SDRs have been deposited with the IMF and amounted to SDR 1 524m at 31 December 2020, compared with SDR 1 663m at year-end 2019.

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 2020, Norway's total resource commitments under the NAB were SDR 1 967, unchanged from 2019. Norges Bank's loans to the IMF under the NAB at 31 December 2020 totalled SDR 84m compared with SDR 103m at year-end 2019.

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 6bn. 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. Norway's commitments for future payments to the PRGT are thus limited to SDR 400m. Loans to the PRGT at 31 December 2020 totalled SDR 381m, compared with SDR 143 at year-end 2019.

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 2020, krone deposits from the IMF totalled SDR 2 795m, compared with SDR 3 130m at year-end 2018.

Net interest income on claims on and liabilities to the IMF

Table 17.2 Net interest income, claims on/liabilities to the IMF

Amounts in NOK millions	2020			
	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
Net interest income from the IMF	12	44	1	57

Amounts in NOK millions	2019			
	Amount drawn on loan resource commitments	Subscription	SDRs	Total
Interest income from the IMF	40	449	195	684
Interest expenses to the IMF	-	-392	-190	-582
Net interest income from the IMF	40	57	5	102

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.

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.

Interest on IMF lending programmes

Interest is calculated monthly and netted quarterly (NAB) and semi-annually (PRGT). 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. 2020	31 Dec. 2019
Fixed-rate loans to banks	80 168	6 560
Total lending to banks	80 168	6 560

In 2020, extraordinary F-loans were extended to banks to ensure pass-through of the policy rate to money market rates. Several of these F-loans, which were extended in early 2020, do not mature until 2021, and the balance of F-loans at

31 December 2020 is consequently larger than normal.

See Note 7 *Investment risk* for a discussion of credit risk associated with lending.

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Table 18.2 Deposits from banks

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Sight and reserve deposits from banks	40 578	40 143
Fixed-rate deposits from banks	12 000	18 004
Other deposits	229	741
Deposits from banks	52 807	58 888

Table 18.3 Deposits from the Treasury

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Deposits from the Treasury	313 131	187 727
Deposits from the Treasury	313 131	187 727

Table 18.4 Interest income from lending to bank

Amounts in NOK millions	2020	2019
Interest income on Fixed-rate loans to banks	206	69
Total interest income from lending to banks	206	69

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 79.7 days in 2020 and 3.6 days in 2019. Average maturity on fixed rate F-loans to banks was 2.0 days in 2020, compared with 2.5 days in 2019.

Foreign currency F-loans were extended to some banks as part of ensuring USD liquidity in the Norwegian banking market. Based on F-loan auctions in USD, participating banks were able to receive USD from Norges Bank. The loans were recognised under Lending to banks. Norges Bank earns no net income nor incurs any expense in connection with this arrangement, since borrowing and lending transactions are in the same amount and at the same interest rate. There are no such borrowing or lending

transactions at 31 December 2020. See further information regarding the borrowing transactions with the Federal Reserve in Note 9 *Secured lending and borrowing*.

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	2020	2019
Interest expense on sight and reserve deposits from banks	-119	-394
Interest expense on fixed-rate deposits from banks	-182	-318
Interest expense on depots operated by banks	-2	-6
Interest expense on deposits from the Treasury	-670	-2 324
Total interest expense on banks' and Treasury deposits	-973	-3 042

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, ie the interest rate on the F-deposits depends on

the benchmark rate in the money market. Average maturity on F-deposits was 1.7 days in 2020 and 3.6 days in 2019.

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 rates, weighted by the investments in the foreign exchange reserves.

In 2020, interest on Treasury deposits was paid at an annual rate of 0.75% in Q1, 0.5% in Q2 and 0% in Q3 and Q4. In 2019, interest was paid on these deposits at an annual rate of 1.25% in Q1 through Q3 and 1% in 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 GPFPG, 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 GPFPG. 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*.

Management of the GPFPG

The Ministry of Finance has placed funds for asset management by the GPFPG as a krone deposit in a special account with Norges Bank (the krone account). GPFPG 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 GPFPG *Statement of changes in owner's capital*.

Norges Bank charges the Ministry of Finance a management fee relating to management of the GPFPG, which amounted to NOK 5 305m in 2019 and NOK 4 312m in 2019. For further information, see Note 20.11 *Management costs*.

Transactions between Norges Bank and the GPFPG

Internal trades in the form of money market lending or borrowing between the GPFPG 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.

Transactions between Norges Bank and wholly owned subsidiaries

As part of the management of the GPFPG's real estate investments, Norwegian subsidiaries have been established that are wholly owned by Norges Bank. These subsidiaries are charged a quarterly administration fee. For 2020, invoiced administration fees totalled NOK 1.5m.

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. Costs related to these tasks amounted to NOK 41.6m in 2019.

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 15.2m for 2020 and NOK 19.7bn for 2019.

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.

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 26.8m in 2020 and NOK 26.9m in 2019.

Note 20 Government Pension Fund Global (GPFG)

Income statement

Amounts in NOK millions	Note	2020	2019
Profit/loss on the portfolio before foreign exchange gain/loss			
Income/expense from:			
- Equities	4	883 788	1 486 909
- Bonds	4	198 080	192 820
- Unlisted real estate	6	-1 017	16 175
- Financial derivatives	4	-6 891	353
- Secured lending	12	4 028	4 529
- Secured borrowing	12	-751	-1 926
Tax expense	9	-7 513	-6 827
Interest income/expense		25	77
Other income/expense		-35	-8
Profit/loss on the portfolio before foreign exchange gain/loss		1 069 713	1 692 103
Foreign exchange gain/loss	10	57 948	126 679
Profit/loss on the portfolio		1 127 661	1 818 782
Management fee	11	-5 305	-4 312
Profit/loss and total comprehensive income		1 122 356	1 814 470

Balance sheet

Amounts in NOK millions	Note	31 Dec. 2020	31 Dec. 2019
Assets			
Deposits in banks		18 258	14 476
Secured lending	12,13	192 526	222 946
Cash collateral posted	13	5 715	1 090
Unsettled trades		4 460	3 169
Equities	5	7 538 156	6 714 195
Equities lent	5,12	438 353	426 623
Bonds	5	2 343 362	2 316 823
Bonds lent	5,12	520 978	479 852
Financial derivatives	5,13	2 551	3 335
Unlisted real estate	6	272 507	264 538
Other assets	16	3 574	3 737
Total assets		11 340 440	10 450 786
Liabilities and owner's capital			
Secured borrowing	12,13	390 380	338 266
Cash collateral received	13	6 004	6 754
Unsettled trades		20 326	13 894
Financial derivatives	5,13	7 619	3 294
Other liabilities	16	2 350	495
Management fee payable	11	5 305	4 312
Total liabilities		431 983	367 015
Owner's capital		10 908 457	10 083 771
Total liabilities and owner's capital		11 340 440	10 450 786



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*.

Management fee shown in the *Statement of cash flows* for a period is the settlement of the fee that was accrued and expensed in the previous year.

Statement of cash flows

Amounts in NOK millions, receipt (+) / payment (-)	Note	2020	2019
Operating activities			
Receipts of dividend from equities		152 788	172 591
Receipts of interest from bonds		60 255	67 751
Receipts of interest and dividend from unlisted real estate	6	8 375	5 865
Net receipts of interest and fee from secured lending and borrowing		3 053	2 711
<i>Receipts of dividend, interest and fee from holdings of equities, bonds and unlisted real estate</i>		224 470	248 918
Net cash flow from purchase and sale of equities		-80 610	-256 760
Net cash flow from purchase and sale of bonds		102 085	23 993
Net cash flow to/from investments in unlisted real estate	6	-15 997	-5 300
Net cash flow financial derivatives		-5 499	-357
Net cash flow cash collateral related to derivative transactions		-6 080	3 556
Net cash flow secured lending and borrowing		94 317	-18 907
Net payment of taxes	9	-5 724	-6 648
Net cash flow related to interest on deposits in banks and bank overdraft		-10	44
Net cash flow related to other income/expense, other assets and other liabilities		-623	22
Management fee paid to Norges Bank	11	-4 312	-4 544
Net cash inflow/outflow from operating activities		302 018	-15 983
Financing activities			
Inflow from the Norwegian government		5 032	32 051
Withdrawal by the Norwegian government		-301 800	-14 400
Net cash inflow/outflow from financing activities		-296 768	17 651
Net change deposits in banks			
Deposits in banks at 1 January		14 476	11 561
Net increase/decrease of cash in the period		5 250	1 668
Net foreign exchange gain/loss on cash		-1 467	1 246
Deposits in banks at end of period		18 258	14 476



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.

Statement of changes in owner's capital

Amounts in NOK millions	Inflows from owner	Retained earnings	Total owner's capital
1 January 2019	3 366 340	4 885 061	8 251 401
Profit/loss and total comprehensive income	-	1 814 470	1 814 470
Inflow during the period ¹	32 300	-	32 300
Withdrawal during the period ¹	-14 400	-	-14 400
31 December 2019	3 384 240	6 699 531	10 083 771
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 ¹	4 130	-	4 130
Withdrawal during the period ¹	-301 800	-	-301 800
31 December 2020	3 086 570	7 821 887	10 908 457

¹ There was an inflow to the krone account of NOK 4.1bn in 2020, while NOK 306.1bn was withdrawn from the krone account. Of this, NOK 4.3bn was used to pay the accrued management fee for 2019. There was an inflow of NOK 32.3bn to the krone account in 2019, while NOK 18.9bn was withdrawn from the krone account. Of this, NOK 4.5bn was used to pay the accrued management fee for 2018.

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

	2020	2019
Returns measured in the fund's currency basket (percent)		
Return on equity investments	12.14	26.02
Return on fixed-income investments	7.46	7.56
Return on unlisted real estate investments	-0.08	6.84
Return on fund	10.86	19.95
Relative return on fund (percentage points)	0.27	0.23
Returns measured in Norwegian kroner (percent)		
Return on equity investments	12.70	28.20
Return on fixed-income investments	8.00	9.41
Return on unlisted real estate investments	0.42	8.68
Return on fund	11.41	22.01

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.

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 millions	2020	2019
Dividends	157 477	173 225
Realised gain/loss	103 946	104 429
Unrealised gain/loss	622 365	1 209 256
Income/expense from equities before foreign exchange gain/loss	883 788	1 486 909

Table 4.2 Specification Income/expense from bonds

Amounts in NOK millions	2020	2019
Interest	62 213	67 097
Realised gain/loss	71 432	38 143
Unrealised gain/loss	64 436	87 580
Income/expense from bonds before foreign exchange gain/loss	198 080	192 820

Table 4.3 Specification Income/expense from financial derivatives

Amounts in NOK millions	2020	2019
Interest	-1 186	1 146
Realised gain/loss	-5 702	-57
Unrealised gain/loss	-3	-735
Income/expense from financial derivatives before foreign exchange gain/loss	-6 891	353

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 12 *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 7 *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 millions	31 Dec. 2020		31 Dec. 2019	
	Fair value incl. accrued dividends	Accrued dividends	Fair value incl. accrued dividends	Accrued dividends
Equities	7 976 509	6 973	7 140 818	8 292
Total equities	7 976 509	6 973	7 140 818	8 292
<i>Of which equities lent</i>	438 353		426 623	

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 millions	31 Dec. 2020			31 Dec. 2019		
	Nominal value	Fair value incl. accrued interest	Accrued interest	Nominal value	Fair value incl. accrued interest	Accrued interest
Government bonds						
Government bonds issued in the government's local currency	1 389 636	1 523 986	6 406	1 404 163	1 526 110	10 076
Total government bonds	1 389 636	1 523 986	6 406	1 404 163	1 526 110	10 076
Government-related bonds						
Sovereign bonds	5 251	5 525	45	7 099	7 642	94
Bonds issued by local authorities	108 392	121 827	600	94 219	104 104	629
Bonds issued by supranational bodies	53 855	57 155	219	47 506	49 790	285
Bonds issued by federal agencies	122 001	128 258	399	150 843	155 619	587
Total government-related bonds	289 498	312 765	1 263	299 667	317 155	1 596
Inflation-linked bonds						
Inflation-linked bonds issued by government authorities	141 583	169 965	350	157 821	174 406	424
Total inflation-linked bonds	141 583	169 965	350	157 821	174 406	424
Corporate bonds						
Bonds issued by utilities	55 620	63 618	591	45 768	50 253	532
Bonds issued by financial institutions	255 026	272 234	2 039	245 018	253 261	2 214
Bonds issued by industrial companies	328 095	366 365	2 855	304 445	325 659	2 801
Total corporate bonds	638 741	702 216	5 485	595 230	629 172	5 547
Securitised bonds						
Covered bonds	160 209	155 409	657	155 564	149 833	848
Total securitised bonds	160 209	155 409	657	155 564	149 833	848
Total bonds	2 619 667	2 864 341	14 161	2 612 446	2 796 675	18 490
<i>Of which bonds lent</i>		520 978			479 852	

Financial derivatives

Financial derivatives such as foreign exchange derivatives, interest rate 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 millions	31 Dec. 2020			31 Dec. 2019		
	Notional amount	Fair value		Notional amount	Fair value	
		Asset	Liability		Asset	Liability
Foreign exchange derivatives	359 170	1 620	6 475	330 125	2 884	2 740
Interest rate derivatives	37 523	725	1 144	21 605	291	554
Equity derivatives ¹	-	206	-	-	159	-
Exchange-traded futures contracts ²	28 587	-	-	27 287	-	-
Total financial derivatives	425 280	2 551	7 619	379 017	3 335	3 294

¹ Notional amounts are not considered relevant for equity derivatives and are therefore not included in the table.

² Exchange-traded futures contracts are settled daily with margin payments. Fair value is therefore zero at the balance sheet date.

Over-the-counter (OTC) financial derivatives

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.

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.

Exchange-traded 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 12 *Secured lending and borrowing* for further information. At the end of 2020, equities purchased in combination with offsetting equity swaps amounted to NOK 56bn (NOK 67bn at the end of 2019). Equity sales in combination with offsetting equity swaps amounted to NOK 54bn (NOK 47bn at the end of 2019). See also Table 13.1 in Note 13 *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 7 *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/equivalent decision-making body, or is paid out as a result of the company's articles of association.

Table 6.1 Income/expense from unlisted real estate

Amounts in NOK millions	2020	2019
Payments of interest and dividend from unlisted real estate	8 375	5 865
Unrealised gain/loss ¹	-9 392	10 311
Income/expense from unlisted real estate before foreign exchange gain/loss	-1 017	16 175

¹ 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 millions	31 Dec. 2020	31 Dec. 2019
Unlisted real estate at 1 January	264 538	243 818
Net cash flow to/from investments in unlisted real estate	15 997	5 300
Unrealised gain/loss	-9 392	10 311
Foreign exchange gain/loss	1 363	5 109
Unlisted real estate, closing balance for the period	272 507	264 538

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 millions	2020	2019
Interest and dividend from ongoing operations	5 976	5 099
Repayments of intercompany loans from ongoing operations	1 697	1 267
<i>Cash flow from ongoing operations unlisted real estate</i>	<i>7 673</i>	<i>6 366</i>
Payments for new investments	-20 531	-8 126
Payments for property development	-1 109	-1 419
Net payments external debt	-	-451
Repayments of intercompany loans from sales	3 945	3 429
Interest and dividend from sales	2 399	766
<i>Cash flow to/from other activities unlisted real estate</i>	<i>-15 295</i>	<i>-5 801</i>
Net cash flow unlisted real estate¹	-7 622	565

¹ Shown in the cash flow statement 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 2020 this amounted to NOK 8 375m (NOK 5 865m in 2019).

Cash flows between the GPFG and 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 2020 this amounted to NOK -15 997m (NOK -5 300m in 2019).

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 15 *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 are 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 millions	2020	2019
Net rental income	11 609	10 478
External asset management - fixed fees	-728	-576
External asset management - variable fees	-71	-91
Internal asset management - fixed fees ¹	-65	-63
Management costs within the limit from the Ministry of Finance ²	-64	-70
Other operating costs, not within the limit from the Ministry of Finance	-110	-101
Interest expense external debt	-555	-525
Tax expense	-211	-290
<i>Net income from ongoing operations</i>	<i>9 805</i>	<i>8 762</i>
Realised gain/loss	2 151	1 114
Unrealised gain/loss ³	-12 472	6 510
<i>Realised and unrealised gain/loss</i>	<i>-10 321</i>	<i>7 624</i>
<i>Transaction costs and fees from purchases and sales</i>	<i>-500</i>	<i>-211</i>
Net income underlying real estate companies	-1 017	16 175

¹ Internal asset management is carried out on 100% owned properties by employees in a wholly-owned, consolidated subsidiary.

² See Table 11.2 for specification of management costs that are measured against the upper limit from the Ministry of Finance.

³ *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 GPFPG'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 millions	31 Dec. 2020	31 Dec. 2019
Properties	293 408	283 191
External debt	-18 783	-18 407
Net other assets and liabilities ¹	-2 118	-246
Total assets and liabilities underlying real estate companies	272 507	264 538

¹ *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 25m are announced. Previously announced

agreements for purchases and sales which are not yet completed at the end of 2020, are described in the following paragraph.

In the second quarter of 2019, Norges Bank entered into agreements to acquire a 48% 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 fourth quarter of 2022 and the fourth quarter of 2023, respectively. The buildings will be purchased, and the final purchase price determined upon completed construction.



GPFG Note 7 Fair value measurement



Accounting policy

All assets and liabilities presented as *Equities, Bonds, Unlisted real estate, Financial derivatives, Secured lending and borrowing, Deposits in banks 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 require 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 7.1. 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 per 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 7.1 Categorisation of the investment portfolio by level in the fair value hierarchy

Amounts in NOK millions	Level 1		Level 2		Level 3		Total	
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
Equities	7 932 488	7 093 963	43 424	46 039	597	816	7 976 509	7 140 818
Government bonds	1 319 168	1 386 488	204 818	139 622	-	-	1 523 986	1 526 110
Government-related bonds	235 974	256 537	76 791	60 618	-	-	312 765	317 155
Inflation-linked bonds	153 784	162 582	16 181	11 824	-	-	169 965	174 406
Corporate bonds	591 372	546 322	110 816	82 834	28	16	702 216	629 172
Securitised bonds	128 141	119 821	27 268	30 012	-	-	155 409	149 833
Total bonds	2 428 439	2 471 750	435 874	324 910	28	16	2 864 341	2 796 675
Financial derivatives (assets)	76	140	2 471	3 192	4	3	2 551	3 335
Financial derivatives (liabilities)	-	-	-7 619	-3 294	-	-	-7 619	-3 294
Total financial derivatives	76	140	-5 148	-102	4	3	-5 068	41
Unlisted real estate	-	-	-	-	272 507	264 538	272 507	264 538
Other (assets)¹	-	-	224 533	245 418	-	-	224 533	245 418
Other (liabilities)²	-	-	-419 059	-359 409	-	-	-419 059	-359 409
Total	10 361 003	9 565 853	279 623	256 856	273 136	265 373	10 913 762	10 088 083
Total (percent)	94.9	94.8	2.6	2.6	2.5	2.6	100.0	100.0

¹ Other (assets) consists of the balance sheet lines *Deposits in banks, Secured lending, Cash collateral posted, Unsettled trades (assets) and Other assets.*

² Other (liabilities) consists of the balance sheet lines *Secured borrowing, Cash collateral received, Unsettled trades (liabilities) and Other liabilities.*

The majority of the total portfolio is priced based on observable market prices. At the end of 2020, 97.5% of the portfolio was classified as Level 1 or 2, which is a marginal increase compared to year-end 2019. 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 (99.45%) are valued based on official closing prices from stock exchanges and are classified as Level 1. A small share of equities (0.54%) 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 (0.01%) that are not listed, or where trading has been suspended over a longer period, 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 (84.78%) have observable, executable market quotes in active markets and are classified as Level 1. Bonds classified as Level 2 amount to 15.22%. These are securities that do not have a sufficient number of observable quotes or that are priced based on comparable liquid bonds. A negligible proportion of 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 that adjustments to valuations are warranted.

Market activity in many sectors of the unlisted real estate market was disrupted during the year, with lower transaction volumes due to the impact of the covid-19 pandemic. Due to uncertainty regarding the impact of the pandemic, combined with a lack of transactional evidence from comparable completed transactions, the majority of the external valuation reports received as at 30 June included a *material valuation uncertainty clause*. There was an increase in market activity towards the end of the year, with increased availability of transactional evidence. While transaction volumes were not yet back to normal levels, there was an adequate level of market evidence upon which external valuers could base their fair value estimates at year-end 2020. The uncertainty clauses have been removed from the external valuation reports at year-end for the vast majority of the portfolio.

The impact of the pandemic has not been uniform across sectors and markets. This has been evident in the GPF's real estate portfolio, with vastly different development between sectors and markets.

Although the clauses regarding material valuation uncertainty have been removed, the external valuers highlight that there is elevated market uncertainty with regards to the long-term impact of the pandemic on cash flows and

yield requirements. At year-end, most valuation reports included statements indicating that values and income may change more quickly than in normal market conditions, as new information becomes available.

There has been no change to the valuation methodology due to covid-19. However, additional controls have been performed as described in Section 6 of this note.

Norges Bank Investment Management has performed a detailed review of the independent external valuation reports received as at 31 December. Based on this, the assessment is that the external valuers have incorporated the impact of the pandemic at the measurement date, in accordance with the assumptions that market participants would reasonably apply under current market conditions. The values determined by the external valuers are accordingly assessed to represent the best estimate of fair value at year-end 2020.

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

There have been no significant reclassifications of equities between Level 1 and Level 2. The share of equities classified as Level 1 is virtually unchanged compared to year-end 2019.

Due to reduced liquidity, there has been a net reclassification of bond holdings of NOK 92 918m from Level 1 to Level 2. These holdings mainly consist of government bonds in both developed

and emerging markets, as well as corporate bonds denominated in US dollar and Euro. The share of bonds classified as Level 1 has decreased by 3.6 percentage points compared to year-end 2019, with a corresponding increase in the share of Level 2 holdings. In addition to reclassifications between levels, Level 2 holdings have increased in 2020 due to the purchase of government bonds in this level just prior to year-end.

Table 7.2 Changes in Level 3 holdings

Amounts in NOK millions	1 Jan. 2020	Purchases	Sales	Settlements	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 ¹	264 538	15 997	-	-	-9 392	-	-	1 363	272 507
Total	265 373	16 013	-22	6	-9 585	75	-70	1 345	273 136

Amounts in NOK millions	1 Jan. 2019	Purchases	Sales	Settlements	Net gain/loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31 Dec. 2019
Equities	353	696	-128	-2	-90	44	-60	3	816
Bonds	453	-	-425	-	-9	-	-3	-	16
Financial derivatives (assets)	12	-	-	-	-7	-	-2	-	3
Unlisted real estate ¹	243 818	5 300	-	-	10 311	-	-	5 109	264 538
Total	244 636	5 996	-553	-2	10 205	44	-65	5 112	265 373

¹ Purchases represent the net cash flow to investments in unlisted real estate. See *Net cash flow to/from investments in unlisted real estate* in the Statement of cash flows.

The relative share of holdings classified as Level 3 was 2.5% at the end of 2020, a decrease from 2.6% at year-end 2019. The GPF's aggregate holdings in Level 3 amounted to NOK 273 136m at year-end 2020, an increase of NOK 7 763m compared to year-end 2019. The increase is mainly due to investments in unlisted real estate which are all classified as Level 3.

Investments in unlisted real estate amounted to NOK 272 507m at year-end 2020, an increase of NOK 7 969m compared to year-end 2019. The increase is due to new investments and positive currency effects, offset by unrealised losses.

4. Valuation techniques

Norges Bank Investment Management has defined hierarchies for which price sources to be used for 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 which provide access to market prices, quotes and transactions at the measurement date.

The next section sets out the main valuation techniques for instruments classified in Level 2 and Level 3 of the fair value hierarchy. Furthermore, it highlights the most significant observable and unobservable inputs used in the valuation models.

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 based on actual lease terms and conditions and 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 investor preferences.

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 have been suspended from trading for a prolonged period. 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, ie 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, such as rights and warrants, are mainly valued based on prices provided by vendors according to the fair value 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.

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 market rental values 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.

As mentioned above, the covid-19 pandemic has had an impact on the unlisted real estate market, with lower transaction volumes than normal. The range of reasonable alternative assumptions applied in the sensitivity analysis has therefore been assessed at year-end. There are variances across sectors and geographical markets. The level of leasing activity and investment transactions has been high for logistics, while there has been less market activity particularly in the retail sector, but also in the office sector. Based on an overall assessment, it is concluded that there is sufficient transactional

Table 7.3 Additional specification Level 3 and sensitivities

Amounts in NOK millions	Key assumptions	Change in key assumptions	Specification of Level 3 holdings 31 Dec. 2020	Sensitivities 31 Dec. 2020		Specification of Level 3 holdings 31 Dec. 2019	Sensitivities 31 Dec. 2019 ¹	
				Unfavourable changes	Favourable changes		Unfavourable changes	Favourable changes
Equities	Suspension adjustment ²	20.0%	597	-119	119	816	-163	163
Total bonds	Probability of future cash flows ³	10.0%	28	-3	3	16	-2	2
Financial derivatives (assets)	Other		4	-4	-	3	-3	-
Unlisted real estate	Yield	0.2 percentage point		-12 708	14 864		-11 954	9 720
	Market rent	2.0%		-4 401	4 383		-4 608	4 639
			272 507	-17 109	19 247	264 538	-16 563	14 359
Total			273 136	-17 235	19 369	265 373	-16 731	14 524

¹ The comparable amounts for equities and bonds have been restated to conform to current period presentation.

² For equities that have been suspended from trading for a prolonged period, a suspension adjustment is applied to the last traded price, based on an assessment of company-specific factors.

³ Holdings consist mainly of defaulted bonds.

evidence in the different sectors and markets to maintain the range used for reasonable alternative assumptions for yields and market rents in the sensitivity analysis at year-end 2020.

In an unfavourable outcome, an increase in the yield of 0.2 percentage point, and a reduction in market rents of 2% would result in a decrease in value of the unlisted real estate portfolio of approximately NOK 17 109m or 6.3% (6.3% at year-end 2019). In a favourable outcome, a reduction in the yield of 0.2 percentage point and an increase in market rents of 2% would result in an increase in value of the unlisted real estate portfolio of approximately NOK 19 247m or 7.1% (5.4% at year-end 2019).

For unlisted real estate, changes in yields are a more significant factor for valuation than changes in market rents. The isolated effects of changes in yields and future market rents are presented in Table 7.3.

6. Control environment

The control environment for fair value measurement of financial instruments and investments in unlisted real estate 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 unlisted real estate investments where valuations are performed quarterly. 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 each month-end for financial instruments and at the end of each quarter for unlisted real estate investments, more extensive controls are performed to ensure the valuation represents fair value in accordance with IFRS. As part of this review, particular attention is paid to illiquid financial instruments and unlisted real estate investments, ie investments deemed to pose valuation challenges. Illiquid instruments are identified using sector and currency classifications, credit rating indicators, bid/ask spreads, and market activity.

In accordance with this control framework, additional analyses and controls have been performed by the valuation department due to the reduced activity in the unlisted real estate

market during 2020. This includes expanded interaction with the external valuers, increased review of independent market research and forecasts, comparison with available quarterly and monthly MSCI and NCREIF property index information as well as increased comparative analysis to valuations and pricing of the listed property sector.

Valuation memos and reports are prepared each quarter-end, documenting the results of the controls performed and the most important sources of uncertainties 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 investment meeting, attended by several members of Norges Bank Investment Management's leader group.

GPFG Note 8 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% to equities and 30% to bonds.

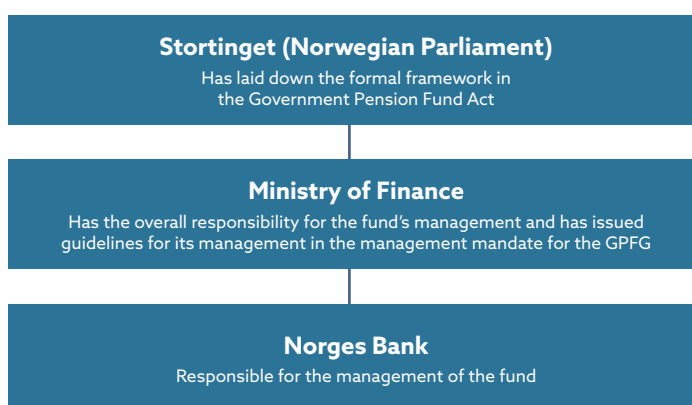
The benchmark index for equities is constructed based on the market capitalisation for equities in the countries included in the benchmark. The benchmark index for bonds specifies a defined allocation between government bonds and corporate bonds, with a weight of 70% to government bonds and 30% to corporate bonds. The currency distribution is a result of these weighting principles.

Investments in real estate are not defined by the fund's benchmark index. The management mandate sets a maximum allocation to unlisted real estate of 7% of the investment portfolio. The fund's allocation to unlisted real estate 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 real estate within the limits set in the management mandate, and how it shall be financed.

The management mandate also opens for investments in unlisted infrastructure for renewable energy of up to 2% of the investment portfolio.

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 8.1 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 8.2 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 are regulated by a separate management framework in the investment mandate. The framework underpins how a diversified exposure to unlisted real estate 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.

Table 8.1 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 and real estate 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 <ul style="list-style-type: none"> - Concentration risk - Volatility and correlation risk - Systematic factor risk - Liquidity risk 	Measured at single issuer and portfolio levels <ul style="list-style-type: none"> - Probability of default - Loss given default - Correlation between instruments and issuers at portfolio level 	Measured risk exposure by type of position <ul style="list-style-type: none"> - 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 and real estate 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. 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 portfolio. 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 GPFG.

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 GPFG.

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 8.2.



Table 8.2 Allocation by asset class, country and currency

Asset class	Market	Market value in percent by country and currency ¹		Market value in percent by asset class		Assets minus liabilities excluding management fee ²		
		31 Dec. 2020	Market	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
Equities	Developed	88.0	Developed	88.6				
	US	41.7	US	39.7				
	Japan	8.2	UK	8.8				
	UK	7.3	Japan	8.4				
	France	4.8	France	5.2				
	Switzerland	4.6	Germany	4.8				
	Total other	21.4	Total other	21.7				
	Emerging	12.0	Emerging	11.4				
	China	5.3	China	4.3				
	Taiwan	2.1	Taiwan	1.8				
	India	1.3	India	1.2				
	Brazil	0.6	Brazil	1.0				
	South Africa	0.5	South Africa	0.6				
	Total other	2.2	Total other	2.6				
Total equities					72.80	70.83	7 945 475	7 145 463
Fixed income	Developed	97.2	Developed	92.0				
	US dollar	47.7	US dollar	45.9				
	Euro	28.1	Euro	26.9				
	Japanese yen	7.6	Japanese yen	7.5				
	Pound sterling	4.9	Pound sterling	4.3				
	Canadian dollar	3.6	Canadian dollar	3.1				
	Total other	5.2	Total other	4.4				
	Emerging	2.8	Emerging	8.0				
	South Korean won	0.8	Mexican peso	1.6				
	Mexican peso	0.7	South Korean won	1.1				
	Russian ruble	0.3	Indonesian rupiah	1.0				
	Indonesian rupiah	0.2	Indian rupee	0.7				
	Columbian peso	0.2	Brazilian real	0.7				
	Total other	0.7	Total other	2.9				
Total fixed income					24.70	26.46	2 695 184	2 669 606
Unlisted real estate	US	46.8	US	48.5				
	France	19.3	UK	21.2				
	UK	18.1	France	17.9				
	Germany	4.0	Switzerland	3.5				
	Switzerland	3.9	Germany	3.4				
	Total other	7.9	Total other	5.6				
Total unlisted real estate					2.50	2.71	273 109	273 014

¹ Market value in percent per country and currency includes derivatives and cash.

² At year-end 2020, a net liability of NOK 6m related to future investments in unlisted infrastructure was not allocated to the asset classes specified in the table.

At the end of 2020, the equity portfolio's share of the fund was 72.8%, up from 70.8% at year-end 2019. The bond portfolio's share of the fund was 24.7%, down from 26.5% at year-end 2019. Fixed income investments in emerging market

currencies fell from 8.0% at the end of 2019 to 2.8% at year-end 2020. The unlisted real estate portfolio's share of the fund was 2.5%, compared with 2.7% at year-end 2019.

For equity investments, concentration in the portfolio is further measured by sector. Table 8.3 shows the composition of the equity asset class by sector.

Table 8.3 Allocation of equity investments by sector¹, percent

Sector	31 Dec. 2020	31 Dec. 2019
Financials	20.4	23.6
Technology	18.5	14.6
Industrials	13.8	13.4
Consumer goods	12.0	11.5
Health care	11.7	11.3
Consumer services	11.5	10.7
Basic materials	4.4	4.4
Oil and gas	3.0	5.0
Utilities	2.6	2.8
Telecommunications	2.4	2.7

¹ Does not sum up to 100% because cash and derivatives are not included.

The GPFG has substantial investments in government-issued bonds. Table 8.4 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 8.4 Largest holdings within the segment government bonds

Amounts in NOK millions	Market value 31 Dec. 2020	Amounts in NOK millions	Market value 31 Dec. 2019
US	717 935	US	701 616
Japan	294 195	Japan	244 195
Germany	138 176	Germany	98 548
UK	87 746	France	80 783
France	72 442	UK	72 793
Spain	51 345	Spain	51 554
Australia	41 065	South Korea	49 049
South Korea	36 045	Mexico	43 360
Italy	31 261	Italy	42 427
Canada	31 242	Canada	30 640

The portfolio is also invested in companies which issue both equities and bonds. Table 8.5 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 8.5 Largest holdings excluding sovereigns, both bonds and equities

Amounts in NOK millions	Sector	31 Dec. 2020		
		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 services	124 334	5 970	130 304
Alphabet Inc	Technology	97 343	2 614	99 957
Nestlé SA	Consumer goods	77 028	2 503	79 531
Taiwan Semiconductor Manufacturing Co Ltd	Technology	66 089	1 784	67 872
Facebook Inc	Technology	67 424	0	67 424
Roche Holding AG	Health care	59 125	424	59 549
Samsung Electronics Co Ltd	Technology	56 598	0	56 598
Alibaba Group Holding Ltd	Consumer services	55 559	439	55 998

Amounts in NOK millions	Sector	31 Dec. 2019		
		Equities	Bonds	Total
Apple Inc	Technology	116 967	7 711	124 677
Microsoft Corp	Technology	104 640	1 258	105 897
Alphabet Inc	Technology	77 831	529	78 360
Nestlé SA	Consumer goods	71 686	1 900	73 585
Amazon.com Inc	Consumer services	68 631	3 716	72 347
Roche Holding AG	Health care	55 297	360	55 657
Alibaba Group Holding Ltd	Consumer services	51 992	1 073	53 065
Royal Dutch Shell Plc	Oil and gas	52 193	496	52 689
Novartis AG	Health care	44 604	3 679	48 283
Facebook Inc	Technology	46 241	0	46 241

Table 8.6 shows the composition of the unlisted real estate asset class by sector.

Table 8.6 Distribution of unlisted real estate investments by sector, percent

Sector	31 Dec. 2020	31 Dec. 2019
Office	57.2	56.5
Retail	16.4	18.2
Logistics	26.0	21.9
Other	0.5	3.4
Total	100.0	100.0

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 Barra Private Real Estate 2 (PRE2) model from MSCI is used to calculate market risk for

the fund's investments in unlisted real estate. As a general modelling issue there are few, if any, available historical prices for individual properties. Available data sources which may be used as approximations for the pricing of unlisted real estate investments include return time series from listed real estate companies (REITs) and valuation-based indices. The risk model from MSCI uses time series of valuations and actual transactions as a starting point, but also includes listed real estate share prices to establish representative time series for unlisted real estate prices. This hybrid model is calibrated to market data for each location and type of property, and constructs synthetic time series of risk factor returns with daily frequency. The main risk sources from being exposed to these risk factors are currency risk, variance and correlation of the location and property type specific appraisal data and, via exposure to listed real estate returns, correlation to the equity and fixed-income markets. The risk model from MSCI then uses these factors for unlisted real estate 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 8.7 and 8.8 present risk both in terms of the portfolio's absolute risk and the relative risk.

Table 8.7 Portfolio risk, expected volatility, percent

	Expected volatility, actual portfolio							
	31 Dec. 2020	Min 2020	Max 2020	Average 2020	31 Dec. 2019	Min 2019	Max 2019	Average 2019
Portfolio	10.4	7.7	10.5	9.4	7.7	7.7	8.6	7.9
Equities	14.3	9.9	14.4	12.9	9.9	9.9	11.5	10.2
Fixed income	9.7	6.9	9.7	8.7	7.0	6.7	7.2	6.9
Unlisted real estate	10.5	8.7	10.7	10.1	8.7	8.7	9.4	9.0

Table 8.8 Relative risk measured against the fund's benchmark index, expected relative volatility, basis points

	Expected relative volatility							
	31 Dec. 2020	Min 2020	Max 2020	Average 2020	31 Dec. 2019	Min 2019	Max 2019	Average 2019
Portfolio	56	32	58	49	33	31	34	32

Risk measured as expected volatility indicates an expected annual value fluctuation in the fund of 10.4%, or approximately NOK 1 130bn at the end of 2020, compared to 7.7% at year-end 2019. Expected volatility for the equity portfolio was 14.3% at year-end, up from 9.9% at year-end 2019, while expected volatility for the bond portfolio was 9.7% at the end of 2020, up from 7.0% at year-end 2019. The increase in expected volatility for the fund in 2020 is mainly due to increased price volatility in the equity markets for the last three years than was the case at the end of 2019.

The management mandate for the GPFG 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 56 basis points at the end of the year, up from 33 basis points at year-end 2019. The increase in the expected relative volatility in 2020 is mainly due to increased price volatility in the markets.

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 under-performance 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% confidence level is then given by the annualised average relative return, measured in the currency basket for the 2.5% 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 1.80 percentage points, compared to 1.50 percentage points at year-end 2019.

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% is used for the calculations.

Strengths and weaknesses

The strength of these types of risk model 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 GPFG'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 8.9 Bond portfolio specified by credit rating

Amounts in NOK millions	31 Dec. 2020					Total
	AAA	AA	A	BBB	Lower rating	
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
Total bonds	1 234 296	426 156	706 697	461 905	35 288	2 864 341

Amounts in NOK millions	31 Dec. 2019					Total
	AAA	AA	A	BBB	Lower rating	
Government bonds	784 270	219 428	367 235	113 426	41 750	1 526 110
Government-related bonds	127 462	131 904	42 359	14 164	1 265	317 155
Inflation-linked bonds	127 523	29 901	7 433	9 549	-	174 406
Corporate bonds	5 567	39 019	260 796	317 812	5 978	629 172
Securitised bonds	122 767	24 524	1 583	526	433	149 833
Total bonds	1 167 588	444 778	679 406	455 478	49 425	2 796 675

The share of holdings in corporate bonds increased by 2.0 percentage points during the year, to 24.5% of the bond portfolio at year-end 2020. The largest increase was for corporate bonds within the category BBB and A. Government bonds, including inflation-linked bonds, comprised 59.1% of the bond portfolio at year-end, compared to 60.8% at year-end 2019.

The share of bonds with credit rating AAA increased by 1.4 percentage points compared to year-end 2019, to 43.1% of the total bond portfolio at year-end. This increase was mainly due to an increase in the holdings in government bonds. The share of bonds with credit rating AA decreased by 1.0 percentage point compared to year-end 2019, to 14.9% of the total bond portfolio at year-end 2020. This decrease was mainly due to a decrease in the holdings in government-

related bonds. The share of bonds with credit rating A increased by 0.4 percentage point compared to year-end 2019, to 24.7% at year-end 2020. The decrease is due to a reduction in corporate bond holdings, mainly issued in US dollars.

The share of bonds grouped under *Lower rating* was reduced to 1.2% of the bond portfolio at year-end 2020, from 1.8% at year-end 2019. This is mainly due to reduced holdings of emerging market government bonds within this category. Defaulted bonds had a market value of NOK 51m at year-end 2020, compared to NOK 129m at year-end 2019. Defaulted bonds are grouped under *Lower rating*. The overall credit quality of the bond portfolio improved slightly during the year.

Table 8.10 Bond portfolio by credit rating and currency, percent

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
Pound sterling	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
Total	43.1	14.9	24.7	16.1	1.2	100.0

31 Dec. 2019	AAA	AA	A	BBB	Lower rating	Total
US dollar	26.1	2.1	6.8	8.4	0.2	43.5
Euro	9.1	7.3	5.3	4.5	0.1	26.2
Japanese yen	-	-	9.4	-	-	9.4
Pound sterling	0.3	2.8	0.5	0.6	-	4.2
Canadian dollar	2.4	0.8	0.1	-	-	3.4
Other currencies	3.9	2.9	2.2	2.8	1.5	13.3
Total	41.7	15.9	24.3	16.3	1.8	100.0

There were no credit derivatives in the portfolio at year-end 2020.

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 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, repurchase and reverse repurchase agreements, securities lending, and holdings of securities that are considered to be unsecured. Counterparty risk also arises from unsecured bank deposits and in connection with the daily liquidity management of the fund, as well as in connection with purchases and sales of unlisted real estate. 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 and repurchase and reverse repurchase agreements, in order to reduce counterparty risk. 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 transactions are conducted. Counterparty risk that arises is analysed in advance of the transaction and requires approval by the CRO. In 2020, 7 transactions were approved by the CRO through this process, compared to 11 transactions in 2019.

Counterparty risk is also limited by setting exposure limits for individual counterparties. 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 for most currency trades is low. 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 8.11.

Norges Bank Investment Management has invested in Saudi Arabian equities. Counterparty risk arises from these listed equities as they are considered to be unsecured.

In Table 8.11, exposure is broken down by type of activity/instrument associated with counterparty risk.

Total counterparty risk was NOK 117.5bn at year-end 2020, a slight increase from NOK 116.4bn at year-end 2019. There was an increase in risk exposure from unsecured securities and derivatives, including foreign exchange contracts, while the risk exposure from securities lending and repurchase and reverse repurchase agreements was reduced during the year. Both equities and bonds are lent through the securities lending programme. The risk exposure for the programme decreased to NOK 55.9bn at year-end 2020, from NOK 58.5bn at year-end 2019. Counterparty risk exposure from securities lending amounted to 48% of the fund's total counterparty risk exposure at year-end 2020, compared to 50% at year-end 2019.

Table 8.11 Counterparty risk by type of position

Amounts in NOK millions	Risk exposure	
	31 Dec. 2020	31 Dec. 2019
Securities lending	55 928	58 488
Derivatives including foreign exchange contracts	33 784	32 611
Unsecured bank deposits ¹ and securities	22 863	18 501
Repurchase and reverse repurchase agreements	4 286	6 535
Settlement risk towards brokers and long settlement transactions	625	266
Total	117 487	116 401

¹ 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 8.12 shows approved counterparties classified by credit rating category. The table also includes brokers that are used when purchasing and selling securities.

Table 8.12 Counterparties by credit rating¹

	Norges Bank's counterparties (excluding brokers)		Brokers	
	31 Dec. 2020	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019
AAA	3	1	1	1
AA	32	34	33	35
A	63	61	83	79
BBB	10	10	35	32
BB	2	2	15	19
B	1	-	7	7
Total	111	108	174	173

¹ 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 increased slightly during the year. There were 111 counterparties at year-end 2020, compared to 108 at year-end 2019. The number of brokers increased to 174 at year-end 2020, from 173 at year-end 2019. The overall credit quality of brokers and counterparties remained unchanged from year-end 2019.

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 1.5% for the aggregated equity and bond portfolio at the end of 2020, compared to 1.1% at the end of 2019. For investments in unlisted real estate, requirements are set in the investment mandate, limiting the maximum debt ratio of the portfolio to 35%. The unlisted real estate investments had a debt ratio of 6.4% at the end of 2020, compared to 6.1% at the end of 2019.

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 2020.



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*. Refundable withholding tax is recognised in the balance sheet as a receivable within Other assets.

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 on capital gains is recognised as a liability in the balance sheet within Other liabilities, 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 line Unlisted real estate is recognised in the income statement as *Income/expense from unlisted real estate*. Only the tax expense in consolidated subsidiaries is included in the income statement line Tax expense. This is specified in Table 9.1 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 9.1 shows tax expense by type of investment and type of tax.

Table 9.1 Specification tax expense

						2020
Amounts in NOK millions	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	-
Tax expense		-5 624	-1 884	-5	-7 513	

						2019
Amounts in NOK millions	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	1 486 909	-6 214	-472	-	-6 685	1 480 224
Bonds	192 820	-22	-38	-	-60	192 760
Secured lending	4 529	-73	-	-	-73	4 456
Other	-	-	-	-9	-9	-
Tax expense		-6 308	-510	-9	-6 827	

Table 9.2 shows receivables and liabilities recognised in the balance sheet related to tax.

Table 9.2 Specification of balance sheet items related to tax

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Included in <i>Other assets</i> :		
Withholding tax receivable	2 234	2 163
Included in <i>Other liabilities</i> :		
Tax payable	12	9
Deferred tax	2 308	450

Table 9.3 specifies the line *Net payment of taxes* in the statement of cash flows.

Table 9.3 Specification of net payment of taxes

Amounts in NOK millions	2020	2019
Receipt of refunded withholding tax	6 748	5 201
Payment of taxes	-12 472	-11 848
Net payment of taxes	-5 724	-6 648

GPFG Note 10 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 in relation to 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 for the holding 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 10.1.

Table 10.1 Specification foreign exchange gain/loss

Amounts in NOK millions	2020	2019
Foreign exchange gain/loss - EUR/NOK	106 910	-5 461
Foreign exchange gain/loss - JPY/NOK	18 103	15 693
Foreign exchange gain/loss - GBP/NOK	4 854	33 334
Foreign exchange gain/loss - USD/NOK	-79 242	44 005
Foreign exchange gain/loss - other	7 324	39 108
Foreign exchange gain/loss	57 948	126 679

Table 10.2 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 8.2 in Note 8 *Investment risk*.

Table 10.2 Specification of the investment portfolio by currency

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
US dollar	4 644 534	4 325 398
Euro	1 995 892	1 999 881
Japanese yen	845 642	807 056
Pound sterling	800 602	758 899
Other currencies	2 627 092	2 196 849
Market value investment portfolio	10 913 762	10 088 083

Table 10.3 gives an overview of exchange rates at the balance sheet date for the main currencies the GPFG is exposed to.

Table 10.3 Exchange rates

	31 Dec. 2020	31 Dec. 2019	Percent change
US dollar	8.56	8.79	-2.6
Euro	10.48	9.86	6.2
Japanese yen	0.08	0.08	2.6
Pound sterling	11.70	11.64	0.5

GPF Note 11 Management costs



Accounting policy

Management fee is recognised in the GPF's income statement as an expense when incurred, but it is cash-settled in the following year. Management fee payable is a financial liability measured at amortised cost.

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 GPF's investments in unlisted real estate.

Management costs in Norges Bank

The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the GPF, 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 11.1.

Table 11.1 Management fee

Amounts in NOK millions	2020		2019	
		Basis points		Basis points
Salary, social security and other personnel-related costs	1 408		1 448	
Custody costs	474		431	
IT services, systems, data and information	650		671	
Research, consulting and legal fees	214		258	
Other costs	269		428	
Allocated costs Norges Bank	281		174	
Base fees to external managers	728		611	
Management fee excluding performance-based fees	4 023	3.9	4 021	4.4
Performance-based fees to external managers	1 282		291	
Management fee	5 305	5.1	4 312	4.7

Management costs in subsidiaries

Management costs incurred in subsidiaries consist of costs related to the management of the unlisted real estate portfolio. These costs are expensed directly in the portfolio result and are not part of the management fee.

Management costs incurred in non-consolidated and consolidated subsidiaries are presented in the income statement as *Income/expense from unlisted real estate* and *Other income/expense*, respectively. These costs are specified in Table 11.2.



Table 11.2 Management costs, unlisted real estate subsidiaries

Amounts in NOK millions	2020		2019	
		Basis points		Basis points
Salary, social security and other personnel-related costs	26		34	
IT services, systems, data and information	21		19	
Research, consulting and legal fees	31		36	
Other costs	25		22	
Total management costs, unlisted real estate subsidiaries	103	0.1	111	0.1
<i>Of which management costs non-consolidated subsidiaries</i>	64		70	
<i>Of which management costs consolidated subsidiaries</i>	40		41	

Upper limit for reimbursement of management costs

The Ministry of Finance has established an upper limit for the reimbursement of management costs. Norges Bank is only reimbursed for costs incurred up to this limit. Norges Bank is also reimbursed for performance-based fees to external managers, which are not included in the limit.

For 2020, total management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external managers, are limited to NOK 4 900m. In 2019, the limit was set based on a share of the fund's value and was then limited to 7.0 basis points of average assets under management.

Total management costs measured against the upper limit amounted to NOK 4 126m in 2020. This consisted of management costs in Norges Bank, excluding performance-based fees to external managers, of NOK 4 023m and management costs in subsidiaries of NOK 103m. Total management costs including performance-based fees to external managers amounted to NOK 5 409m in 2020.

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 2020, management costs incurred in Norges Bank and its subsidiaries, excluding perfor-

mance-based fees to external managers, corresponded to 4.0 basis points of assets under management. Management costs including performance-based fees to external managers corresponded to 5.2 basis points of assets under management.

Other operating costs in subsidiaries

In addition to the management costs presented in Table 11.2, other operating costs are also incurred in subsidiaries related to the ongoing maintenance, operation and development of properties and leases. These are not costs related to investing in real estate, they are costs of operating the underlying properties 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 line *Income/expense from unlisted real estate*. See Table 6.4 in Note 6 *Unlisted real estate* for further information. Other operating costs incurred in consolidated subsidiaries are expensed in the income statement line *Other income/expense*.

GPFG Note 12 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 12.1 Income/expense from secured lending and borrowing

Amounts in NOK millions	2020	2019
Income/expense from secured lending	4 028	4 529
Income/expense from secured borrowing	-751	-1 926
Net income/expense from secured lending and borrowing	3 277	2 603





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 an 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 an 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 12.2 shows the amount presented as *Secured lending*, and the associated collateral received in the form of securities.

Table 12.2 Secured lending

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Secured lending	192 526	222 946
Total secured lending	192 526	222 946
Associated collateral in the form of securities (off balance sheet)		
Equities received as collateral	62 514	68 147
Bonds received as collateral	134 307	155 990
Total collateral received in the form of securities related to secured lending	196 821	224 137

Table 12.3 shows transferred securities with the associated liability presented as *Secured borrowing*, and collateral received in the form of securities or guarantees.

Table 12.3 Transferred financial assets and secured borrowing

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Transferred financial assets		
Equities lent	438 353	426 623
Bonds lent	520 978	479 852
Total transferred financial assets	959 332	906 475
Associated cash collateral, recognised as liability		
Secured borrowing	390 380	338 266
Total secured borrowing	390 380	338 266
Associated collateral in the form of securities or guarantees (off balance sheet)		
Equities received as collateral	345 111	436 482
Bonds received as collateral	278 691	178 250
Guarantees	959	8 548
Total collateral received in the form of securities or guarantees related to transferred financial assets	624 761	623 280

GPFG Note 13 Collateral and offsetting



Accounting policy

Cash collateral OTC derivative transactions

Cash collateral posted in connection with OTC 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 OTC 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 13.1 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 13.1. *Cash collateral posted* and *Cash collateral received* in the balance sheet are related exclusively to OTC 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 12 *Secured lending and borrowing for further information*.

Offsetting

Table 13.1 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 effects of potential netting of recognised financial assets and liabilities 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 13.1 Assets and liabilities subject to netting agreements

Amounts in NOK millions		31 Dec. 2020					
Description	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements ¹	Amounts subject to enforceable master netting agreements				
			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
Assets							
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	-	-	-
Total	200 791	57 676	143 116	8 060	74 398	60 658	-

Amounts in NOK millions		31 Dec. 2020					
Description	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements ²	Amounts subject to enforceable master netting agreements				
			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
Liabilities							
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
Total	404 003	55 976	348 027	3 797	78 837	259 135	6 257

Amounts in NOK millions		31 Dec. 2019					
Description	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements ¹	Amounts subject to enforceable master netting agreements				
			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
Assets							
Secured lending	222 946	80 807	142 140	-	90 773	51 367	-
Cash collateral posted	1 090	-	1 090	984	-	-	107
Financial derivatives	3 335	159	3 176	2 441	598	-	136
Total	227 372	80 966	146 406	3 425	91 371	51 367	243

Amounts in NOK millions		31 Dec. 2019					
Description	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements ²	Amounts subject to enforceable master netting agreements				
			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
Liabilities							
Secured borrowing	338 266	71 979	266 287	-	100 734	164 663	890
Cash collateral received	6 754	-	6 754	920	-	-	5 834
Financial derivatives	3 294	-	3 294	2 441	570	-	283
Total	348 314	71 979	276 335	3 362	101 304	164 663	7 006

¹ Secured lending includes amounts related to shares purchased in combination with equity swaps. In 2020, this amounted to NOK 56bn (NOK 67bn in 2019). See Note 12 Secured lending and borrowing for further information.

² Secured borrowing includes amounts related to shares sold in combination with equity swaps. In 2020, this amounted to NOK 54bn (NOK 47bn in 2019). See Note 12 Secured lending and borrowing for further information.

GPFG Note 14 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 11 *Management costs*. In 2020, NOK 4.3bn was deducted from the krone account to pay the accrued management fee for 2019 to Norges Bank, compared to NOK 4.5bn in 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 2020, the net balance between the portfolios represented a receivable for the GPFG of NOK 806m, compared to a receivable of NOK 195m at the end of 2019. 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. For an overview of the companies that own and manage the properties, as well as consolidated subsidiaries, see Note 15 *Interests in other entities*. For further information regarding transactions with subsidiaries, see Note 6 *Unlisted real estate*.

GPFG Note 15 Interests in other entities

Investments in unlisted real estate are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. These subsidiaries invest, through holding companies, in entities that invest in properties. These entities may be subsidiaries or joint ventures.

The overall objective of the ownership structures used for unlisted real estate investments 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 real estate investments. Expected tax expense for the fund is therefore one of the factors considered when determining the ownership structure.

Table 15.1 shows the companies that own and manage the properties, as well as consolidated subsidiaries.

Table 15.1 Real estate companies

Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
Non-consolidated companies					
United Kingdom					
NBIM George Partners LP ¹	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
Luxembourg					
NBIM S.à r.l.	Luxembourg	N/A	100.00	N/A	2011
France					
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
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

Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
Germany					
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
Switzerland					
NBIM Antoine CHF S.à r.l.	Luxembourg	Zürich	100.00	100.00	2012
Europe					
Prologis European Logistics Partners S.à r.l.	Luxembourg	Multiple European cities	50.00	50.00	2013
United States					
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
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
Japan					
TMK Tokyo TN1	Tokyo	Tokyo	70.00	70.00	2017
Tokyo MN1 TMK	Tokyo	Tokyo	100.00	39.90	2020

Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
Consolidated subsidiaries					
Japan					
NBRE Management Japan Advisors K.K.	Tokyo	N/A	100.00	N/A	2015
United Kingdom					
NBRE Management Europe Limited	London	N/A	100.00	N/A	2016

¹ One property in this company, 20 Air Street, has an ownership share of 50% from 1 September 2017.

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 15.1, Norges Bank has wholly-owned holding companies established in connection with investments in unlisted real estate. These

holding companies do not engage in any operations and do not own any properties directly. The holding companies have their business address either in the same country as the property, in connection with NBIM S.à r.l. in Luxembourg or in Norway for the holding companies established for property investments in Japan, France and Germany. In addition, a wholly-owned holding company in Norway is established for future investments in unlisted infrastructure for renewable energy.

GPF Note 16 Other assets and other liabilities

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Table 16.1 Other assets

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Withholding tax receivable	2 234	2 163
Net balance Norges Bank's foreign exchange reserves	806	195
Unsettled inflow krone deposit	227	1 129
Accrued income/expense from secured lending	299	232
Other	9	19
Other assets	3 574	3 737

Table 16.2 Other liabilities

Amounts in NOK millions	31 Dec. 2020	31 Dec. 2019
Tax payable	12	9
Deferred tax	2 308	450
Other	30	36
Other liabilities	2 350	495

To the Supervisory Council of Norges Bank

Independent auditor's report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Norges Bank, which comprise the balance sheet as at 31 December 2020, income statement, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.



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In our opinion, the accompanying financial statements are prepared in accordance with law and regulations and give a true and fair view of the financial position of Norges Bank as at 31 December 2020, 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 laws, regulations, and auditing standards and practices generally accepted in Norway, including 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 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 judgement, were of most significance in our audit of the financial statements for 2020. 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>For a more detailed description of the development, management and operation of IT systems in Norges Bank, see the chapter on Corporate governance, risk management and internal control in the Executive Board's report for 2020.</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>Norges Bank has established overall governance models and 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 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 273.1 billion at 31 December 2020. Of this, investments in unlisted real estate amount to NOK 272.5 billion.</p> <p>Unlisted real estate in the Government Pension Fund Global is valued by external valuers. Market activity in many sectors of the unlisted real estate market was disrupted during the year, with lower transaction volumes as a result of the impact of the Covid-19 pandemic.</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 2020, 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.</p> <p>We used our own experts in the review of the valuation reports.</p> <p>We reconciled the fair value in the financial reporting with the valuation reports.</p> <p>We assessed whether the disclosures in note 20, GPFG, notes 6 and 7 regarding valuation of unlisted real estate was 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 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 methods 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

Management is responsible for the other information. The other information comprises information in the annual report, except the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Board and the Governor for the Financial Statements

The Executive Board and the Governor are responsible for the preparation in accordance with law and regulations, including fair presentation of the financial statements 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. The Executive Board and the Governor are responsible for such internal control as they determine 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 laws, regulations, and auditing standards and practices generally accepted in Norway, including 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 laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs, we exercise professional judgment and maintain professional skepticism 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 the Executive Board and the Governor.
- 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 fair presentation.

We communicate with the Executive Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Executive Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the 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.

Report on Other Legal and Regulatory Requirements

Opinion on the Executive Board's report

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Executive Board's report and in the statements on Corporate Social Responsibility concerning the financial statements, and the allocation of the result is consistent with the financial statements and complies with the law, the regulations and the guidelines for Norges Bank.

Opinion on Registration and Documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, it is our opinion that the Executive Board and the Governor has fulfilled its duty to produce a proper and clearly set out registration and documentation of Norges Bank's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 4 February 2021

Deloitte AS

Henrik Woxholt

State Authorised Public Accountant

Note: Translation has been made for information purposes only.



To the Supervisory Council of Norges Bank

Independent auditor's assurance report on the information on "Responsible investment management of the Government Pension Fund Global for 2020"

We have been engaged by the Supervisory Council of Norges Bank to provide limited assurance in respect of the information on Responsible investment management of the Government Pension Fund Global, presented on pages 110 – 114 in the Norges Bank – Annual Report 2020. Our responsibility is to conclude with a limited level of assurance that:

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- Norges Bank has applied procedures to identify, collect, compile and validate information for 2020 to be included in the section Responsible investment management of the Government Pension Fund.
- The information in the section Responsible investment management of the Government Pension Fund 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. The Executive Board and the Governor 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 section Responsible investment management of the Government Pension Fund is described in the section.

Auditor's responsibilities

Our responsibility is to express a limited assurance conclusion on the information in the section Responsible investment management on the Government Pension Fund. 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 management and individual resources responsible for responsible investment management, as well as a review on a sample basis of evidence supporting the information in the section Responsible investment management of the Government Pension Fund.

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 2020 to be included in the section Responsible investment management of the Government Pension Fund.
- The information presented for 2020 in the section Responsible investment management of the Government Pension Fund is consistent with the supporting documentation presented to us.

Oslo, 4 February, 2021
Deloitte AS

Henrik Woxholt
State Authorised Public Accountant

Frank Dahl
Deloitte Sustainability

Note: Translation has been made for information purposes only.

RESOLUTION OF THE SUPERVISORY COUNCIL ON THE FINANCIAL STATEMENTS FOR 2020

Norges Bank's Supervisory Council adopted the following decision at its meeting 24 February 2021:

- The Supervisory Council takes note of the Annual Report of the Executive Board for 2020.
- The Supervisory Council takes note of the auditor's report for Norges Bank and the auditor's report on responsible investment for 2020 and approves Norges Bank's financial statements for 2020.
- In accordance with the guidelines, the net profit of NOK 28.8bn is to be transferred as follows: NOK 22.7bn to the Adjustment Fund and NOK 6.1bn to the Transfer Fund. From the Transfer Fund, one-third, or NOK 15.2bn, 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 2020 will be adopted by the Supervisory Council on 18 March 2021 and Published upon submission to the Storting.

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NORGES BANK
INVESTMENT MANAGEMENT


A photograph of two children running on a sandy beach. The child on the left is a girl wearing a white tank top, blue shorts, and a white hat. The child on the right is a boy wearing a blue t-shirt and green shorts. They are both smiling and running towards the camera. The background shows the ocean and a clear sky.

Government Pension Fund Global

Annual report

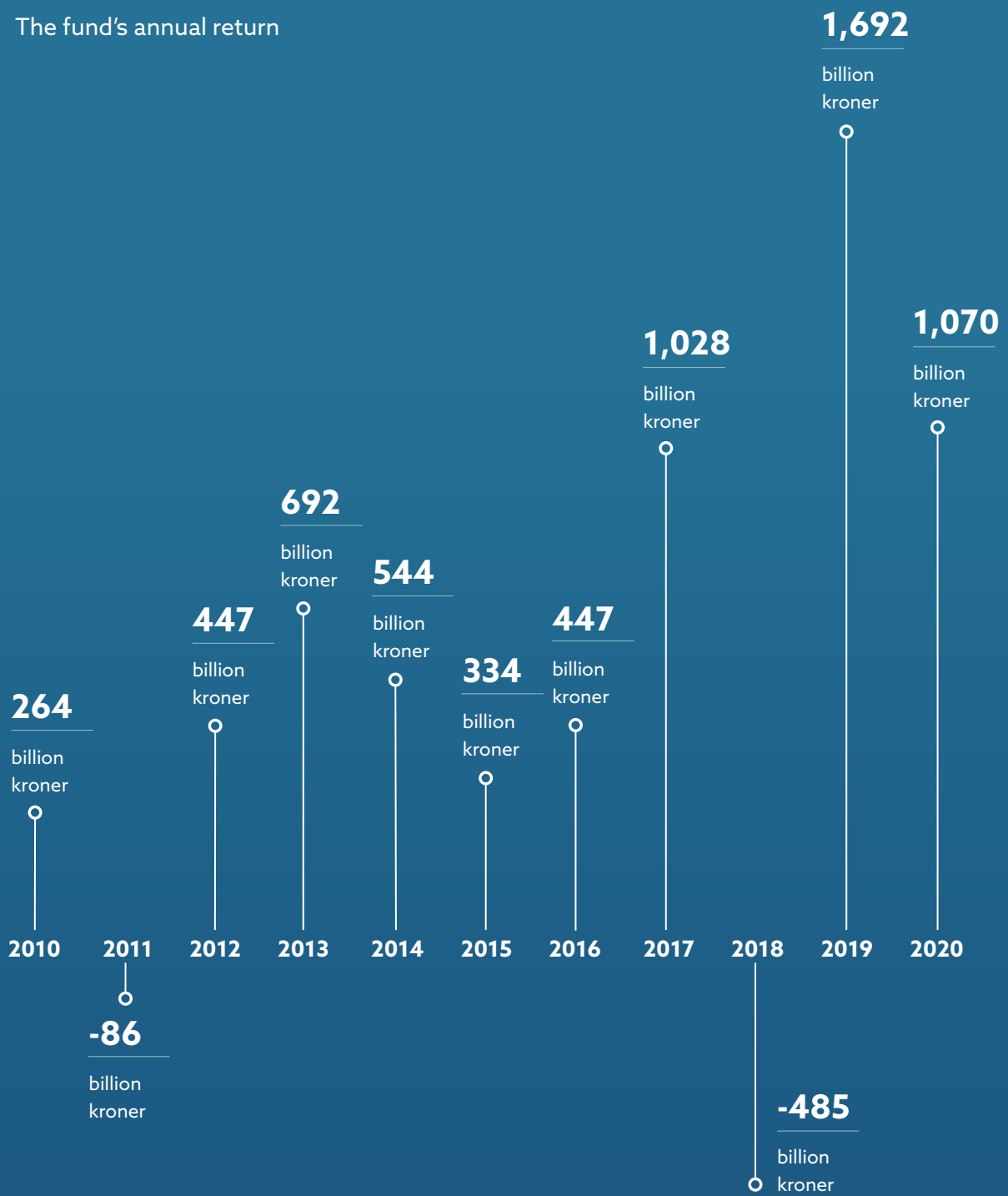
2020



The background is a soft-focus landscape. The upper portion shows a range of blue-grey mountains under a pale sky. The lower portion shows a field of dry, yellowish-brown grass or brush. The overall tone is calm and natural.

**Our mission is to
safeguard and build
financial wealth for
future generations**

The fund's annual return



10.9%

1,070 billion kroner

The Government Pension Fund Global returned 10.9 percent, or 1,070 billion kroner, in 2020.



Equity

12.1%

return on the fund's equity investments



Unlisted real estate

-0.1%

return on the fund's unlisted real estate investments



Fixed income

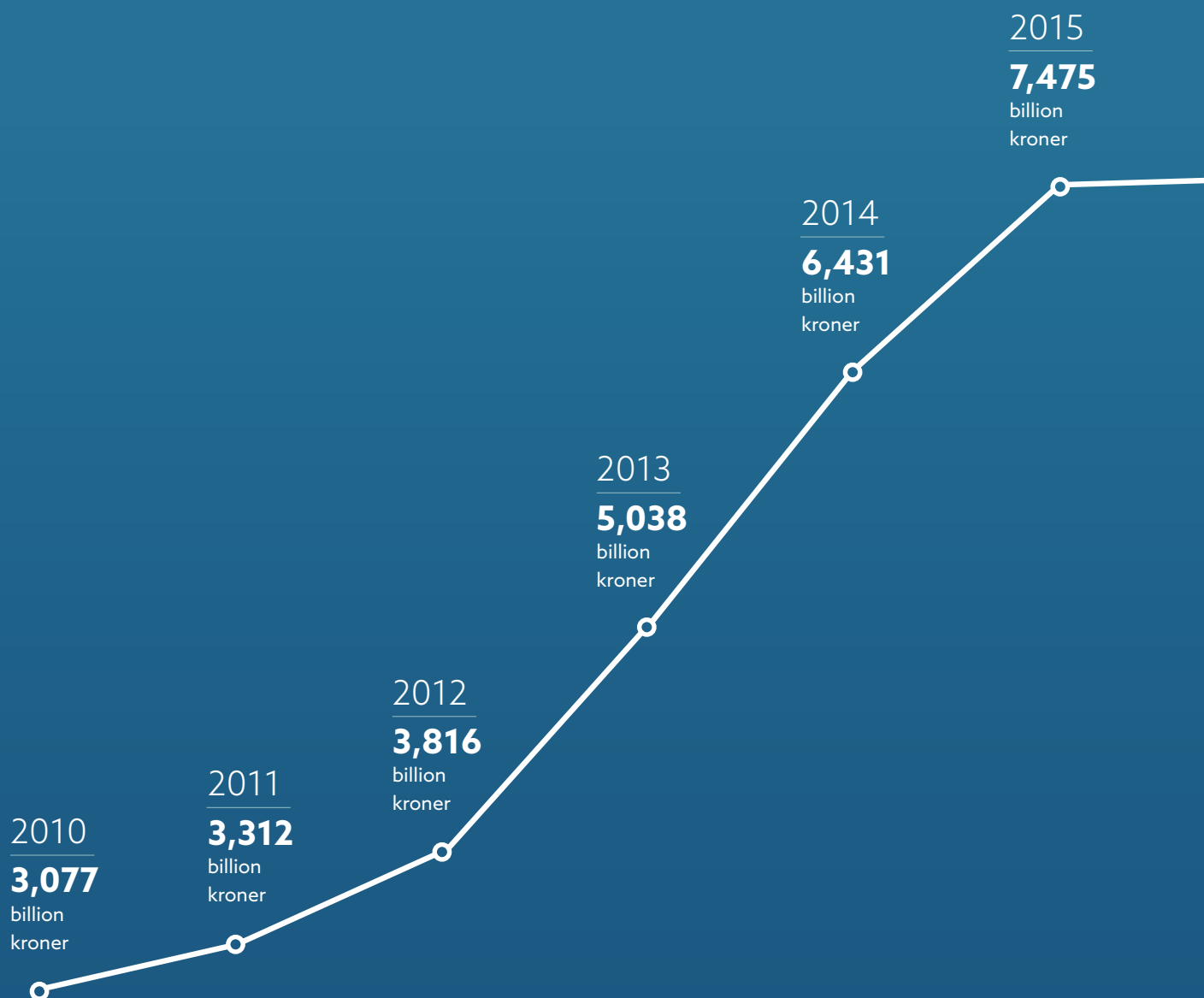
7.5%

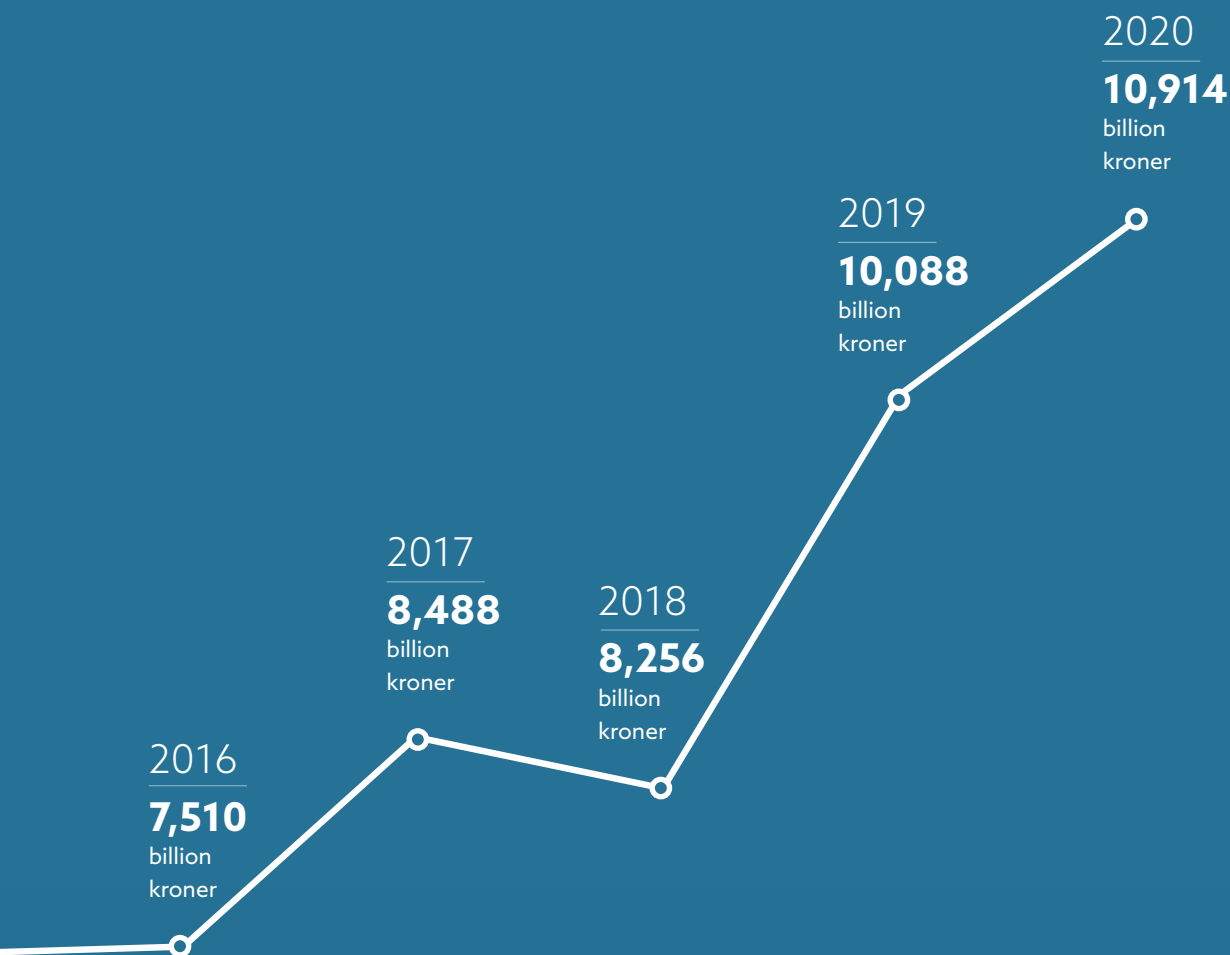
return on the fund's fixed-income investments

10,914

billion kroner

The fund's market value was 10,914 billion kroner at the end of 2020, up from 10,088 billion kroner a year earlier.





Equity

7,945
billion kroner

72.8%
of the fund



Unlisted real estate

273
billion kroner

2.5%
of the fund



Fixed income

2,695
billion kroner

24.7%
of the fund

The equity investments had a market value of 7,945 billion kroner, the unlisted real estate investments 273 billion kroner and the fixed-income investments 2,695 billion kroner at the end of 2020.

The fund's asset allocation was 72.8 percent in equities, 2.5 percent in unlisted real estate and 24.7 in fixed income.

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Translated from Norwegian for information only.

Related information published on www.nbim.no Holdings, voting records, composition of benchmark indices, GIPS report, monthly returns, risk-adjusted returns, stress tests, external mandates and responsible investment report.

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Øystein Olsen
Chair of the Executive Board

The Executive Board's assessment of the results

The coronavirus pandemic in 2020 led to demanding working conditions and large and sudden movements in financial markets. The investments in the Government Pension Fund Global nevertheless returned 10.9 percent in 2020, which is 0.27 percentage point more than the return on the benchmark index the fund is measured against. The Executive Board is pleased that a solid excess return was achieved in a turbulent year.

The Government Pension Fund Global had a market value of 10,914 billion kroner at the end of 2020. The fund's return before management costs was 10.9 percent measured in the fund's currency basket. Equities returned 12.1 percent, bonds 7.5 percent, and unlisted real estate -0.1 percent. Management costs amounted to 0.05 percent of assets under management.

Returns varied considerably during the year. When the coronavirus pandemic spread in March, the value of the fund's equity investments dropped sharply. This caused a decrease in the equity share in the fund's benchmark index and triggered a gradual rebalancing back to 70 percent. The fund's return in the first quarter was the lowest in its history, both in kroner and in percentage terms. Both the strong recovery in equity prices during the spring and withdrawals of capital from the fund by the government reduced the need to purchase equities, and the equity share was back to 70 percent by the end of the second quarter.

There were substantial variations in equity returns between sectors, which also contributed to equities in different regions performing differently. Containment measures in response to the coronavirus pandemic contributed to negative returns on both listed and unlisted real estate investments.

The outbreak of the pandemic and the partial shutdown of Norges Bank's offices in Norway and abroad presented challenges for the management of the Government Pension Fund Global. Employees put in great effort to manage the fund in these circumstances. The Executive Board recognises that Norges Bank has been able, at all times, to perform its

mission and has managed the fund in line with approved strategies. In a year of operational challenges and sometimes demanding market conditions, the return before management costs was 0.27 percentage point higher than that on the fund's benchmark index.

Norges Bank manages the fund with a view to achieving the highest possible long-term return within the constraints laid down in the mandate from the Ministry of Finance. Norges Bank pursues a variety of investment strategies. For the period from 2013, these strategies are grouped into three main categories: fund allocation, security selection and asset management. The different strategies build on the fund's special characteristics as a large, long-term investor with limited liquidity needs. The return contributions from the various strategies in 2020 show that fund allocation contributed negatively to the relative return, while asset management and security selection both contributed positively. The single largest contribution to the relative return was from internal security selection in equity and fixed-income management.



The contributions to the relative return from equity, fixed-income and real estate management, show a negative contribution from real estate management, reflecting the poor performance of the sector in 2020, but positive contributions from both equity and fixed-income management.

The Executive Board emphasises the importance of assessing the performance of the fund over time. Viewed over the full period from 1998 to 2020, the annual return on the fund has been 6.3 percent, which is 0.25 percentage point higher than the return on the benchmark index before management costs. The annual net real return, after deductions for inflation and management costs, has been 4.4 percent in the same period. The Executive Board is satisfied that the return both in 2020 and over a longer period has been good and higher than the return on the benchmark index. The large fluctuations in the markets in 2020 nevertheless serve as a reminder that the fund's returns can vary considerably.

In the period from 2013, the annual excess return before management costs has been 0.20 percentage point. The Board is satisfied that the overall return has been higher than that on the benchmark index during this period. The contributions from the three groups of strategies show that fund allocation has contributed negatively to the relative return during the period, while asset management and security selection have both contributed positively.

The objective of Norges Bank's management of the fund 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 Norges Bank to manage the fund with the aim that expected relative volatility (tracking error) does not exceed 1.25 percentage points.

Expected relative volatility was 0.56 percentage point at the end of 2020, up from 0.33 percentage point a year earlier. The increase is not primarily a result of wider deviation

between the fund and the benchmark index, but is due to the increase in measured risk owing to the fluctuations observed in the markets during 2020. Measured over the full period from 1998 to 2020, realised relative volatility has been 0.66 percentage point. The Executive Board notes that the management of the fund has achieved an excess return over time despite remaining well within this risk limit.

The management of the fund is to be cost-effective. Cost-effective management supports the objective of the highest possible return after costs. In the period 2013-2020, annual management costs averaged 0.06 percent of assets under management. In 2020, management costs amounted to 5.3 billion kroner, or 0.05 percent of assets under management. The Executive Board is satisfied that management costs are low compared to other managers.

The Executive Board has issued principles for responsible management of the fund. Norges Bank works systematically on establishing principles, exercising ownership and investing responsibly. The Board decides on the exclusion and observation of companies based on ethically motivated guidelines laid down by the Ministry of Finance.

The Executive Board is currently reviewing the strategic plan for the period 2020-2022 in close dialogue with the new CEO for the fund. As part of this work, it will assess how the various strategies have contributed to the fund's results over time.

The Executive Board
Oslo, 25 February 2021



Øystein Olsen

Chair of the Executive Board



Ida Wolden Bache

Deputy Chair of the Executive Board



Kristine Ryssdal

Board member



Arne Hyttnes

Board member



Karen Helene Ulltveit-Moe

Board member



Hans Aasnæs

Board member



Nina Udnes Tronstad

Board member



Egil Herman Sjørus

Board member



Nicolai Tangen
Chief Executive Officer

Mie Caroline Holstad
Chief Real Assets Officer

Dag Huse
Chief Risk Officer

Age Bakker
Chief Technology Officer

Petter Johnsen
Chief Equities Officer

Carine Smith Ihenacho
Chief Governance and
Compliance Officer

Trond Grande
Chief of Staff/Deputy Chief
Executive Officer

Birgitte Bryne
Chief Operation Officer

Geir Øivind Nygård
Chief Asset Strategies Officer

Strong return in a difficult year

The fund returned 10.9 percent in 2020, a year impacted dramatically by a global pandemic.

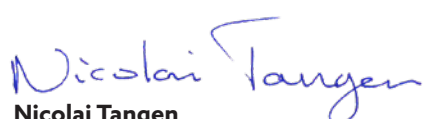
2020 was a year for the history books. The outbreak and spread of the coronavirus had enormous consequences for us all. The pandemic had a dramatic impact on the markets in the first quarter, followed by a rapid recovery in the second. The year saw high levels of volatility and considerable variations between sectors. Although global economic growth was hit hard, the fund's equity investments returned 12.1 percent. Our technology stocks made a particularly strong contribution, returning no less than 41.9 percent.

The pandemic also affected the fund operationally. We have offices around the world, and our activities and employees in Shanghai and Singapore were the first to be affected. This meant that we were well prepared by the time the pandemic reached Oslo, London and New York. The transfer of all of the fund's IT operations to the cloud the previous year was a key factor in our ability to handle 30 million transactions in 2020 despite most of our staff working from home.

The oil fund is a generational fund but also a reserve fund. In 2020, we saw how important the fund is when Norway is struck by a crisis. We transferred 298 billion kroner out of the fund during the year to cover the central government budget deficit. In the same period, the fund received 218 billion kroner in dividend, coupons and rental income from its investments.

2020 was also the year when I took over as CEO of the oil fund after Yngve Slyngstad. Yngve made an enormous contribution, and I have inherited an exceptional organisation with 518 talented colleagues. All of them deserve great credit for their sterling efforts during a challenging year.

Oslo, 25 February 2021



Nicolai Tangen

Chief Executive Officer

Norges Bank Investment Management

Large fluctuations in fund return

The market value of the Government Pension Fund Global increased by 826 billion kroner in 2020, a year of substantial fluctuations in asset values.

The fund returned 10.9 percent in 2020. Equity investments returned 12.1 percent, unlisted real estate investments -0.1 percent, and fixed-income investments 7.5 percent.

Return since inception more than 6 trillion kroner

The Norwegian government first allocated capital to the fund in May 1996 and had transferred a total of 3,092 billion kroner by the end of 2020. Norges Bank Investment Management was set up on 1 January 1998 to handle the operational management of the fund. Between then and the end of 2020, the fund generated a return of 6,427 billion kroner, equivalent to an annual return of 6.3 percent. After management costs and inflation, the annual return has been 4.4 percent. Over the past ten years, the fund's accumulated return has been 5,681 billion kroner, giving an annual return of 7.9 percent. After management costs and inflation, the annual return over the past decade has been 6.2 percent.

Returns measured in international currency

The fund is invested in international securities and real estate in foreign currency. We measure returns in a basket of international currencies. This basket is defined in the management mandate as a weighted combination of the currencies in the fund's benchmark indices for equities and bonds, and consisted of 36 currencies at the end of 2020. Unless otherwise stated in the text, results are measured in this currency basket.

Market value increased by 826 billion kroner

The fund's market value climbed 826 billion kroner to 10,914 billion kroner during the year. The market value is affected by investment returns, capital inflows and withdrawals, and exchange rate movements. The fund returned 1,070 billion kroner in 2020, while withdrawals by the government came to 302 billion kroner after the payment of management fees. The krone weakened against many of the currencies the fund is invested in, which in isolation increased its market value by 58 billion kroner, but this has no bearing on the fund's international purchasing power. The fund's asset allocation at the end of the year was 72.8 percent equities, 2.5 percent unlisted real estate and 24.7 percent fixed income.

Table 1 Return figures. Percent.

	2020	2019	2018	2017	2016
Returns measured in the fund's currency basket					
Equity investments	12.14	26.02	-9.49	19.44	8.72
Unlisted real estate investments ¹	-0.08	6.84	7.53	7.52	0.78
Fixed-income investments	7.46	7.56	0.56	3.31	4.32
Return on fund	10.86	19.95	-6.12	13.66	6.92
Relative return on fund (percentage points) ²	0.27	0.23	-0.30	0.70	0.15
Management costs	0.05	0.05	0.05	0.06	0.05
Return on fund after management costs	10.81	19.90	-6.17	13.60	6.87
Returns in kroner					
Equity investments	12.70	28.20	-6.56	19.74	3.67
Unlisted real estate investments ¹	0.42	8.68	11.02	7.80	-3.91
Fixed-income investments	8.00	9.41	3.82	3.57	-0.53
Return on fund	11.41	22.01	-3.07	13.95	1.95

¹ Includes listed real estate investments from 01.11.2014 to the end of 2016.

² Includes unlisted real estate investments from 01.01.2017. Relative return prior to 2017 is calculated on the aggregated equity and fixed-income investments.

Table 2 Historical key figures as at 31 December 2020. Annualised data, measured in the fund's currency basket.

	Since 01.01.1998	Last 15 years	Last 10 years	Last 5 years	Last 12 months
Fund return (percent)	6.29	6.45	7.95	8.69	10.86
Annual price inflation (percent)	1.72	1.73	1.54	1.52	0.59
Annual management costs (percent)	0.08	0.08	0.06	0.05	0.05
Net real return on fund (percent)	4.42	4.57	6.25	7.02	10.16
The fund's actual standard deviation (percent)	8.06	9.15	8.43	9.68	17.58
Relative return on fund (percentage points) ¹	0.25	0.10	0.16	0.19	0.27
The fund's tracking error (percentage points) ¹	0.66	0.76	0.36	0.34	0.34
The fund's information ratio (IR) ^{1,2}	0.40	0.18	0.46	0.56	0.83

¹ Based on aggregated equity and fixed-income investments until end of 2016.

² The fund's information ratio (IR) is the ratio of the fund's average monthly relative return to the fund's tracking error. The IR indicates how much relative return has been achieved per unit of relative risk.

Chart 1 The fund's annual return and accumulated annualised return. Percent.

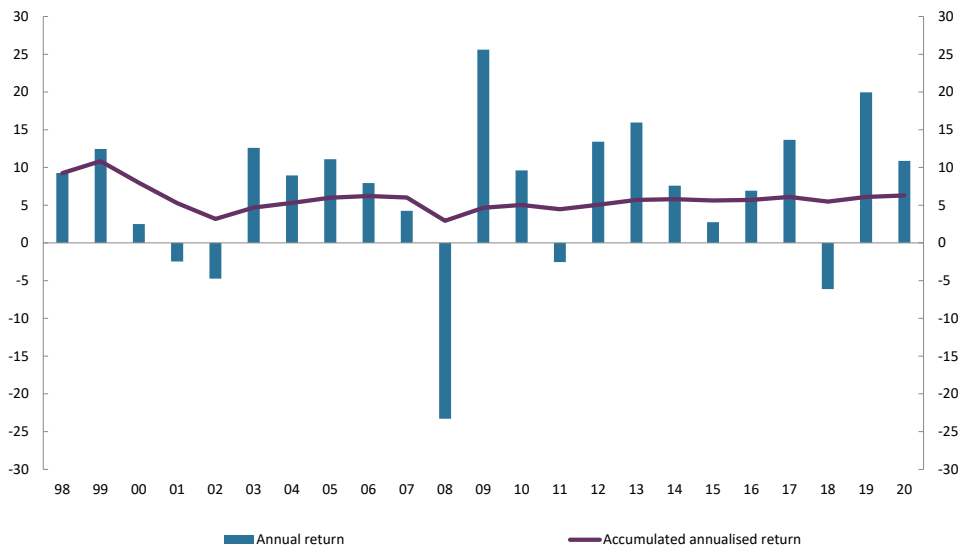


Chart 2 Historical returns on the fund's investments. Percent.

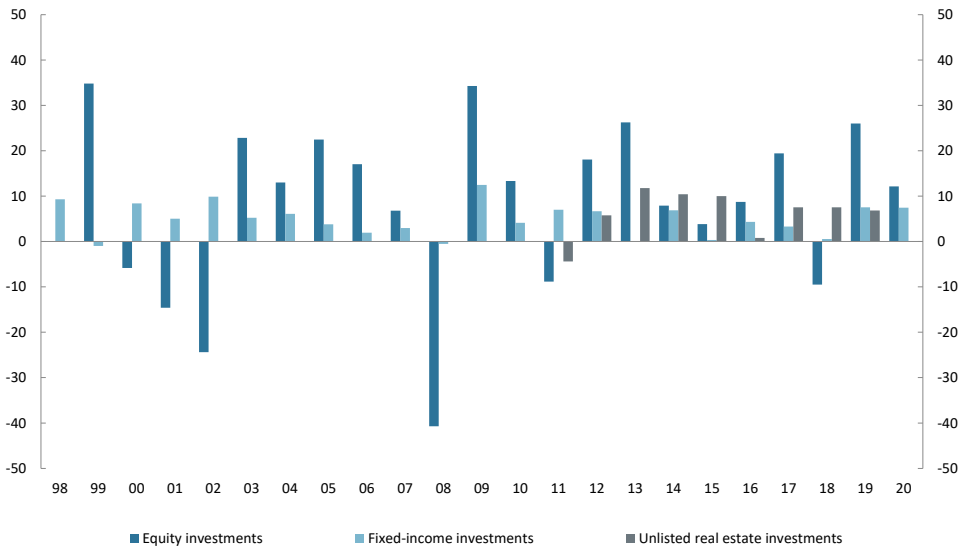


Table 3 Return on the fund as at 31 December, measured in various currencies. Percent.

	Since 01.01.1998 Annualised figures	2020	2019	2018	2017	2016
US dollar	6.65	14.35	20.24	-8.44	19.92	4.83
Euro ¹	6.15	4.90	22.45	-3.83	5.33	7.97
British pound	7.54	10.82	15.59	-2.75	9.54	25.05
Norwegian krone	7.38	11.41	22.01	-3.07	13.95	1.95
Currency basket	6.29	10.86	19.95	-6.12	13.66	6.92

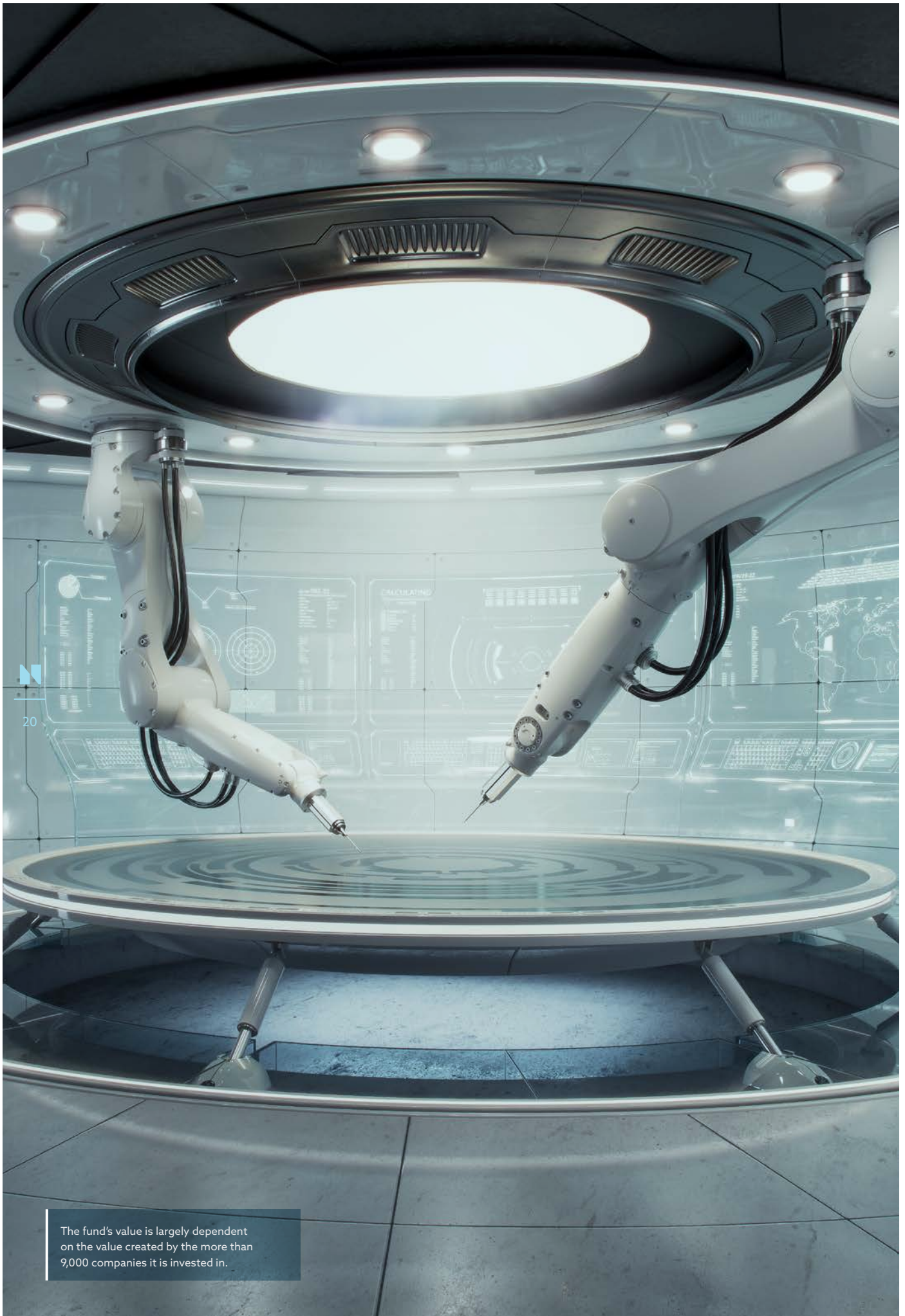
¹ Euro was introduced as currency on 01.01.1999. WM/Reuters' euro rate is used as estimate for 31.12.1997.

Table 4 Historical returns on the fund's investments. Percent

	Fund	Equity investments	Fixed-income investments	Unlisted real estate investments ¹
2020	10.86	12.14	7.46	-0.08
2019	19.95	26.02	7.56	6.84
2018	-6.12	-9.49	0.56	7.53
2017	13.66	19.44	3.31	7.52
2016	6.92	8.72	4.32	0.78
2015	2.74	3.83	0.33	9.99
2014	7.58	7.90	6.88	10.42
2013	15.95	26.28	0.10	11.79
2012	13.42	18.06	6.68	5.77
2011 ²	-2.54	-8.84	7.03	-4.37
2010	9.62	13.34	4.11	-
2009	25.62	34.27	12.49	-
2008	-23.31	-40.71	-0.54	-
2007	4.26	6.82	2.96	-
2006	7.92	17.04	1.93	-
2005	11.09	22.49	3.82	-
2004	8.94	13.00	6.10	-
2003	12.59	22.84	5.26	-
2002	-4.74	-24.39	9.90	-
2001	-2.47	-14.60	5.04	-
2000	2.49	-5.82	8.41	-
1999	12.44	34.81	-0.99	-
1998	9.26	-	9.31	-

¹ Includes listed real estate investments from 01.11.2014 to the end of 2016.

² Unlisted real estate investments from 01.04.2011.



The fund's value is largely dependent on the value created by the more than 9,000 companies it is invested in.

Table 5 Key figures. Billions of kroner.

	2020	2019	2018	2017	2016
Market value					
Equity investments	7,945	7,145	5,477	5,653	4,692
Unlisted real estate investments ¹	273	273	246	219	242
Fixed-income investments	2,695	2,670	2,533	2,616	2,577
Market value of fund²	10,914	10,088	8,256	8,488	7,510
Accrued, not paid, management fees ²	-5	-4	-5	-5	-4
Owner's capital ²	10,908	10,084	8,251	8,484	7,507
Inflow/withdrawal of capital³	-298	18	34	-61	-101
Paid management fees ³	-4	-5	-5	-4	-4
Return on fund	1,070	1,692	-485	1,028	447
Changes due to fluctuations in krone	58	127	224	15	-306
Total change in market value	826	1,832	-233	978	35
Changes in value since first capital inflow in 1996					
Total inflow of capital ⁴	3,092	3,389	3,371	3,337	3,397
Return on equity investments	4,897	4,023	2,545	3,062	2,129
Return on unlisted real estate investments ¹	84	85	69	53	38
Return on fixed-income investments	1,446	1,249	1,052	1,037	955
Management fees ⁵	-53	-48	-44	-39	-35
Changes due to fluctuations in krone	1,448	1,390	1,263	1,040	1,025
Market value of fund	10,914	10,088	8,256	8,488	7,510
Return on fund	6,427	5,358	3,666	4,151	3,123
Return after management costs	6,374	5,309	3,622	4,111	3,088

¹ Includes listed real estate investments from 01.11.2014 to the end of 2016.

² The fund's market value shown in this table does not take into account the management fee. Owner's capital in the financial statements equals the fund's market value less accrued, not paid, management fees.

³ Paid management fees are specified separately, and not included in Inflow/withdrawal of capital.

⁴ Total inflow of capital shown in this table is adjusted for accrued, not paid, management fees.

⁵ Management costs in subsidiaries, see Table 11.2 in the financial reporting section, are not included in the management fees. Management costs in subsidiaries have been deducted from the fund's return before management fees.

Chart 3 The fund's market value. Billions of kroner.

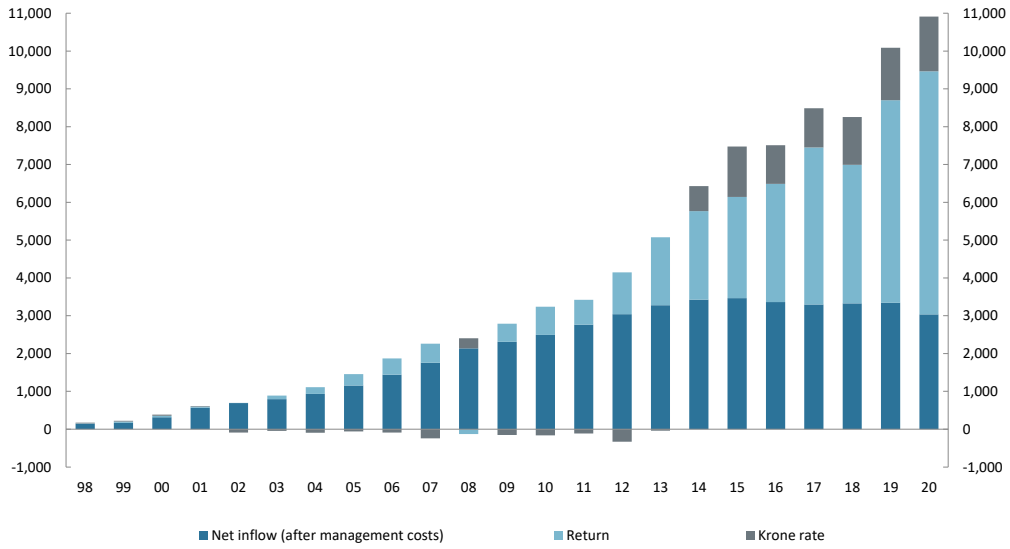


Chart 4 Changes in the fund's market value. Billions of kroner.

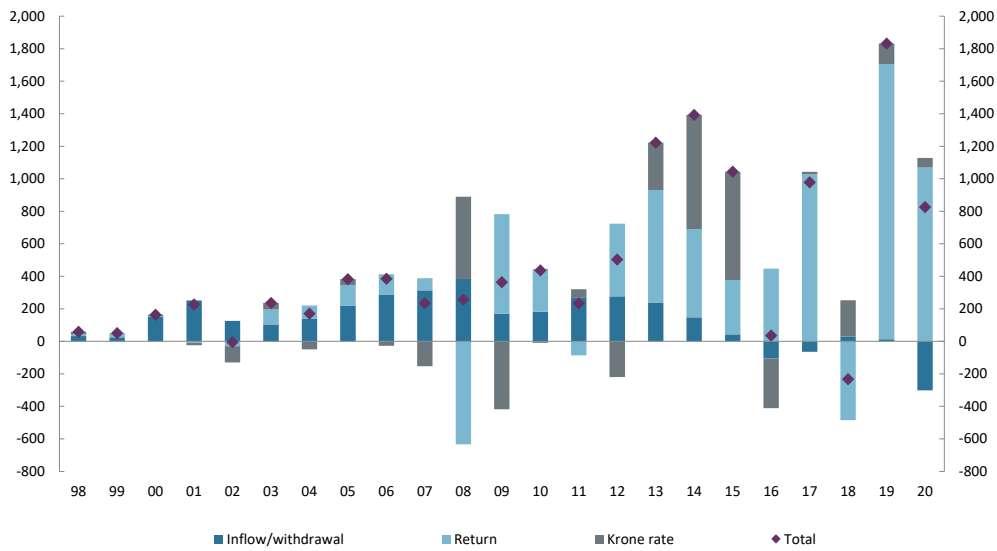
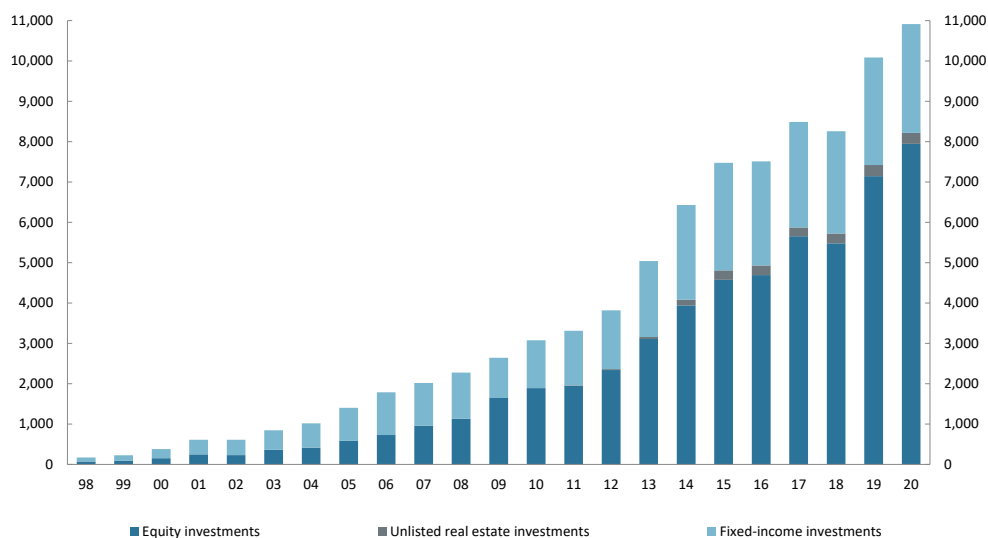


Chart 5 The fund's market value. Billions of kroner.**Table 6** Changes in the fund's market value. Billions of kroner.

Year	Total	Return	Inflow/ withdrawal ¹	Krone rate
2020	826	1,070	-302	58
2019	1,832	1,692	13	127
2018	-233	-485	29	224
2017	978	1,028	-65	15
2016	35	447	-105	-306
2015	1,044	334	42	668
2014	1,393	544	147	702
2013	1,222	692	239	291
2012	504	447	276	-220
2011	234	-86	271	49
2010	437	264	182	-8
2009	365	613	169	-418
2008	257	-633	384	506
2007	235	75	314	-153
2006	385	124	288	-28
2005	383	127	220	36
2004	171	82	138	-49
2003	236	92	104	41
2002	-5	-29	125	-101
2001	227	-9	251	-15
2000	164	6	150	8
1999	51	23	24	3
1998	58	12	33	13
Før 1998	113	0	108	5

¹ After paid management fees.**Table 7** The fund's market value by asset class. Billions of kroner.

Year	Total	Equity	Fixed income	Unlisted real estate ¹
2020	10,914	7,945	2,695	273
2019	10,088	7,145	2,670	273
2018	8,256	5,477	2,533	246
2017	8,488	5,653	2,616	219
2016	7,510	4,692	2,577	242
2015	7,475	4,572	2,668	235
2014	6,431	3,940	2,350	141
2013	5,038	3,107	1,879	52
2012	3,816	2,336	1,455	25
2011	3,312	1,945	1,356	11
2010	3,077	1,891	1,186	-
2009	2,640	1,644	996	-
2008	2,275	1,129	1,146	-
2007	2,019	958	1,061	-
2006	1,784	726	1,058	-
2005	1,399	582	817	-
2004	1,016	416	600	-
2003	845	361	484	-
2002	609	231	378	-
2001	614	246	363	-
2000	386	153	227	-
1999	222	94	129	-
1998	172	70	102	-

¹ Includes listed real estate investments from 01.11.2014 to the end of 2016.

2 | The fund

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26

The Storting (Norwegian parliament)

Government Pension Fund Act

Ministry of Finance

Management Mandate for the Government Pension Fund Global
Guidelines for Observation and Exclusion of Companies

Norges Bank

Principles issued by the Executive Board
Investment mandate issued by the Executive Board
Job description for the CEO of Norges Bank Investment Management issued by the Executive Board

Norges Bank Investment Management

Policies issued by the CEO
Investment mandates and job descriptions issued by the CEO

Our mission

The fund is owned by the Norwegian people. The Ministry of Finance sets the overall investment strategy, and any major changes to this strategy require the approval of the Storting – the Norwegian parliament. Long-term management of the fund ensures that both current and future generations of Norwegians can benefit from the nation's oil wealth.

The fund is invested exclusively outside Norway in order to protect the mainland economy. The formal framework for the fund has been laid down by the Storting in the Government Pension Fund Act. The Ministry of Finance has overall responsibility for the fund and has issued guidelines for its management in the Management Mandate for the Government Pension Fund Global. The Central Bank Act assigns the role of managing the fund to Norges Bank. Norges Bank's Executive Board has delegated the operational management to the CEO of Norges Bank's management of the Government Pension Fund Global by issuing principles, an investment mandate and a job description.

Our role is to manage the wealth in the fund for future generations safely, efficiently, responsibly and transparently. Our objective is the highest possible long-term return within the constraints imposed by the management mandate. We spread our investments widely all around the world to limit the fund's exposure to developments in individual companies, industries and countries.

The management mandate from the Ministry of Finance permits Norges Bank to invest the fund in listed equities, bonds, unlisted real estate and unlisted renewable energy infrastructure. The fund's equity and bond investments largely mirror the benchmark indices defined by the ministry. It is up to Norges Bank to decide how

much to invest in real estate and what types of property to invest in. Property purchases are funded through the sale of equities and bonds. Unlisted and listed real estate investments are managed under a combined strategy for real estate. Investments in renewable energy infrastructure are part of the fund's environmental mandates, which are subject to an upper limit of 120 billion kroner. Unlisted renewable energy infrastructure was added to the mandate in November 2019. No such investments had been made by the end of 2020.

Responsible investment is an integral part of our management of the fund. We are an active owner and prioritise work on well-functioning boards and good corporate governance. Our investment decisions take account of how we view companies' long-term financial, environmental and social performance. We attach importance to high standards of quality and cost effectiveness in the management of the fund. Extensive reporting, an informative website and high media availability ensure the greatest possible transparency about the management of the fund.



The financial markets were characterized by large fluctuations through 2020.

A turbulent year

The coronavirus pandemic plunged the global economy into a deep crisis in 2020. It was a year of large fluctuations in financial markets, considerable variations between sectors and countries, and extraordinary support measures from the authorities.

In the first part of the year, the pandemic and measures to contain the virus triggered a sharp drop in economic activity and short-term growth expectations. Over the summer, lower infection rates and a gradual relaxation of restrictions in many countries led to higher activity and contributed to smaller risk premiums and reduced volatility in financial markets. Infections surged again during the autumn and winter, with the authorities in many countries introducing stringent new measures. The end of the year brought fresh optimism, fuelled by effective vaccines and the start of mass immunisation. Over the year as a whole, the repeated lockdowns nevertheless resulted in a dramatic downturn in the global economy. There were substantial variations between regions, however, with annual GDP expected to grow by around 2.1 percent in China, but fall by 3.6 percent in the US and 7.3 percent in the euro area.

Extraordinary government support packages helped stabilise financial markets and support the real economy during the year. Action was taken more quickly and on a greater scale than in previous economic crises. Central banks worldwide cut interest rates and made huge support purchases in financial markets. Central bank balance sheets in the US, euro area, UK and Japan grew by around 5 trillion dollars in just three months, whereas they took several years to expand that far after the financial crisis in 2008. This easing of monetary policy probably helped bring down risk

premiums, and fears of mass bankruptcies and a credit crunch gradually receded.

The crisis caused by the pandemic was also met with highly expansionary fiscal policy in many countries, resulting in large budget deficits and correspondingly high government borrowing. The US launched substantial economic relief packages at an early point in the crisis. For example, the CARES Act brought direct payments to households, higher unemployment benefits, and forgivable loans and grants for small businesses.

In addition to large national fiscal stimulus packages, the EU countries agreed on a joint borrowing programme to support the economies hit hardest by the crisis with a recovery fund of 750 billion euros. This was seen by many as a step towards closer economic integration in the EU after the crisis as well.

Risk-free interest rates fell widely in the first quarter. The combination of much looser monetary and fiscal policy helped the steep drop in equity prices in the first quarter to reverse over the rest of the year. Although the pandemic imparted an unusually sharp and negative shock to the global economy in the short term, long-term growth expectations were revised down only modestly, which may also have underpinned equity prices.

The pandemic did, however, bring major variations in returns between sectors. Far-reaching restrictions on personal mobility and social contact resulted in substantial growth in digital services, which benefited technology companies. On the other hand, the lockdowns created major challenges for industries that are dependent on travel, such as airlines and oil companies. In some industries, the pandemic led to an increase in debt from already high levels.

Invested widely outside Norway

The fund was invested in 9,123 companies at the end of 2020. Its average holding in the world's listed companies was 1.4 percent.

The fund's investments spanned 73 countries and 49 currencies at the end of 2020.

A total of 45.6 percent of the fund was invested in North America, up from 43.9 percent a year earlier, 32.0 percent in Europe, down from 33.7 percent, and 20.1 percent in Asia-Pacific, up from 19.2 percent. Emerging markets accounted for 9.4 percent of the fund's investments, down from 10.1 percent.

Holdings in more than 9,000 companies

The fund was invested in 9,123 companies at the end of 2020, down from 9,202 a year earlier. It had holdings of more than 2 percent in 1,278 companies, and more than 5 percent in 40 companies.

The fund's average holding in the world's listed companies, measured as its share of the FTSE Global All Cap stock index, was 1.4 percent at the end of the year. Ownership was highest in Europe at 2.6 percent, unchanged from a year earlier. Holdings in developed markets averaged 1.4 percent, while those in emerging markets (including frontier markets) averaged 1.6 percent.

The fund's fixed-income investments consisted of 4,951 securities from 1,245 issuers, up from 4,608 securities from 1,177 issuers. These investments were spread across 22 currencies, down from 26 a year earlier.

Chart 6 The fund's investments as at 31 December 2020. Equities distributed by country and bonds by currency. Percent.

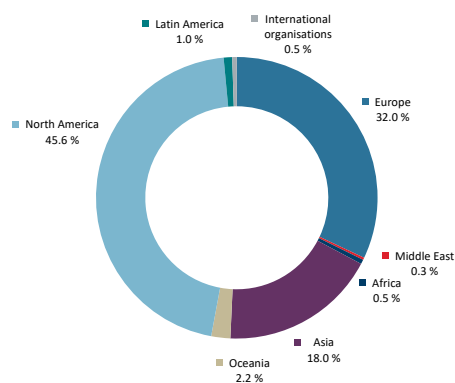


Table 8 The fund's ten largest holdings by country as at 31 December 2020. Percent.

Country	Total	Equity	Fixed income	Unlisted real estate
US	41.6	30.0	10.5	1.1
Japan	8.9	5.9	3.0	0.0
UK	7.0	5.1	1.5	0.4
Germany	5.6	3.2	2.3	0.1
France	5.4	3.4	1.5	0.5
China	3.8	3.8	0.0	-
Switzerland	3.7	3.2	0.4	0.1
Canada	2.5	1.4	1.1	-
Australia	2.1	1.4	0.7	-
South Korea	1.8	1.4	0.4	-

Emerging markets accounted for 2.8 percent of fixed-income investments, down from 8.0 percent. Bonds denominated in dollars, euros, pounds and yen climbed from 84.6 percent to 88.4 percent of fixed-income investments.

Investment opportunities evolve over time. New markets become available for investment, new opportunities emerge, and the risk picture changes. We must constantly adjust the fund's overall exposure to different markets and different sources of risk and return. The fund is invested in numerous markets, countries and currencies to achieve broad exposure to global economic growth.

The starting point for the fund's equity investments is the FTSE Global All Cap index. Which new markets we enter depends on which markets are available for investment, what market opportunities there are, and market standards. The number of countries approved as marketplaces for trading in equities was unchanged at 62.

We had 1,079 billion kroner invested in equities and fixed-income securities in emerging markets at the end of 2020, up from 1,024 billion a year earlier. Investments in equities in frontier markets amounted to 13.0 billion kroner, down from 13.3 billion kroner.

Table 9 Investments in frontier markets. Classification according to FTSE. Millions of kroner.¹

Country	2020
Vietnam	5,017
Slovenia ³	3,627
Bangladesh	2,126
Lithuania ^{2,3}	2,117
Iceland ^{2,3}	1,861
Slovakia ³	1,298
Estonia	1,136
Morocco	957
Sri Lanka	904
Kenya	844
Nigeria	504
Bahrain ³	409
Croatia	310
Peru ³	220
Malta	173
Tunisia ³	110
Mauritius	74
Oman	31
Latvia	22
Cyprus	8
Botswana	7
Total	21,757
Countries not included in the FTSE index	
Saudi Arabia	1,665
Romania ³	849
Ukrania ³	238
Kirgisistan ³	42
Moldova ³	36
Total	2,830

¹ Cash and derivatives are not included.

² Including bonds denominated in a currency other than the local currency.

³ Including investments in stocks listed on stock exchanges in other countries.

Global investments

Number of investments by asset class



North America

2,101
companies

2,208
bonds from
614 issuers

462
properties

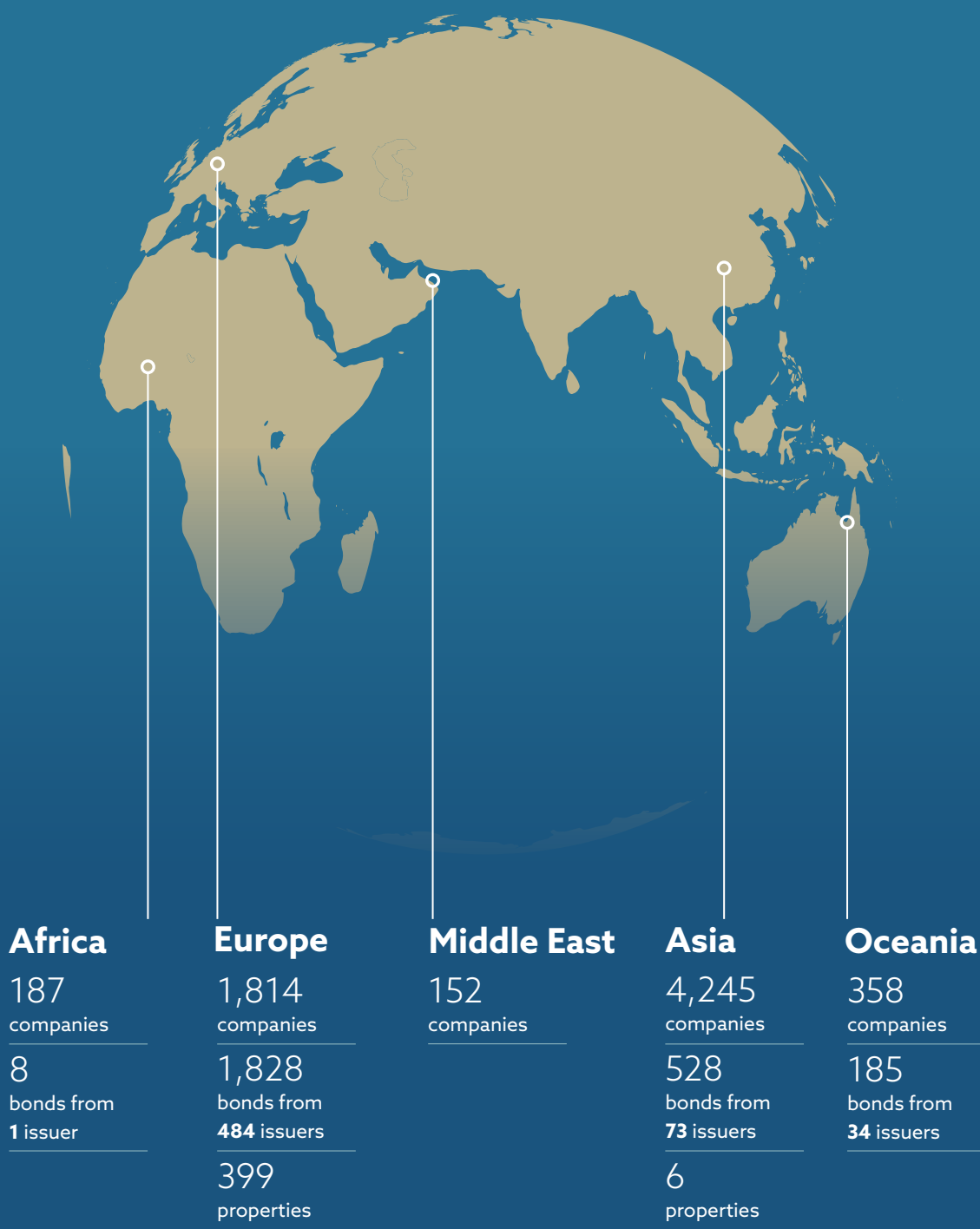
Latin America

266
companies

73
bonds from
22 issuers

International organisations

121
bonds from
17 issuers



Africa

187
companies

8
bonds from
1 issuer

Europe

1,814
companies

1,828
bonds from
484 issuers

399
properties

Middle East

152
companies

Asia

4,245
companies

528
bonds from
73 issuers

6
properties

Oceania

358
companies

185
bonds from
34 issuers

3 | Investments

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Large variations in the equity markets

The fund's equity investments generated a return of 12.1 percent in a year dominated by the coronavirus pandemic. There were substantial variations in returns between markets, sectors and segments.

The fund's investments in developed markets returned 11.6 percent, while those in emerging markets returned 16.6 percent.

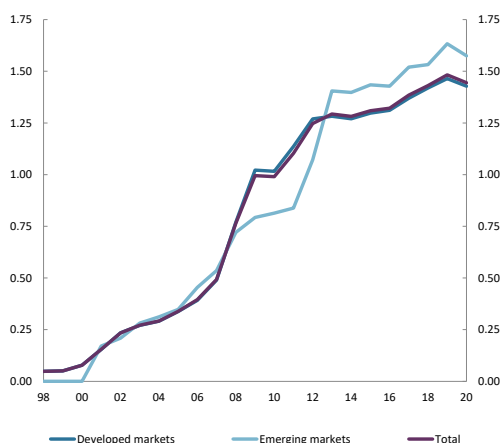
Investments in North America made up 43.9 percent of the fund's equity portfolio and returned 16.9 percent. US stocks returned 21.3 percent in local currency and accounted for 42.0 percent of the fund's equity holdings, making this the fund's single largest market. Measured in the fund's currency basket, the return was 17.6 percent, due to the dollar falling slightly against the currency basket.

European stocks returned 3.9 percent and amounted to 30.9 percent of the fund's equity investments. The UK was the fund's third-largest single market behind the US and Japan, with 7.2 percent of its equity investments, and returned -12.3 percent in local currency. Measured in the fund's currency basket, the return was -12.2 percent, due to the pound strengthening very slightly against the currency basket.

Investments in Asia-Pacific made up 23.5 percent of the fund's equity portfolio and returned 18.3 percent. Excluding Japan, the

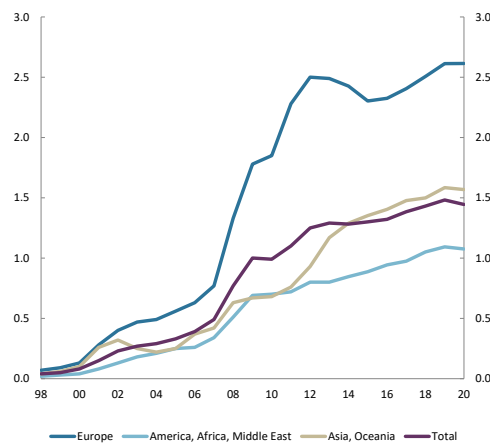


Chart 7 The fund's holdings in equity markets. Percentage of market value of equities in the benchmark index.



Source: FTSE Russell, Norges Bank Investment Management

Chart 8 The fund's holdings in equity markets. Percentage of market value of equities in the benchmark index.



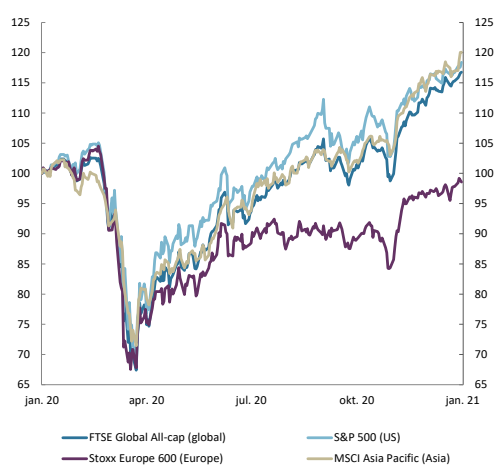
Source: FTSE Russell, Norges Bank Investment Management

region returned 22.9 percent. Japanese stocks made up 8.2 percent of the fund's equity holdings and returned 8.3 percent in local currency. Measured in the fund's currency basket, the return was 10.5 percent, due to the yen strengthening against the currency basket.

Emerging markets (including frontier markets) accounted for 12.0 percent of the fund's equity investments. Chinese equities returned 29.7 percent in local currency, or 33.9 percent in the fund's currency basket. China accounted for 5.3

percent of the fund's equity investments and was its single largest emerging market, followed by Taiwan at 2.1 percent and India at 1.3 percent. The fund's investments in these last two countries returned 30.3 and 19.5 percent respectively in local currency, or 34.8 and 13.2 percent measured in the fund's currency basket.

Chart 9 Price developments in regional equity markets. Measured in US dollars, except for the Stoxx Europe 600, which is measured in euros. Indexed total return 31.12.2019 = 100.



Source: Bloomberg

Table 10 Return on the fund's largest equity investments in 2020 by country. Percent.

Country	Return in international currency	Return in local currency	Share of equity investments
US	17.6	21.3	42.0
Japan	10.5	8.3	8.2
UK	-12.2	-12.3	7.2
China	33.9	29.7	5.3
France	2.1	-3.3	4.8
Switzerland	10.1	3.6	4.5
Germany	12.3	6.3	4.5
Taiwan	34.8	30.3	2.1
Australia	7.1	0.7	2.0
South Korea	41.1	36.7	2.0



Companies in the technology sector performed best in 2020, returning 41.9 percent.

Tech stocks perform best

Technology companies performed best in 2020 with a return of 41.9 percent. The global pandemic contributed to a sharp increase in demand for products for online working, education, shopping and entertainment, and companies developing these products delivered strong returns.

Basic materials returned 21.0 percent. The return was driven partly by expansionary monetary and fiscal policy and higher commodities prices due to supply disruptions brought on by the pandemic and other disruptions.

Consumer services stocks returned 17.3 percent. A particularly strong performance from online retailers benefiting from a surge in Internet shopping contributed to this return.

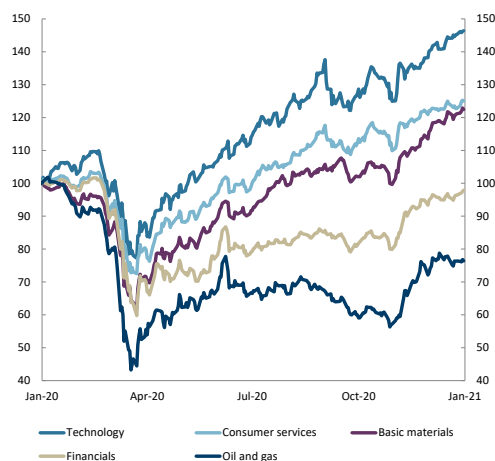
The weakest performer was oil and gas with a return of -25.3 percent. The pandemic had a stark negative effect on mobility, which contributed to a sharp drop in oil prices. The economic downturn also contributed to weak markets for natural gas, refined products and petrochemicals.

Table 11 Return on the fund's equity investments in 2020 by sector. International currency. Percent.

Sector	Return	Share of equity investments ¹
Financials	-6.3	20.4
Technology	41.9	18.5
Industrials	17.2	13.8
Consumer goods	16.7	12.0
Health care	13.7	11.7
Consumer services	17.3	11.5
Oil and gas	21.0	4.4
Basic materials	-25.3	3.0
Utilities	10.3	2.6
Telecommunications	1.7	2.4

¹ Does not sum up to 100 percent because cash and derivatives are not included.

Chart 10 Price developments in stock sectors in the FTSE Global All Cap Index. Measured in US dollars. Indexed total return 31.12.2019 = 100.



Source: FTSE Russell

Largest investments

The investments in technology company Apple Inc and online retailer Amazon.com Inc made the most positive contributions to the return for the year, followed by technology company Microsoft Corp. All three are US companies. The worst-performing investments were in oil and gas company Royal Dutch Shell PLC, bank HSBC Holdings PLC and oil and gas company BP PLC.

The largest investment in any one company was in Apple Inc. This investment accounted for 2.3 percent of the fund’s equity portfolio and had a market value of 185 billion kroner at the end of the year. Both of the fund’s next-largest investments were also in technology companies: 148 billion kroner in Microsoft Corp and 124 billion kroner in Amazon.com Inc, corresponding to 1.9 and 1.6 percent of the fund’s equity portfolio respectively.

Excluding listed real estate companies, the largest percentage holding in any one company was in consumer services company Nordic Entertainment Group AB. The fund’s 8.3 percent stake was worth 2.9 billion kroner. With the exception of listed real estate companies, the fund may hold no more than 10 percent of the voting shares in a company.

We participated in 250 initial public offerings during the year. The largest of these were at consumer services companies JD.com Inc and JD Health International Inc and technology company Snowflake Inc. The offerings in which the fund invested the most were at industrial company GFL Environmental Inc., health care company PPD Inc. and consumer services company Allegro.eu Sa.

T-Mobile US Inc.

T-Mobile US Inc. is one of the big three US telecom companies following its merger in 2020 with Sprint Corp, previously the country’s fourth-largest wireless carrier. Its largest shareholder is Germany’s Deutsche Telekom AG, which has a 43 percent stake. The company has its headquarters in Bellevue, Washington, and has more than 100 million customers.

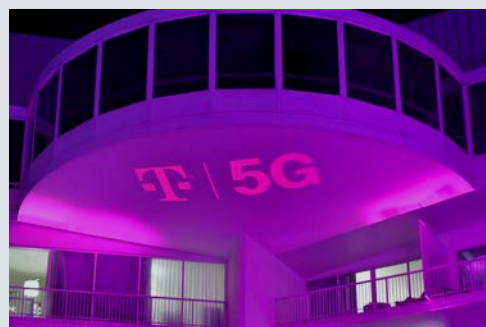


Table 12 The fund's largest equity holdings as at 31 December 2020. Millions of kroner.

Company	Country	Holding
Apple Inc	US	185,339
Microsoft Corp	US	147,893
Amazon.com Inc	US	124,334
Alphabet Inc	US	97,343
Nestle SA	Switzerland	77,028
Facebook Inc	US	67,424
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	66,089
Roche Holding AG	Switzerland	59,125
Samsung Electronics Co Ltd	South Korea	56,598
Alibaba Group Holding Ltd	China	55,559
Tencent Holdings Ltd	China	49,657
Tesla Inc	US	45,802
Novartis AG	Switzerland	45,290
ASML Holding NV	Netherlands	41,000
Johnson & Johnson	US	36,398
Berkshire Hathaway Inc	US	36,382
Vonovia SE	Germany	33,654
Unilever PLC	UK	33,376
LVMH Moet Hennessy Louis Vuitton SE	France	32,908
Royal Dutch Shell PLC	UK	32,794

Table 13 The fund's largest ownership shares in the equity markets as at 31 December 2020. Percent.

Company ¹	Country	Ownership
Nordic Entertainment Group AB	Sweden	8.9
Smurfit Kappa Group PLC	UK	7.1
Iberpapel Gestion SA	Spain	6.9
Oponeo.pl SA	Poland	6.8
Arkema SA	France	6.7
ASR Nederland NV	Netherlands	6.6
Valeo SA	France	6.3
Equitable Holdings Inc	US	6.3
DS Smith PLC	UK	5.6
R22 SA	Poland	5.6
BHP Group PLC	UK	5.6
SIG Combibloc Group AG	Switzerland	5.5
Covanta Holding Corp	US	5.4
Sri Trang Agro-Industry PCL	Thailand	5.4
DIO Corp	South Korea	5.4
Chemring Group PLC	UK	5.3
Direct Line Insurance Group PLC	UK	5.2
Tamura Corp	Japan	5.2
Humansoft Holding Co KSC	Kuwait	5.1
Logo Yazilim Sanayi Ve Ticaret AS	Turkey	5.1

¹ Excluding listed real estate investments.

Sea Ltd.

Sea Ltd. is a provider of online shopping, entertainment and payment services, primarily in Southeast Asia. It was founded in 2009 and was listed on the New York Stock Exchange in 2017. The company has its headquarters in Singapore and is the country's most valuable listed company after its market capitalisation more than quadrupled in 2020.

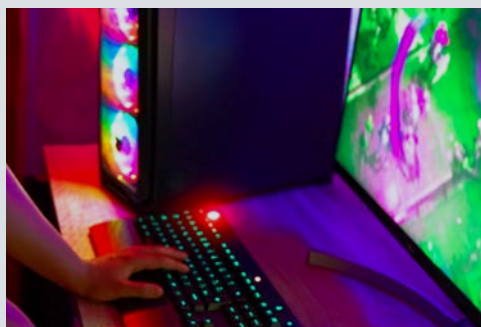


Table 14 Regional composition of the fund's equity holdings.

Region	Millions of kroner ¹	Percent
North America	3,491,165	43.9
US	3,336,345	42.0
Canada	154,820	1.9
Europe	2,456,765	30.9
UK	570,707	7.2
France	384,097	4.8
Switzerland	358,641	4.5
Germany	357,599	4.5
Netherlands	155,330	2.0
Sweden	152,743	1.9
Spain	113,311	1.4
Denmark	95,220	1.2
Italy	93,632	1.2
Finland	50,808	0.6
Belgium	40,576	0.5
Asia	1,698,879	21.4
Japan	652,288	8.2
China	419,142	5.3
Taiwan	170,097	2.1
South Korea	157,619	2.0
India	103,846	1.3
Hong Kong	85,256	1.1
Oceania	170,860	2.2
Australia	158,321	2.0
Latin America	77,491	1.0
Brazil	45,524	0.6
Africa	50,086	0.6
South Africa	42,763	0.5
Middle East	27,635	0.3

¹ Does not sum up to total market value because cash and derivatives are not included.

Table 15 Sector composition of the fund's equity holdings.

Sector	Millions of kroner ¹	Percent
Financials	1,617,065	20.4
Banks	526,255	6.6
Real estate	425,069	5.3
Insurance	357,224	4.5
Financial services	308,517	3.9
Technology	1,473,488	18.5
Technology	1,473,488	18.5
Industrials	1,096,758	13.8
Industrial goods and services	930,882	11.7
Construction and materials	165,877	2.1
Consumer goods	954,501	12.0
Personal and household goods	426,997	5.4
Food and beverage	315,459	4.0
Automobiles and parts	212,045	2.7
Health care	927,688	11.7
Health care	927,688	11.7
Consumer services	910,557	11.5
Retail	579,200	7.3
Travel and leisure	172,944	2.2
Media	158,414	2.0
Oil and gas	353,504	4.4
Oil and gas	182,571	2.3
Basic materials	170,933	2.2
Chemicals	236,621	3.0
Basic resources	236,621	3.0
Utilities	210,284	2.6
Utilities	210,284	2.6
Telecommunications	192,415	2.4
Telecommunications	192,415	2.4

¹ Does not sum up to total market value because cash and derivatives are not included.

A challenging year for the real estate market

The fund's investments in real estate returned -5.0 percent in 2020 and made up 3.8 percent of the fund at the end of the year. Unlisted real estate investments returned -0.1 percent, and listed real estate investments -14.9 percent.

The fund's real estate strategy covers both unlisted and listed real estate investments. Together, these amounted to 419.8 billion kroner at the end of 2020.

Unlisted real estate

The fund's unlisted real estate investments are not part of the strategic benchmark index, which consists solely of equities and bonds. It is up to Norges Bank to determine the scope and mix of real estate investments within the upper limit set in the management mandate of 7 percent of the fund.

We invested a total of 20.5 billion kroner in unlisted real estate during the year, up from 8.1 billion kroner in 2019. We also sold properties for 6.3 billion kroner. Our unlisted real estate investments had a market value of 273.1 billion kroner at the end of the year, equivalent to 2.5 percent of the fund and 65.1 percent of our total real estate investments.

The return on unlisted real estate investments depends on rental income, operating costs, changes in the value of properties and debt, movements in exchange rates, and transaction costs for property purchases and sales. Measured in local currency, rental income net of operating costs contributed 3.4 percentage points to the return in 2020. Operating costs consist of interest on external debt, taxes, fixed management fees, costs at management companies and costs in the holding structure.

Changes in the value of properties and debt contributed -3.5 percentage points to the return in local currency. These consist of realised gains and losses, changes in the value of properties, external debt and other assets and liabilities, and variable management fees. Transaction costs made a contribution of -0.2 percentage point, while exchange rate movements made a positive contribution of 0.3 percentage point as a result of differences between the currency composition of the real estate portfolio and the fund's currency basket.

The coronavirus pandemic had a direct and significant impact on the fund's real estate investments. Lockdowns meant that many of our retail properties had to stop trading, and staff in many of our office properties had to work from home. A number of retail tenants filed for bankruptcy during the year. The retail properties in our unlisted portfolio returned -12.6 percent in

Table 16 Value of real estate investments as at 31 December 2020. Millions of kroner.

	Value ¹
Unlisted real estate investments	273,109
Listed real estate investments	146,677
Aggregated real estate investments	419,786

¹ Including bank deposits and other receivables

2020, compared with -1.5 percent in 2019. Since the start of the pandemic, the fund has received 93 percent of rent due on unlisted real estate: 97 percent for office tenants, 64 percent for retail tenants and 98 percent for logistics tenants.

The acute effects of the pandemic on our real estate investments was accompanied by an acceleration of existing trends in the market. Trading in physical stores has increasingly been replaced with shopping online, a phenomenon that has been positive for the logistics sector. The return on our unlisted logistics properties in 2020 was 9.2 percent.

Investments in Europe returned -2.1 percent in local currency and accounted for 49.9 percent of the fund's unlisted real estate investments at the end of the year. The retail sector in the UK was hit hardest by lockdowns, and e-commerce increased its share of the country's retail sales from 21.5 percent in December 2019 to 31.3 percent in December 2020. Market rents for our retail properties fell by 8.0 percent in London during the year, but climbed 2.8 percent in Paris. Rents for the fund's logistics properties

increased by 1.5 percent in Europe, while office rents fell in London and rose in Continental Europe due to uncertainty around future developments in the sector.

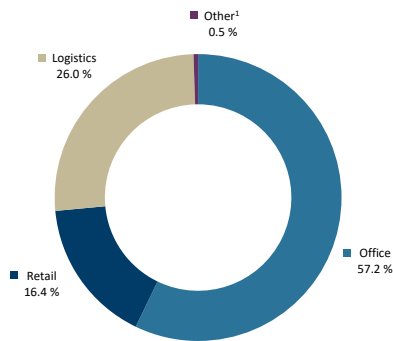
Real estate investments in the US returned 1.9 percent in local currency and made up 46.8 percent of the fund's unlisted real estate investments at the end of the year. Market rents for our office properties in the US largely stagnated or decreased across the cities in which we are invested. In San Francisco, rents fell by 3.5 percent during the year as a result of reduced demand for office space from, among others, the big technology companies. Logistics rents increased in the US due to the growth in e-commerce.

Real estate investments in Japan returned -11.5 percent in local currency and accounted for 3.3 percent of the fund's unlisted real estate investments at the end of the year. Market rents for our office properties in Tokyo fell by 1.3 percent, while vacancy in the market was stable at record-low levels.

Table 17 Return on the fund's unlisted real estate investments. Percentage points.

	Since 01.04.2011	2020	2019	2018	2017	2016
Rental income	3.8	3.4	3.6	3.6	3.7	3.7
Change in value	2.8	-3.5	3.1	4.1	3.8	0.7
Transaction costs	-1.0	-0.2	-0.1	-0.2	-0.2	-0.2
Currency effect	0.1	0.3	0.1	-0.1	0.1	-2.5
Total (percent)	5.7	-0.1	6.8	7.5	7.5	1.7

Chart 11 The fund's unlisted real estate investments by sector as at 31 December 2020. Percent.



¹Other sectors, bank deposits and other claims.

Chart 12 The fund's unlisted real estate investments by country as at 31 December 2020. Percent.

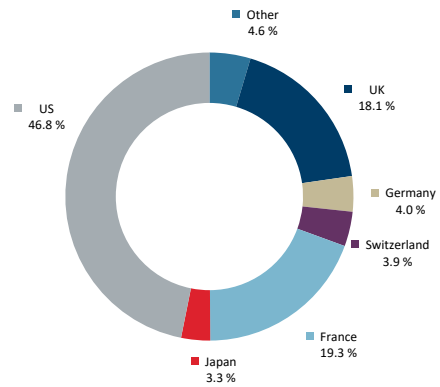


Table 18 The fund's largest unlisted real estate investments, excluding logistics, by city as at 31 December 2020.

City	Percent
Paris	23.9
London	20.0
New York	18.6
Boston	10.3
San Francisco	6.0
Washington, D.C.	5.8
Zurich	5.3
Berlin	4.7
Tokyo	4.4
Sheffield	0.6

Table 19 The fund's largest unlisted real estate investments. Logistics by country as at 31 December 2020.

Country	Percent
US	63.7
UK	10.8
France	6.2
Spain	4.3
Netherlands	3.8
Italy	2.4
Czech Republic	2.3
Poland	2.3
Germany	1.8
Hungary	1.3

Chart 13 Changes in the fund's market value by unlisted real estate investments in 2020. Billions of kroner.

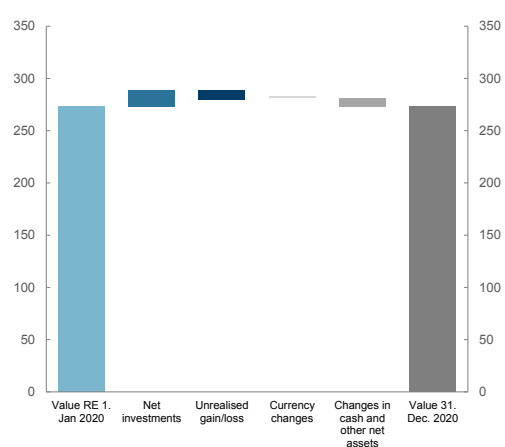


Chart 14 Annual investments in unlisted real estate. Completed transactions. Billions of kroner.

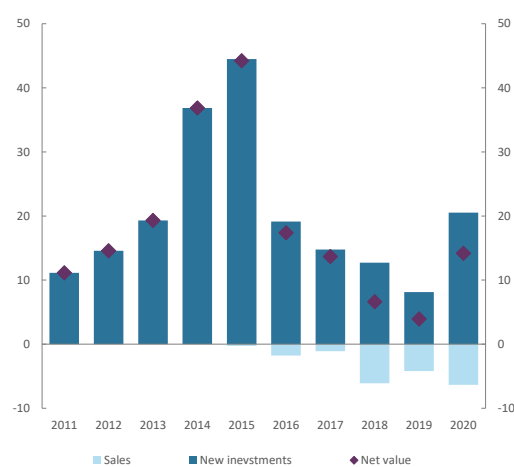


Table 20 Announced new investments and disposals in 2020.

Address	City	Partner	Sector	Ownership Percent	Currency	Price Millions
New investments						
Otemachi Park Building	Tokyo	Mitsubishi Estate	Office	39.9	JPY	79 680.0
One logistics property in the UK	Milton Keynes	Prologis	Logistics	50	GBP	19.6
Disposal of assets						
Two logistics properties in the US	Wisconsin	Prologis	Logistics	45	USD	79.2

Listed real estate

Investments in listed real estate returned -14.9 percent in 2020 and had a market value of 146.7 billion kroner at the end of the year, equivalent to 1.3 percent of the fund and 34.9 percent of our total real estate investments. The fund's investments in listed real estate companies have

exposure to high-quality properties in attractive cities and sectors globally that complement the fund's unlisted real estate portfolio. The listed portfolio is mainly invested in the residential, office and retail sectors. Geographically, it is split almost equally between the US and Europe.

Table 21 Ownership shares for the listed real estate investments as at 31 December 2020.¹
Ownership shares in percent and holdings in million kroner.

Company	Country	Ownership	Value
Shaftesbury PLC	UK	25.8	6,588
Capital & Counties Properties PLC	UK	15.0	2,166
Great Portland Estates PLC	UK	13.1	2,590
Federal Realty Investment Trust	US	9.5	5,241
Vonovia SE	Germany	9.5	33,654
Regency Centers Corp	US	9.5	6,297
Vornado Realty Trust	US	9.4	5,765
Gecina SA	France	9.4	9,455
Derwent London PLC	UK	9.2	3,730
Land Securities Group PLC	UK	9.2	5,358
Deutsche Wohnen SE	Germany	9.1	15,031
Paramount Group Inc	US	9.0	1,539
JBG SMITH Properties	US	8.8	3,136
British Land Co PLC/The	UK	8.8	4,674
Alexandria Real Estate Equities Inc	US	8.6	17,731
Boston Properties Inc	US	8.4	10,516
Kilroy Realty Corp	US	7.9	4,451
Equity Residential	US	7.7	14,577
Svenska Cellulosa AB SCA	Sweden	7.2	7,558
Klepierre SA	France	4.9	2,831
Unibail-Rodamco-Westfield	Netherlands	4.4	4,130
Hudson Pacific Properties Inc	US	4.1	1,269
Douglas Emmett Inc	US	3.4	1,475
Mitsubishi Estate Co Ltd	Japan	3.2	6,061
Essex Property Trust Inc	US	3.1	4,123
Swiss Prime Site AG	Switzerland	2.7	1,695
AvalonBay Communities Inc	US	2.6	5,069
Sunstone Hotel Investors Inc	US	2.4	492
Aroundtown SA	Germany	2.3	2,291
PSP Swiss Property AG	Switzerland	2.3	1,209

¹ The figures for ownership share and holdings also include holdings that are a part of the equity management.

The fund's listed real estate investments consisted of 16 companies in the US, six in the UK, four in France, three in Germany, two in Japan, two in Switzerland, two in Sweden, one in the Netherlands and one in Spain. The fund's 25.8 percent stake in Shaftesbury PLC was one of three investments in the listed portfolio where the fund had a holding above 10 percent at the end of the year.

Unlisted renewable energy infrastructure

In November 2019, the fund was given a mandate to invest in unlisted renewable energy infrastructure, i.e. infrastructure for the production, transmission, distribution and storage of energy from renewable sources. The management mandate from the Ministry of Finance sets an upper limit for these

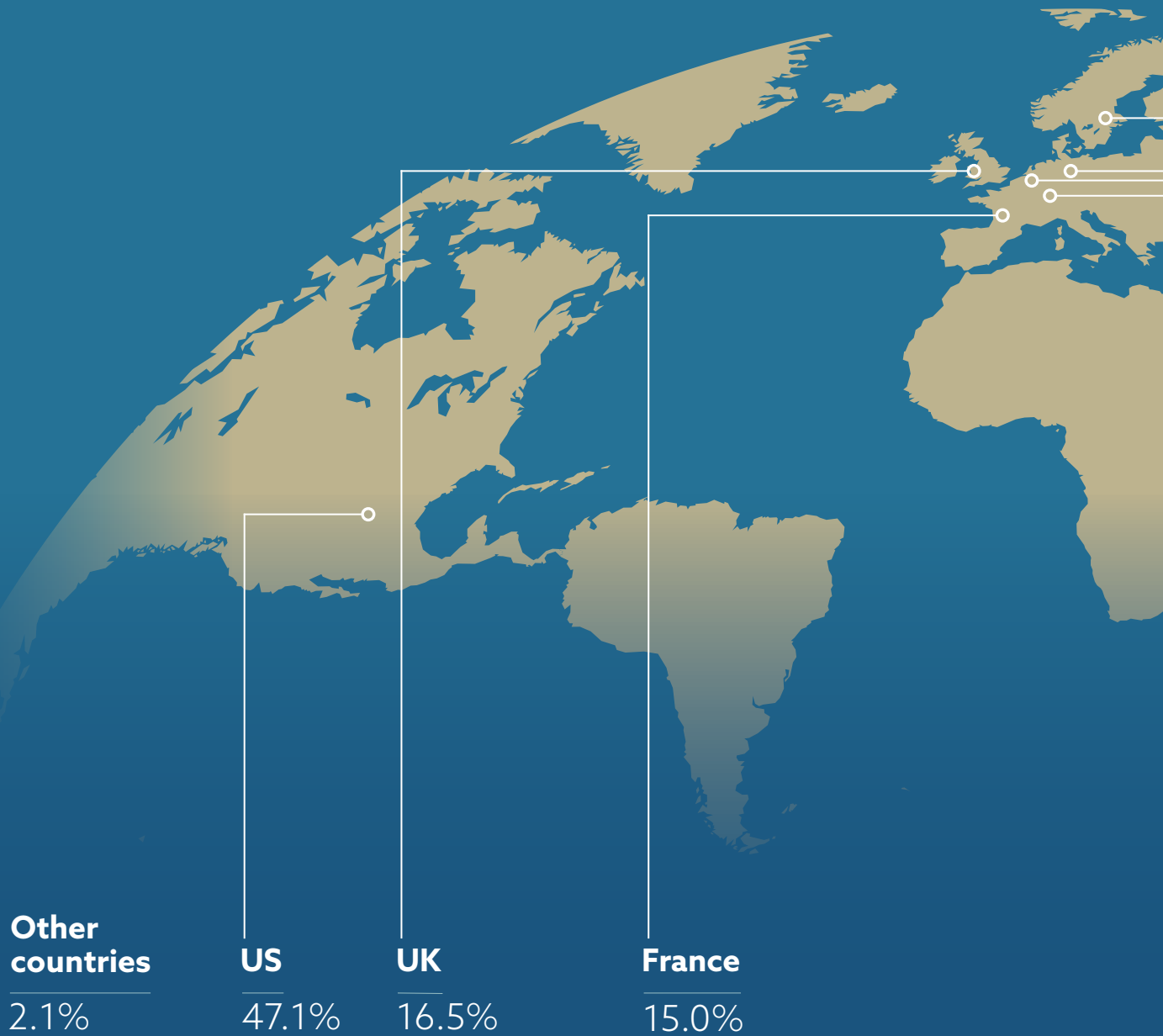
investments of 2 percent of the fund's value. They are also to be made within the limit of 120 billion kroner set for the fund's environmental investment mandates.

The fund built up a group dedicated to investing in unlisted renewable energy infrastructure during the year, and we worked on assessing specific investment opportunities. In line with the strategy plan for 2020-2022, we are concentrating mainly on wind and solar projects in Europe and North America with experienced partners and low power price risks. As at the end of 2020, no investments had yet been made in this asset class.



Real estate investments

Share of market value





Switzerland

2.5%

Netherlands

1.1%

Germany

11.3%

Sweden

1.5%

Japan

3.0%

Good return on fixed income

The fund's fixed-income investments returned 7.5 percent in 2020. The year brought substantial monetary and fiscal easing in all markets in the wake of the pandemic.

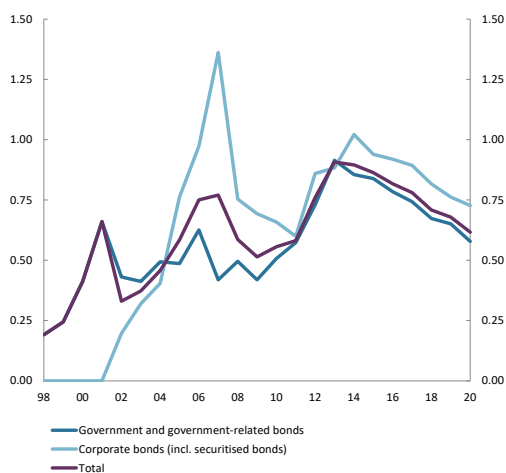
Fixed-income investments accounted for 24.7 percent of the fund at the end of the year. These investments were mainly in bonds, with the remainder in short-term securities and bank deposits. The fixed-income market began to discount the expected economic consequences of the coronavirus pandemic in late February and early March, pricing in monetary easing and higher risk premiums. Central banks reacted with both traditional rate cuts and extensive use of quantitative easing and other measures to increase liquidity, and risk premiums gradually returned to more normal levels.

Yields fall furthest in the US

The fund's government bond holdings made up 56.5 percent of its fixed-income investments and returned 6.4 percent in 2020. Government bonds in developed markets, which made up 51.4 percent of fixed-income investments, returned 7.2 percent.

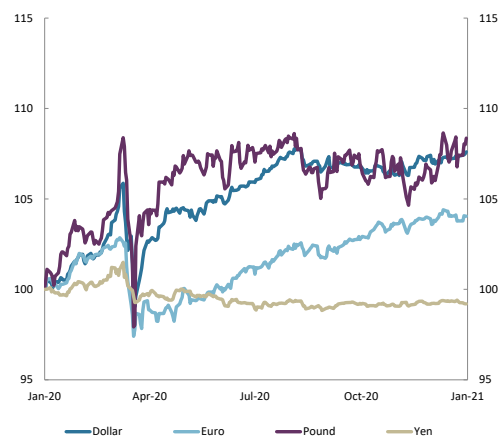
US Treasuries returned 8.7 percent in local currency and 5.3 percent measured in the fund's currency basket, and accounted for 23.2 percent of fixed-income investments, making them the fund's largest holding of government debt from

Chart 15 The fund's holdings in fixed-income markets. Percentage of market value of bonds in the benchmark index.



Source: Bloomberg Barclays Indices, Norges Bank Investment Management

Chart 16 Price developments for bonds issued in different currencies. Measured in local currencies. Indexed total return 31.12.2019 = 100.



Source: Bloomberg Barclays Indices

a single issuer. Ten-year Treasury yields started the year at a record-low 1.9 percent but went on to fall further, ending the first quarter at 0.6 percent. They were then stable, with a moderate recovery towards the end of the year. The Federal Reserve reacted quickly to the pandemic, lowering interest rates to zero for all practical purposes and supplying liquidity to the market through various support programmes. Its balance sheet expanded from just over 4 trillion dollars to well over 7 trillion dollars during the year.

Euro-denominated government bonds returned 5.2 percent in local currency and 11.2 percent in the fund's currency basket, and made up 11.6 percent of fixed-income investments. The ECB's deposit rate was already down at -0.5 percent at the beginning of the year and was not altered. Its monetary easing focused instead on measures

to supply liquidity, the most important being the Pandemic Emergency Purchase Programme (PEPP). The premium investors require to hold government bonds from countries in the euro area with weak government finances shrank during the year, which contributed positively to the return.

UK gilts accounted for 2.6 percent of the fund's fixed-income investments and returned 11.0 percent in both local currency and the fund's currency basket. The Bank of England cut its policy rate from 0.75 percent to 0.1 percent in March and also focused on quantitative easing to support the UK economy, which was affected as well by the exit from the EU.

Japanese government bonds accounted for 10.6 percent of fixed-income holdings and returned -0.6 percent in local currency and 1.4 percent in

Table 22 Return on the fund's largest bond holdings by currency in 2020. Percent.

Currency	Return in international currency	Return in local currency	Share of fixed-income investments
US dollar	6.7	10.0	47.0
Euro	9.9	4.0	28.1
Japanese yen	1.5	-0.6	11.6
British pounds	9.8	9.8	4.8
Canadian dollar	8.0	9.5	3.9
Australian dollar	11.4	4.7	2.5
South Korean won	5.1	1.8	1.4
Mexican peso	7.1	16.6	0.9
Swedish kroner	11.9	1.3	0.8
Swiss franc	8.0	1.7	0.6

the fund's currency basket. In contrast to other developed markets, there were no major changes to either monetary policy or interest rates in Japan.

Government bonds in emerging markets, which made up 5.2 percent of fixed-income investments, returned 3.3 percent. Monetary policy in these markets was more countercyclical than before, with greater attention paid to stimulating demand in the domestic economy and less on stabilising the exchange rate. This led to high returns measured in local currency, but more moderate returns measured in the fund's currency basket.

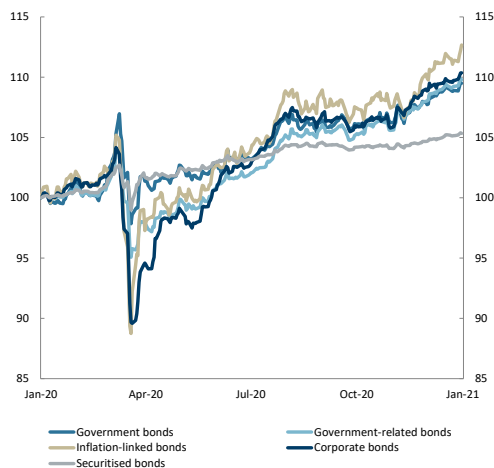
Inflation-linked bonds, all of which are issued by governments, returned 9.1 percent and amounted to 6.3 percent of fixed-income

investments. Inflation expectations fell sharply in March but subsequently returned to around the levels seen at the beginning of the year.

The fund also held bonds from government-related institutions such as Kreditanstalt für Wiederaufbau, Canada Mortgage and Housing Corp, and the European Investment Bank. These returned 7.2 percent and accounted for 11.6 percent of the fund's fixed-income investments at the end of the year.

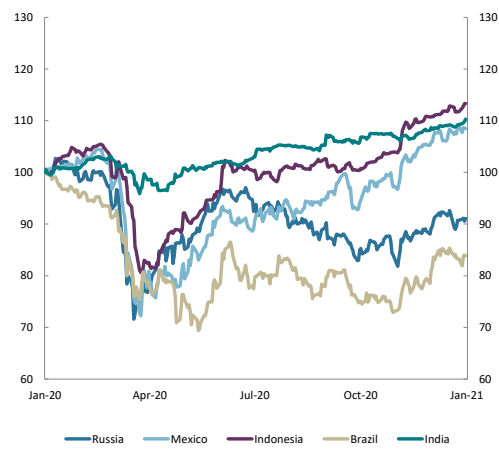
Corporate bonds returned 7.7 percent and represented 26.1 percent of fixed-income investments at the end of the year. There was a substantial and very rapid widening of credit spreads in late February and the first half of March. The credit premium for investment-grade bonds denominated in US dollars jumped from

Chart 17 Price developments in fixed-income sectors. Measured in US dollars. Indexed total return 31.12.2019 = 100.



Source: Bloomberg Barclays Indices

Chart 18 Price developments for 10-year government bonds issued in emerging market currencies. Measured in US dollars. Indexed total return 31.12.2019 = 100.



Source: Bloomberg Barclays Indices

Table 23 Return on the fund's fixed-income investments in 2020 by sector. International currency. Percent.

Sector	Return	Share of fixed-income investments ¹
Government bonds ²	6.4	56.5
Government-related bonds ²	7.2	11.6
Inflation-linked bonds ²	9.1	6.3
Corporate bonds	7.7	26.1
Securitised bonds	6.7	5.8

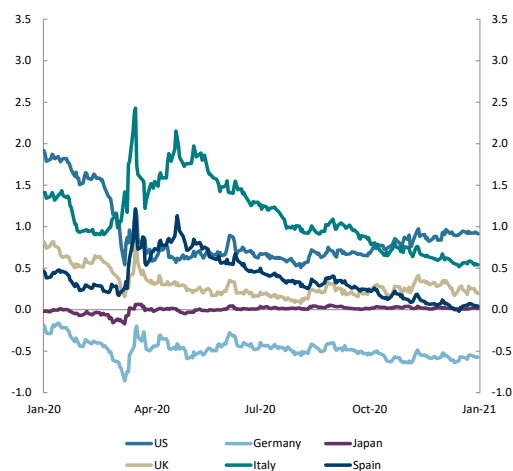
¹ Does not sum up to 100 percent because cash and derivatives are not included.

² Governments may issue different types of bonds, and the fund's investments in these bonds are grouped accordingly. Bonds issued by a country's government in the country's own currency are categorised as government bonds. Bonds issued by a country's government in another country's currency are government-related bonds. Inflation-linked bonds issued by governments are grouped with inflation-linked bonds.

Table 24 The fund's largest bond holdings as at 31 December 2020. Millions of kroner.

Issuer	Country	Holding
United States of America	US	717,935
Japanese government	Japan	294,195
Federal Republic of Germany	Germany	138,176
UK government	UK	87,746
French Republic	France	72,442
Spanish government	Spain	51,345
Australian government	Australia	41,065
South Korean government	South Korea	36,045
Canada Mortgage & Housing Corp	Canada	31,675
Italian Republic	Italy	31,261
Government of Canada	Canada	31,242
Mexican government	Mexico	24,444
Bank of America Corp	US	17,648
Government of Indonesia	Indonesia	16,785
Government of Denmark	Denmark	13,805
Province of Ontario Canada	Canada	13,643
Goldman Sachs Group Inc/ The	US	13,575
Government of Ireland	Ireland	13,127
Morgan Stanley	US	12,519
Government of South Africa	South Africa	12,475

Chart 19 10-year government bond yields. Percent



around 1 percent to 3.5 percent. By the end of the year, this had reversed, and the premium was back down around 1 percent.

Securitised debt, consisting mainly of covered bonds denominated in euros, returned 6.7 percent and made up 5.8 percent of the fund's fixed-income holdings. The market share for this type of debt is shrinking as a result of many issuers having access to cheaper liquidity via central banks' monetary policy.

Changes in fixed-income holdings

The largest increases in the market value of the fund's fixed-income investments were in government bonds from Germany, the US and Australia, while the largest decreases were in government bonds from Italy, Mexico and Russia. The largest holding of bonds from a single issuer was of US Treasuries, followed by Japanese and German government debt.

Table 25 Sector composition of the fund's fixed-income investments.

Sector	Millions of kroner ¹	Percent
Government bonds	1,524,033	56.5
Government bonds	1,524,033	56.5
Government-related bonds	312,717	11.6
Bonds issued by federal agencies	128,305	4.8
Bonds issued by local authorities	121,732	4.5
Bonds issued by supranational bodies	57,155	2.1
Sovereign bonds	5,525	0.2
Inflation-linked bonds	169,965	6.3
Inflation-linked bonds	169,965	6.3
Corporate bonds	702,214	26.1
Bonds issued by industrial companies	366,363	13.6
Bonds issued by financial institutions	272,234	10.1
Bonds issued by utilities	63,618	2.4
Securitised bonds	155,409	5.8
Covered bonds	155,409	5.8

¹ Does not sum up to total market value because cash and derivatives are not included.

Table 26 Currency composition of the fund's bond holdings.

Currency	Millions of kroner ¹	Percent
US dollar	1,267,382	47.0
Euro	757,693	28.1
Japanese yen	313,814	11.6
British pound	130,446	4.8
Canadian dollar	104,126	3.9
Australian dollar	68,708	2.5
South Korean dollar	38,922	1.4
Mexikan peso	24,444	0.9
Swedish kroner	22,905	0.8
Swiss franc	17,068	0.6
Danish crown	16,231	0.6
Indonesian rupiah	15,926	0.6
South African rand	12,410	0.5
Singapore dollar	12,361	0.5
Brazilian real	12,082	0.4
Malayian ringgit	11,344	0.4
Indian rupiah	10,709	0.4
New Zealand dollar	10,000	0.4
Columbian peso	9,618	0.4
Russian ruble	6,722	0.2
Phillippine peso	955	0.0
Poland złoty	474	0.0

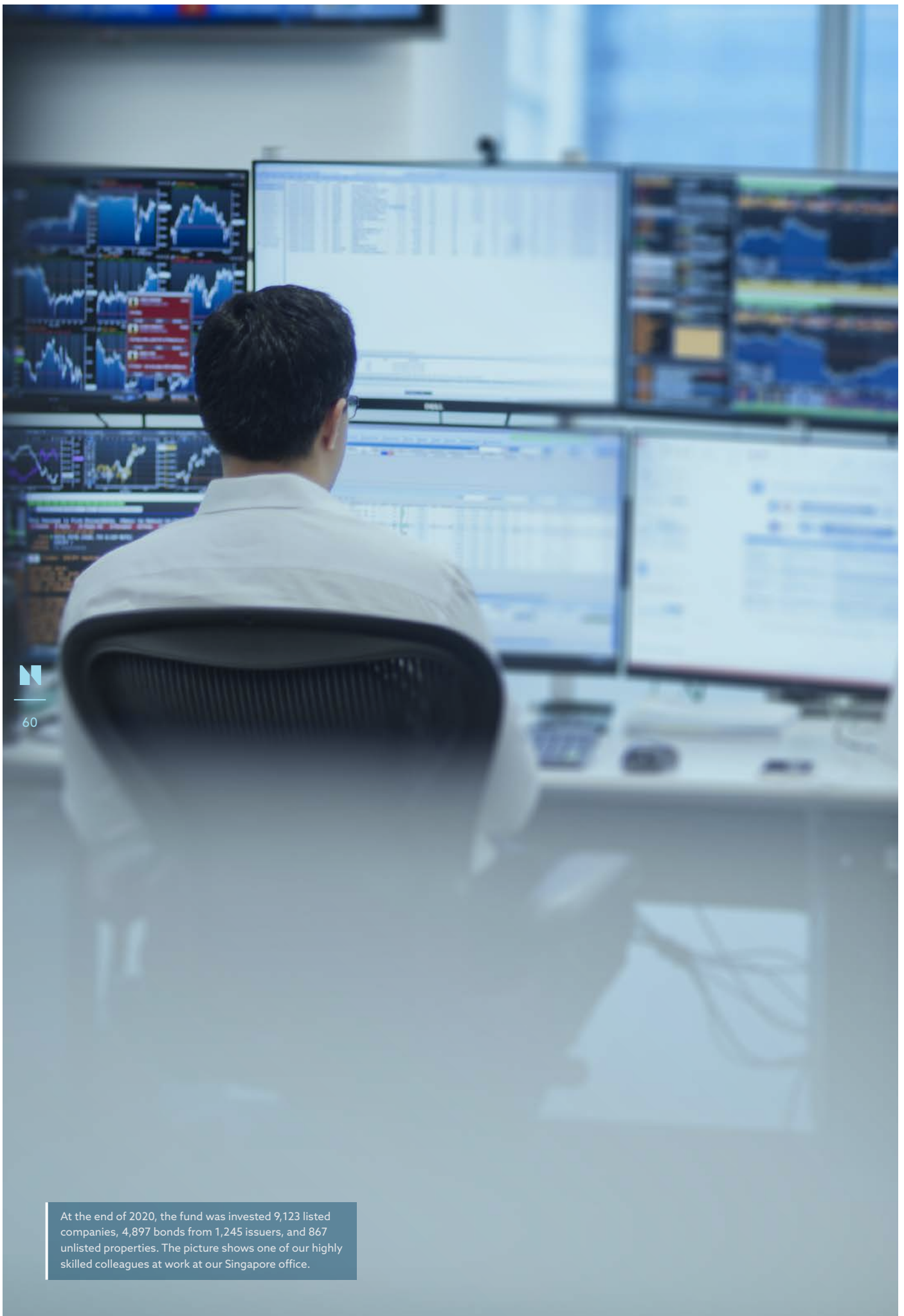
¹ Does not sum up to total market value because cash and derivatives are not included.

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At the end of 2020, the fund was invested 9,123 listed companies, 4,897 bonds from 1,245 issuers, and 867 unlisted properties. The picture shows one of our highly skilled colleagues at work at our Singapore office.

Higher return than the benchmark index

We aim to leverage the fund's long-term investment horizon and considerable size to generate a high return with acceptable risk. In 2020, the fund's return was 0.27 percentage point higher than the return on the benchmark index.

The return on the fund's investments is measured against the return on the fund's benchmark index from the Ministry of Finance, which is made up of global equity and bond indices. The equity portion of the benchmark index is based on the FTSE Global All Cap index, which comprised 8,966 listed companies at the end of 2020. The bond portion of the benchmark index is based on indices from Bloomberg Barclays Indices, comprising 15,506 bonds from 1,721 issuers.

At the end of 2020, the fund was invested in 9,123 listed companies (including listed real estate companies) and 4,897 bonds from 1,245 issuers. The fund also had investments in 867 unlisted properties. The fund's investments in real estate are funded through sales of equities and bonds tailored to the currency of each real estate investment. The relative return on equities and bonds is therefore measured against an index that is adjusted for the funding of real estate.

In 2020, the fund's return was 0.27 percentage point higher than the return on the benchmark index. The fund has outperformed the benchmark index by 0.25 percentage point since 1998, 0.16 percentage point over the past decade, and 0.19 percentage point over the past five years.

Equity management

Equity management is measured against the equity portion of the benchmark index, adjusted for sales of stocks to fund real estate investments. The return on equity management was 0.98 percentage point higher than that on the adjusted benchmark index for equities in 2020 and made a positive contribution of 0.68 percentage point to the fund's total relative return. Investments in the financial, technology and health care sectors contributed most to the relative return, while investments in consumer services made a slightly negative contribution. Of the countries the fund was invested in, Chinese, US and UK stocks made the greatest contributions to the relative return, while Danish and French stocks made a negative contribution.

Since 2019, the fund has recognised a provision for future tax obligations relating to capital gains in India. This reduced the relative result in 2020 by -1,844 million kroner.

Equity management has outperformed the benchmark index by 0.46 percentage point since 1999, 0.25 percentage point over the past decade, and 0.29 percentage point over the past five years.

Fixed-income management

Fixed-income management is compared with the bond portion of the benchmark index, adjusted for sales of bonds to fund real estate investments. The return on fixed-income management was 0.76 percentage point higher than that on the adjusted benchmark index in 2020, contributing 0.22 percentage point to the fund's relative return. There were positive contributions from corporate bonds and from government and government-related bonds.

Fixed-income management has outperformed the benchmark index by 0.17 percentage point since 1998, 0.09 percentage point over the past decade, and 0.28 percentage point over the past five years.

Real estate management

We invest in real estate to improve the fund's risk/return profile. The fund's overall strategy for real estate covers both unlisted and listed real estate investments. The relative return for real estate management is the difference between the return on the fund's total real estate investments and the return on the bonds and equities sold to buy them. Real estate management contributed -0.64 percentage point to the fund's relative return in 2020. Unlisted real estate investments made a contribution of -0.25 percentage point, most of this coming from the fund's properties in the US, while listed real estate investments made a contribution of -0.39 percentage point.

We report unlisted real estate returns quarterly and annually, but longer time series paint a better picture of the performance of our investments. From the fund's first unlisted real estate investment through to the end of 2016, the annual return on unlisted real estate investments was 7.67 percent. During this period, real estate investments were funded by

selling bonds. The annual return on bond investments in the same period was 3.62 percent. Since 2017, unlisted real estate has been funded through sales of equities as well as bonds. The annual return on this funding from 2017 to 2020 was 6.98 percent, compared with 4.10 percent for the unlisted real estate portfolio.

Investment strategies

We employ a range of investment strategies in our management of the fund. They are grouped into three main categories: fund allocation, security selection and asset management. These strategies are pursued across equity, fixed-income and real estate management.

Fund allocation consists of a number of strategies that aim to improve the fund's long-term exposure to markets and risks. The strategies contributed -0.67 percentage point to the fund's relative return in 2020, with the allocation to real estate contributing -0.64 percentage point.

As part of these allocation strategies, the fund had a reference portfolio in 2020. The reference portfolio included more markets and segments, and had exposure to systematic risk factors. The internal reference portfolio for equity management returned 11.40 percent in 2020, which was 0.37 percentage point less than the equity portion of the benchmark index and contributed -0.24 percentage point to the fund's relative return. The reference portfolio's overweight in value stocks made a negative contribution, as did an overweight in small companies.

The internal reference portfolio for fixed-income management returned 6.69 percent in 2020, which was 0.01 percentage point less than the bond portion of the benchmark index adjusted

for sales of bonds to buy real estate, and contributed -0.01 percentage point to the fund's relative return. The reference portfolio's overweight in emerging markets contributed negatively to the relative return, while an underweight in corporate bonds made a positive contribution.

The dedicated environmental mandates are a strategy within fund allocation. Investments under this strategy contributed 0.20 percentage point to the relative return in 2020.

Security selection strategies are based on company analysis to enhance returns, provide fundamental insights into the fund's largest investments, and support the fund's role as a responsible and active owner, and contributed 0.71 percentage point to the fund's relative return in 2020. Internal equity selection contributed 0.37 percentage point, with investments in the technology and telecom sectors making particularly positive contributions, and investments in industrials a slightly negative contribution. External equity selection contributed 0.22 percentage point to the relative return, with positive contributions from all regions, especially Asia-Pacific.

When it comes to fixed-income management, security selection focuses on corporate bonds. This strategy contributed 0.12 percentage point to the fund's relative return, with both credit positioning and issuer selection contributing positively.

Asset management strategies consist of positioning and securities lending, and contributed 0.23 percentage point to the fund's relative return in 2020. The positioning strategy for equities implements market exposures with a view to increasing investment returns and reducing transaction costs for the fund. This

strategy contributed 0.07 percentage point, with European and US stocks the main contributors. When it comes to bonds, the positioning strategy contributed 0.10 percentage point to the fund's relative return. This strategy consists of tactical macro positions in areas such as duration, convexity, inflation, currency and country exposure, and relative value positions across instruments, sectors and issuers. There are also positions related to transition activity to reduce transaction costs. Positioning strategies saw positive contributions from both developed and emerging markets during the year. Securities lending contributed 0.04 percentage point to the fund's relative return.

Table 27 Relative return. Percentage points.

	2020
Fund	0.27
Equity investments	0.40
Fixed-income investments	0.69

Chart 20 The fund's annual relative return and accumulated annualised relative return. Calculations based on aggregated equity and fixed-income investments until end of 2016. Percentage points.

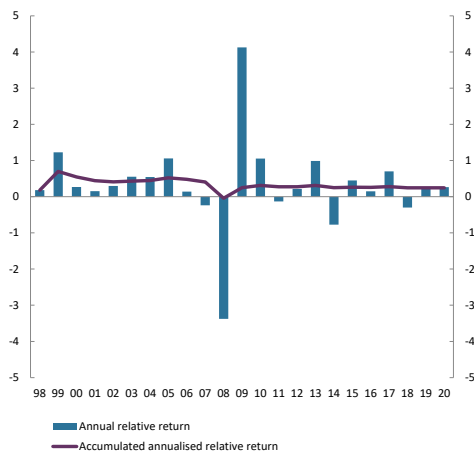


Table 28 Relative return on the fund's asset management. Percentage points.

Year	Fund ¹	Equity management ²	Fixed-income management ²	Real estate management ²
2020	0.27	0.98	0.76	-13.81
2019	0.23	0.51	0.11	-3.89
2018	-0.30	-0.69	-0.01	5.49
2017	0.70	0.79	0.39	0.70
2016	0.15	0.15	0.16	-
2015	0.45	0.83	-0.24	-
2014	-0.77	-0.82	-0.70	-
2013	0.99	1.28	0.25	-
2012	0.21	0.52	-0.29	-
2011	-0.13	-0.48	0.52	-
2010	1.06	0.73	1.53	-
2009	4.13	1.86	7.36	-
2008	-3.37	-1.15	-6.60	-
2007	-0.24	1.15	-1.29	-
2006	0.14	-0.09	0.25	-
2005	1.06	2.16	0.36	-
2004	0.54	0.79	0.37	-
2003	0.55	0.51	0.48	-
2002	0.30	0.07	0.49	-
2001	0.15	0.06	0.08	-
2000	0.27	0.49	0.07	-
1999	1.23	3.49	0.01	-
1998	0.18	-	0.21	-

¹ Includes real estate management from 2017. The fund's relative return prior to 2017 is calculated on equity and fixed-income management only.

² Measured against actual funding from 2017. The relative return on equity and fixed-income management before 2017 is measured against the respective Ministry of Finance asset class indices.

Table 29 Contributions to the fund's relative return from investment strategies in 2020. Percentage points.

	Equity management	Fixed-income management	Real estate management	Allocation	Total
Fund allocation	-0.03	-0.01	-0.64	0.01	-0.67
Reference portfolio	-0.24	-0.01		0.01	-0.24
of which systematic factors	-0.35				-0.35
Real estate			-0.64		-0.64
Unlisted real estate			-0.25		-0.25
Listed real estate			-0.39		-0.39
Allocations	0.20	0.00			0.20
of which environmental related mandates	0.00	0.01		0.00	0.01
Security selection	0.59	0.12			0.71
Internal security selection	0.37	0.12			0.49
External security selection	0.22				0.22
Asset management	0.12	0.11		0.00	0.23
Asset positioning	0.07	0.10		0.00	0.17
Securities lending	0.03	0.01			0.04
Total	0.68	0.22	-0.64	0.01	0.27

Table 30 Contributions to the fund's relative return from investment strategies for 2013-2020. Annualised. Percentage points.

	Equity management	Fixed-income management	Real estate management	Allocation	Total
Fund allocation	-0.05	-0.08	-0.07	0.02	-0.17
Reference portfolio	-0.05	-0.08		0.00	-0.12
of which systematic factors	-0.05				-0.05
Real estate			-0.07		-0.07
Unlisted real estate			-0.02		-0.02
Listed real estate			-0.05		-0.05
Allocations	0.04	0.00			0.04
of which environmental related mandates	-0.04	0.00	0.00	0.02	-0.02
Security selection	0.17	0.02			0.18
Internal security selection	0.06	0.02			0.08
External security selection	0.11				0.11
Asset management	0.10	0.08		0.00	0.18
Asset positioning	0.07	0.07		0.00	0.14
Securities lending	0.05	0.01			0.06
Total	0.22	0.02	-0.07	0.03	0.20

Large fluctuations in the fund's value

The fund's market value can fluctuate widely. In 2020, it ranged from a low of 9,388 billion kroner on 16 March to a high of 10,989 billion kroner on 17 November.

The fund's market risk is determined by the composition of its investments and by movements in share prices, exchange rates, interest rates, credit risk premiums and property values. As no single measure or analysis can fully capture the fund's market risk, we use a variety of measures and analyses – including expected volatility, factor exposures, concentration analysis and liquidity risk – to obtain the broadest possible picture of the fund's market risk.

Risk is controlled at the regional, sector and issuer levels. Some investment strategies expose the fund to elevated tail risks, and we monitor these risks closely.

The fund's expected absolute volatility, calculated using the statistical measure standard deviation, uses a three-year price history to estimate how much the annual return on the fund's investments can normally be expected to fluctuate. Expected absolute volatility was 10.4 percent at the end of the year, or about 1,130 billion kroner, compared with 7.7 percent a year earlier. The increase was due mainly to greater market volatility over the past three years than at the end of 2019. With an equity share of around 70 percent and such a large fund, we have to be prepared for considerable fluctuations in the fund's return and market value.

Chart 21 Expected relative volatility of the fund. Basis points.

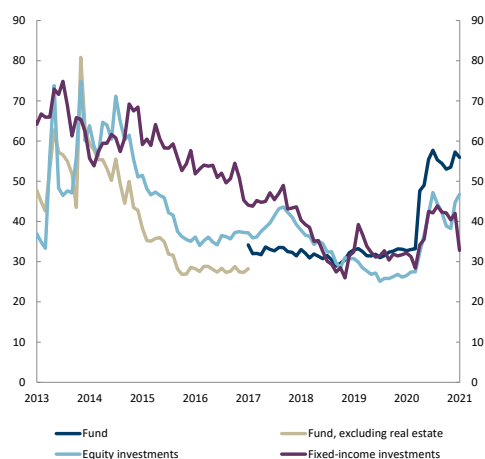


Chart 22 Expected absolute volatility of the fund. Percent (left-hand axis) and billions of kroner (right-hand axis).



We invest in real estate to create a more diversified portfolio. We expect real estate investments to have a different return profile to equities and bonds in both the short and the longer term. The relative risk that this entails will impact on calculations of the fund's expected relative volatility. As daily pricing is not available for our real estate investments, we use a model from MSCI to calculate the risk for these investments.

The Ministry of Finance and Norges Bank's Executive Board have set limits for how far the fund's investments may deviate from the benchmark index.

One of these limits is expected relative volatility, or tracking error, which puts a ceiling on how much the return on the fund's investments can be expected to deviate from the return on the

benchmark index. The management mandate requires all of the fund's investments to be included in the calculation of expected relative volatility and measured against the fund's benchmark index, which consists solely of global equity and bond indices. The limit for expected relative volatility for the fund is 1.25 percentage points. The actual level at the end of the year was 0.56 percentage point, up from 0.33 percentage point. The increase was due mainly to greater volatility in market prices.

Norges Bank's Executive Board has also set a limit for expected shortfall for the relative return between the fund and the benchmark index. The fund is to be managed in such a way that the expected negative relative return in extreme situations does not exceed 3.75 percentage points. The actual figure at the end of 2020 was 1.80 percentage points.

Table 31 Key figures for the fund's risk and exposure.

Limits set by the Ministry of Finance		31.12.2020
Allocation	Equity portfolio 60–80 percent of fund's market value ¹	72.9
	Unlisted real estate no more than 7 percent of the fund's market value	2.5
	Fixed-income portfolio 20–40 percent of fund's market value ¹	26.0
	Unlisted renewable energy infrastructure no more than 2 percent of the fund's market value	0.0
Market risk	1.25 percentage points expected relative volatility for the fund's investments	0.6
Credit risk	Maximum 5 percent of fixed-income investments may be rated below BBB-	1.2
Emerging markets	Maximum 5 percent of fixed-income investments may be in emerging markets ²	5.9
Ownership	Maximum 10 percent of voting shares in a listed company in the equity portfolio ³	9.6

¹ Derivatives are represented with their underlying economic exposure

² The Ministry of Finance has decided on a transition plan for the phasing-out of bonds issued by emerging market countries and companies from the strategic benchmark index. The limit of 5 percent of the bond portfolio for these bonds may be deviated from until the completion of the transition plan.

³ Investments in listed and unlisted real estate companies are exempt from this restriction.

Relative exposures

The fund is invested differently to its benchmark index along various dimensions, including currencies, sectors, countries, regions, individual stocks and individual bond issuers. At the end of 2020, the equity portfolio had a higher weight of stocks of greater volatility than the average in the benchmark, and a higher weight of small companies and value stocks than the benchmark. The equity portfolio was also overweight in some segments that saw strong growth, such as its investments under the environmental mandates. The fixed-income portfolio had a higher weight of bonds from emerging markets and government-related bonds, but less exposure to corporate bonds than the benchmark index.

The fund had 273 billion kroner invested in unlisted real estate and an allocation to listed real estate investments of 147 billion kroner at the end of the year. These real estate investments were funded through the sale of equities and bonds in the same currency. All of the fund's investments, including those in real estate, are measured against the fund's benchmark index, which is made up of global equity and bond indices. Real estate investments were among the fund's largest relative exposures at the end of the year.

Factor exposures

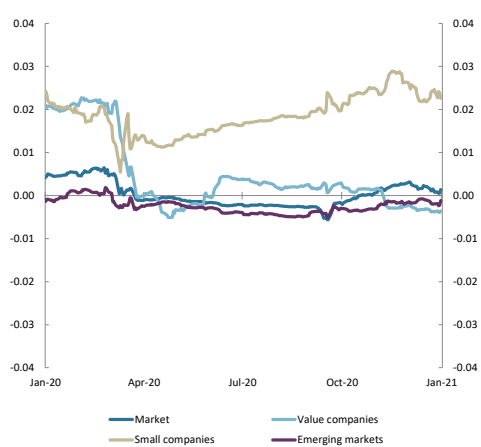
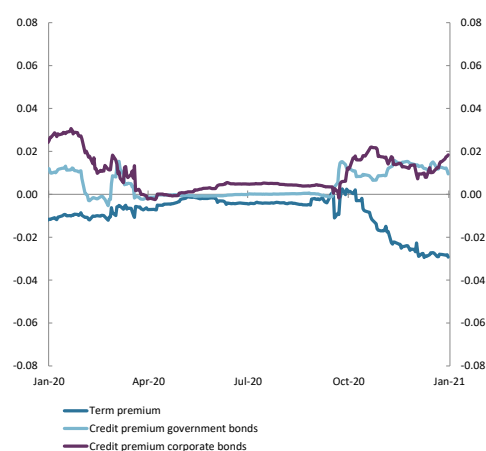
We measure the fund's exposure to various systematic risk factors, such as small companies, value stocks and bonds with credit premiums. These risk factors capture common variations in returns on securities with similar characteristics and contribute to both the risk and the return on investments. Exposure to these factors can be estimated using the correlation between the fund's historical relative return and the return on these factors.

Such an analysis of factor exposures for equity management indicates that the fund was more closely correlated with small companies than the benchmark index was at the end of 2020. Around 20 percent of the variation in the relative return from equity management could be explained by general market movements and exposure to value stocks, small companies and emerging markets. Around 25 percent of the variation in the relative return from fixed-income management could be explained by movements in the term and credit premiums.

The results of such statistical regressions are uncertain, and we also use several other approaches to analyse the fund's factor exposures. For more information on the fund's investment risk, see note 8 to the financial reporting.

Table 32 The fund's fixed-income investments as at 31 December 2020 based on credit ratings. Percentage of bond holdings.

	AAA	AA	A	BBB	Lower rating	Total
Government bonds	29.8	6.6	12.8	3.2	0.8	53.2
Government-related bonds	4.4	4.6	1.5	0.4	0.0	10.9
Inflation-linked bonds	4.0	1.2	0.3	0.4	0.0	5.9
Corporate bonds	0.2	1.7	10.0	12.2	0.3	24.5
Securitised bonds	4.6	0.8	0.0	0.0	0.0	5.4
Total	43.1	14.9	24.7	16.1	1.2	100.0

Chart 23 Factor exposures of the fund's equity investments. Coefficients.**Chart 24** Factor exposures of the fund's fixed-income investments. Coefficients.**Table 33** Expected relative volatility of investment strategies as at 31 December 2020. Each strategy measured stand-alone with the other strategies positioned in line with the benchmarks. All numbers measured at fund level. Basis points.

	Equity management	Fixed-income management	Real estate management	Allocation	Total
Fund allocation	17	7	39	0	51
Reference portfolio	17	5		0	16
of which systematic factors	17				17
Real estate			39		39
Unlisted real estate			22		22
Listed real estate			21		21
Environmental related mandates	5				5
Allocations	2	5		0	5
Security selection	15	5			14
Internal security selection	12	5			11
External security selection	8				8
Asset management	7	1		1	8
Asset positioning	7	1		1	8
Total	28	7	39	1	56



We seek to improve the long-term economic performance of our investments and reduce the financial risk associated with companies' environmental and social behaviour.

Long-term and responsible

The fund's future value is dependent on the value created by the companies we invest in. We exercise our ownership rights and contribute to market standards in order to promote good corporate governance and responsible business practices.

Responsible investment supports the fund's objective in two ways. First, we seek to improve the long-term economic performance of our investments. Second, we aim to reduce the financial risk associated with companies' environmental and social behaviour. We therefore assess governance and sustainability issues that could impact on the fund's return over time and integrate this into our work on establishing principles, exercising ownership and investing responsibly.

Establishing principles

Our goal is to contribute to well-functioning markets and good corporate governance. Common standards and principles provide consistency across markets and raise the bar for all companies. We recognise a set of international principles and standards from the UN and the OECD which provide a framework for our work with companies and other stakeholders.

We contribute to the further development of standards. In 2020, we participated in 16 public consultations relating to responsible investment and were in regular contact with international organisations, regulators and other standard setters. These consultations concerned topics that are important to us, such as common standards for extended reporting on risks, shareholder rights and responsible business practices. We had meetings during the year with the OECD, the UN Global Compact, the European Commission, the International

Accounting Standards Board, the Global Reporting Initiative and the Sustainability Accounting Standards Board, as well as national standard setters in France, Germany, Sweden, the UK and the US.

Since 2008, we have formulated clear expectations of the companies we invest in. These expectations build on international standards and principles. We want companies to be equipped to deal with global challenges that may lead to major changes in the market and eventually affect their profitability. We updated our climate expectations during the year to include sustainable land use and the risk of land degradation. We also updated our human rights expectations to mention the elevated risks associated with certain business models. We published five new position papers on board independence, equity issuances, multiple share classes, related-party transactions and sustainability reporting. These papers explain our position on key governance issues and are an important basis for our voting.

We support and initiate research projects with a view to understanding and improving market practices. We collaborate with academic institutions to access the latest research and obtain analyses that can inform our investment strategy, risk management and ownership. In 2020, we awarded support for three new research projects at the European Corporate Governance Institute, the École Polytechnique Fédérale de Lausanne and the University of

Oxford. The projects aim to shed light on how ownership changes affect companies and how institutional investors can influence corporate governance. We also continued to support a research project at New York University looking at the financial consequences of climate change.

Exercising ownership

The fund has holdings in 9,123 companies all around the world. We voted on 121,619 items at 11,871 shareholder meetings in 2020. We voted in line with the board's recommendation in 95.1 percent of cases, which was on a par with our voting in 2019.

Director elections account for nearly 40 percent of the resolutions we vote on. Who sits on the board is the most important decision we make. As a minority investor in thousands of companies, we leave most decisions to the board. We expect the board to set strategy, supervise management and act in shareholders' interests. We voted in line with the board's recommendation in 94.6 percent of director elections in 2020, compared with 94.1 percent in 2019. The main reasons for voting against board candidates were a lack of independence on the board, combination of the roles of CEO and chairperson, and directors being overcommitted. We have set out our expectations when it comes to directors' independence and time commitments in public position papers which we have shared with companies.

We have seen an increase in the number of shareholder resolutions addressing environmental and social issues over the years. We support well-founded resolutions that are aligned with our own priorities, especially in areas covered by our expectation documents. We voted in favour of 35.1 percent of shareholder resolutions in 2020, compared with 39.9 percent in 2019.

We held a total of 2,877 meetings with 1,209 companies during the year. The size of our investments gives us access to board members, senior management and specialists at companies. We are interested in understanding how companies are governed and how they address key sustainability issues.

We followed up our seven expectation documents during the year by engaging with selected companies, assessing companies' sustainability reporting, and supporting various industry initiatives. We initiated new dialogues on deforestation and commodities production, climate risk in banks' lending and financing portfolios, climate risk and opportunities in iron and steel production, climate measures and lobbying in heavy industry, sustainable fisheries in Asia and Africa, reporting and management of water-related risks, children's rights and the telecommunications industry, the organisation of labour in the platform economy, business operations in areas affected by wars and conflicts, monitoring of corruption risks in the industrial sector, and activities in low-tax environments and closed jurisdictions.

We conducted a total of 4,158 assessments of companies' reporting against our published expectations during the year. We assessed the reporting of 1,521 companies on climate change, 694 on human rights, 500 on water management, 494 on children's rights, 250 on anti-corruption, 250 on ocean sustainability, 249 on deforestation and 200 on tax. The companies assessed accounted for 74.8 percent of the equity portfolio's market value at the end of the year.

We contact companies with weak or limited disclosure and encourage them to improve it, for example by participating in established reporting initiatives. In 2020 we sent letters to 127

companies about their reporting on areas covered by our expectation documents. The average improvement in performance at the companies we contacted in 2019 was 9.8 percentage points. The overall improvement from 2019 to 2020 at the companies covered by our assessments was 6.5 percentage points. The difference was greatest at companies we contacted about tax transparency, climate change and deforestation, and least for human rights and water management. All in all, we saw improvements at 50 percent of the companies we contacted.

We support initiatives that bring companies together to find common standards for sustainable business conduct. These initiatives work best when numerous companies in a

particular industry or value chain face the same challenge. The starting point for our expectations of companies is that boards should establish suitable strategies, control functions and reporting procedures. At the same time, many companies face practical challenges in doing so. The need for standardisation and more universal approaches is considerable. The initiatives we support look at challenges such as supply chain management and reporting.

Investing responsibly

Investing responsibly is an integral part of the fund's investment strategy. In order to assess companies, we need them to move from words to numbers. This gives us a better understanding of the risks and opportunities in our investments.



We support the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) set up by the G20's Financial Stability Board. We are working with companies to ensure that they are equipped for the transition to a low-carbon economy. We invest specially in climate solutions, adjust the portfolio through divestments, and consider climate issues in our investment decisions. We also analyse carbon emissions from companies in our portfolio and various climate scenarios for the fund. Based on our percentage holdings, companies in the equity portfolio emitted 92.4 million tonnes of CO₂-equivalents in 2020.

Our environmental equity mandates returned 34.3 percent in 2020. These mandates are managed entirely in-house. By way of comparison, the funding for the mandates returned 3.5 percent. We had a total of 98.9 billion kroner invested in these mandates at the end of the year.

Our environmental investments are in three main areas: i) low-carbon energy and alternative fuels, ii) clean energy and energy efficiency and iii) natural resource management. Companies must have at least 20 percent of their business in one of these areas to be included in our environmental universe. In November 2019, the fund was also given a mandate to invest in unlisted renewable energy infrastructure, i.e. infrastructure for the production, transmission, distribution and storage of energy from renewable sources. These investments are also to be made within the limit for the environmental mandates.

The Ministry of Finance has issued ethically motivated guidelines for observation and exclusion of companies from the fund. These guidelines set out criteria for exclusion based either on companies' products or on their conduct. The fund must not be invested in companies that produce certain types of

Table 34 Return on the environment-related equity mandates, funding and other return series. Annualised data, measured in the fund's currency basket. Percent.

	Since 01.01.2010	Last 5 years	Last 3 years	2020
Return on the environment-related equity mandates	9.5	18.0	18.7	34.3
Return on the financing of the environment-related equity mandates ¹	4.3	7.5	4.7	3.5
Return on the FTSE Environmental Technology 50 index	11.0	21.5	27.8	82.3
Return on the FTSE Environmental Opportunities All-Share index	13.4	17.5	16.8	35.6
Return on the MSCI Global Environment index	14.5	24.4	30.0	90.4
Return on the benchmark index for equities	9.8	10.5	8.6	11.7

¹ The financing of the environment-related equity mandates includes dedicated allocation to environment-related equity mandates in the reference portfolio.

weapon, base their operations on coal, or produce tobacco. Companies whose operations contribute to violations of fundamental ethical norms may also be excluded. In addition, Norges Bank's Executive Board excluded five coal companies, placed four companies under observation based on the coal criterion, and revoked the exclusion of two companies previously excluded under the product-based criteria. In 2020, ten companies were excluded on the grounds of conduct considered to constitute particularly serious violations of ethical norms, while one exclusion under the conduct criteria was revoked.

We integrate analysis of environmental, social and governance issues into our risk management. This may result in divestment from companies where we see particularly high long-term risks. We divested from 32 companies in 2020 following assessments of environmental, social and governance risks.

Responsible real estate investment

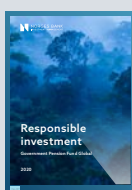
We integrate environmentally-friendly measures into the business plans for the fund's properties and work with other investors to develop tools for measuring climate risk in real estate markets.

We measure the environmental performance of the real estate portfolio annually against the Global Real Estate Sustainability Benchmark

(GRESB). The portfolio scored 79 out of 100 in 2020, down from 80 in 2019. At the end of the year, 82 percent of the fund's portfolio of large office and retail properties was environmentally certified, up from 79 percent a year earlier. In addition, 34 logistics properties had obtained green building certifications on the basis of their sustainable design and construction.

The fund's real estate investments are exposed to climate risks. We estimate that 4 percent of the portfolio by value is in locations that have experienced coastal or river flooding at least once in the last century. In 2020, we obtained an external analysis of the future exposure of our most vulnerable real estate investments in the US, which found that the long-term risk of flooding in some areas could be considerable in the most extreme climate scenario.

National and local authorities have begun to implement long-term carbon reduction plans that will impact on the real estate sector. Alongside other investors, we have been supporting the Carbon Risk Real Estate Monitor (CRREM), a research project that in 2020 published decarbonisation pathways through to 2050 in line with the Paris Agreement for various real estate markets. We are now using the tool in our wider work on measuring transition risks in the real estate market.



Report on responsible investment

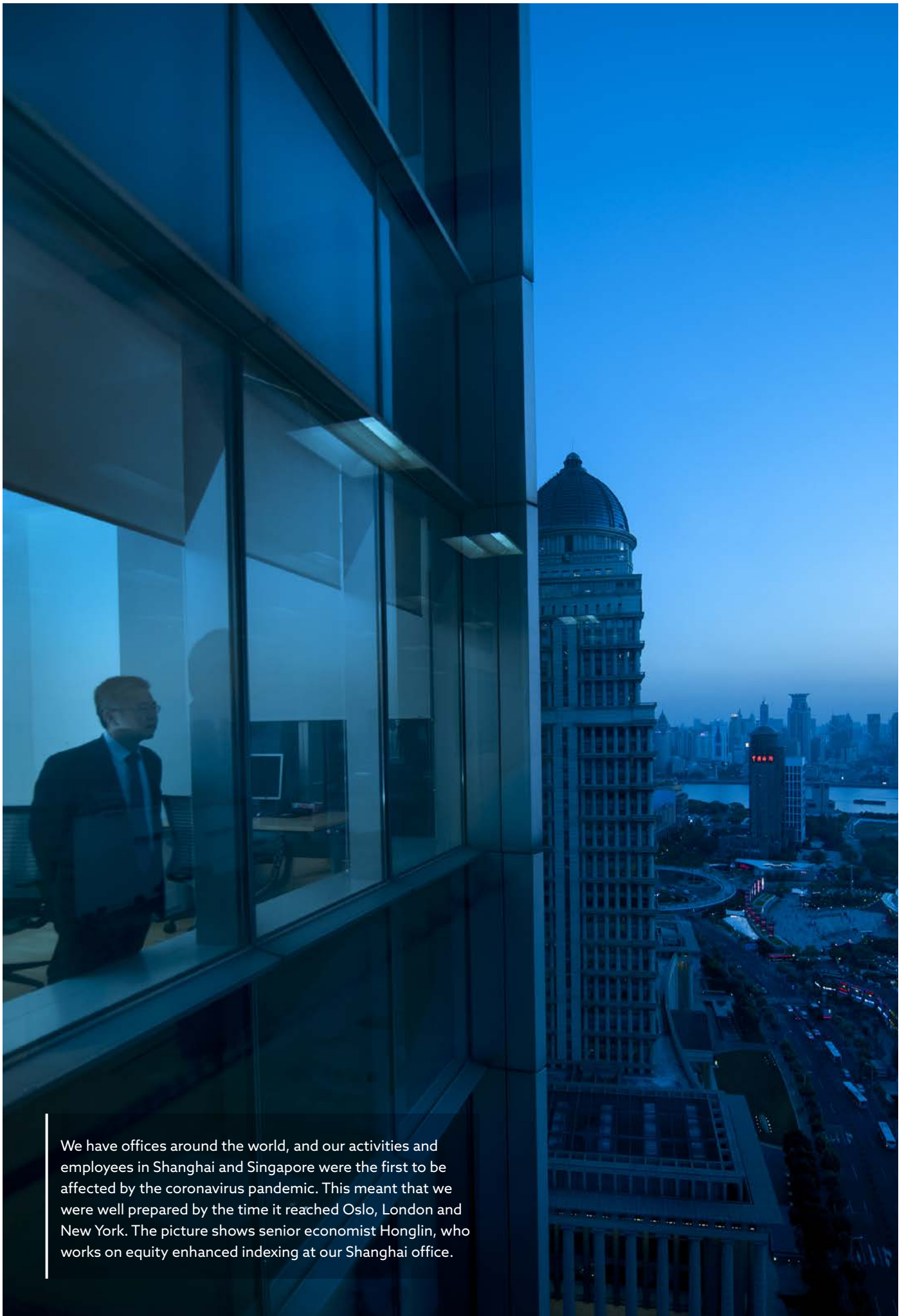
An extended report on responsible investment in 2020 is available on the fund's website: www.nbim.no

5 | Organisation

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We have offices around the world, and our activities and employees in Shanghai and Singapore were the first to be affected by the coronavirus pandemic. This meant that we were well prepared by the time it reached Oslo, London and New York. The picture shows senior economist Honglin, who works on equity enhanced indexing at our Shanghai office.

Our organisation

Number of employees and our offices



518

Employees

33

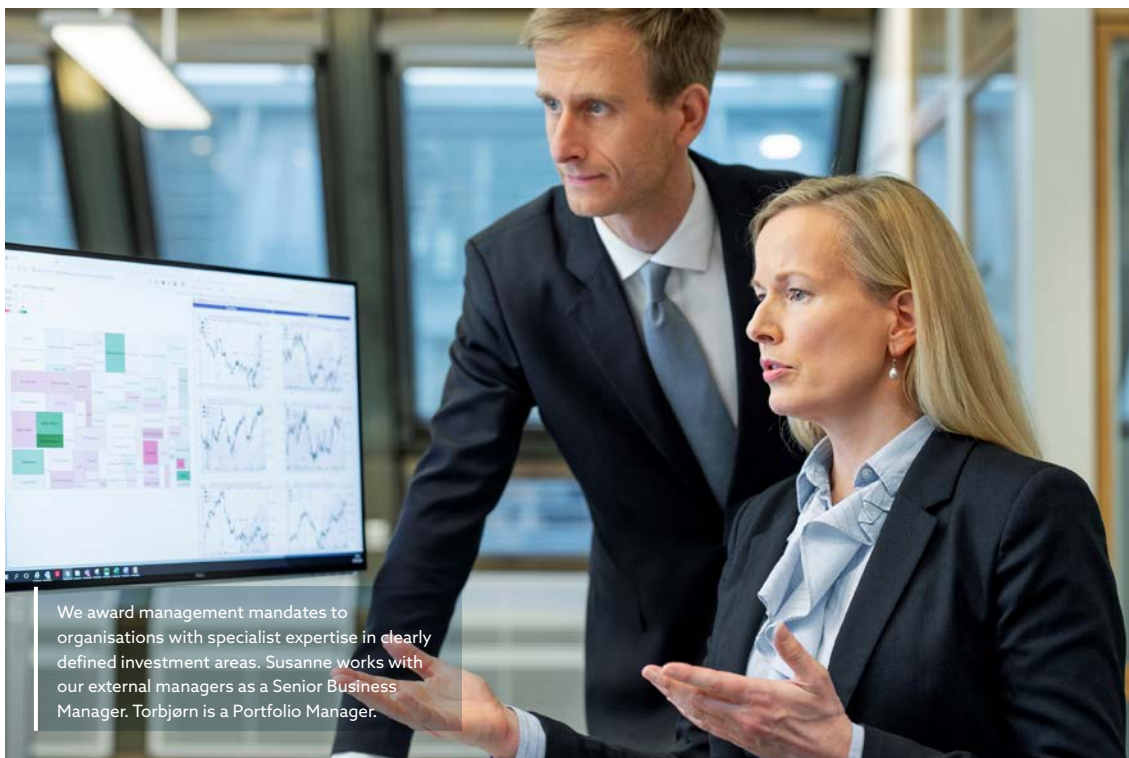
Nationalities



In 2019, the fund was awarded a mandate to invest in unlisted renewable energy infrastructure. Pia works as a Senior Adviser in real estate and infrastructure investments. Pavlina is a Senior Controller in the Finance department.



The fund is a long term investor. Fredrik works at our London office as Head of Strategy Research. Lukas is a Researcher.



We award management mandates to organisations with specialist expertise in clearly defined investment areas. Susanne works with our external managers as a Senior Business Manager. Torbjørn is a Portfolio Manager.

An international investment organisation

Norges Bank Investment Management manages one of the world’s largest investment funds. We strive to promote a performance culture, develop and attract the best talents worldwide, and provide proactive, open and clear communication.

A strong performance culture is key to achieving the fund’s objective of the highest possible return after costs. We stepped up our efforts in 2020 so that we make even better investment decisions.

Our employees are the heart of our operation. If we are to perform, we need the best talents. We continued our work on continuous learning and development for staff during the year. We are also keen to see greater global mobility between our various offices. We relaunched our talent programmes, and we look for candidates with varied backgrounds and mindsets when recruiting.

We had 518 employees at the end of the year. A total of 25 percent of our employees and 21 percent of our senior managers were women. We want to increase the proportion of women working for the fund both in general and at management level. In 2020, 48 percent of new recruits were women, compared with 17 percent the year before.

Equal opportunities and diversity provide the best starting point for achieving good results. We are therefore working systematically on improvements, and this is reflected in the way we approach recruitment, pay and other benefits, employee development and the working environment.

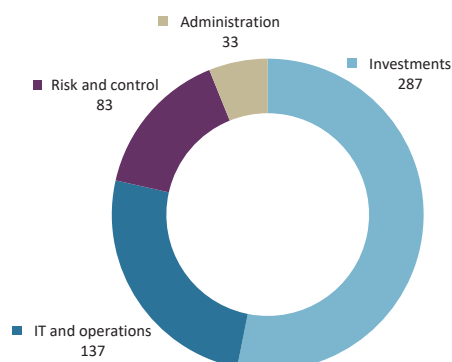
We look for diversity of skills, experience and outlook regardless of nationality, gender, age, background or education. To enhance this work

in 2020, we launched a diversity and inclusion initiative across Norges Bank. Working with external organisations and networks has brought a valuable exchange of experience and opportunities to learn from the best.

We strive continuously to raise awareness of diversity and inclusion in our communication, and this is a key topic in management training and in the leader group’s communication with the rest of the workforce.

Attracting female applicants is a key objective when designing our information materials and job advertisements. We also make diversity and gender balance a requirement for external recruitment agencies. We have introduced checkpoints in the recruitment process to ensure that applicants are treated objectively

Chart 25 Number of employees by area, including subsidiaries.



Most of our employees worked from home for much of 2020. A flexible and skilled workforce and good IT solutions helped this to function well.



Yvonne Silden Langlo Associate Portfolio Manager, Sector Strategies, London

When the pandemic broke, my primary focus was to keep up to date on how it was impacting the various companies. Most of my working day was spent in front of a screen even before the pandemic, but I am looking forward to visiting companies and resuming more of a social life.



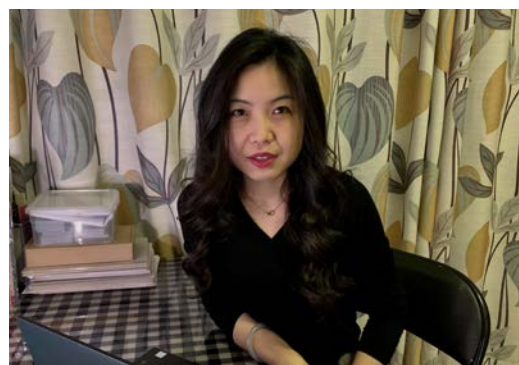
Gero Elerd Business Manager, Asset Strategies, Oslo

It was a truly strange year, but as a global organisation we coped surprisingly well. The barrier to call a colleague to connect disappeared. Work itself shifted quite quickly online thanks to faster internet, the right equipment and better software to enable virtual meetings and interaction.



Godfrey Sendege Analyst, Technology and Support, Oslo

The biggest change has been not to meet other people in person and to juggle being a parent and doing my work. Now that the children are back to school, I have daily sync-ups with my teammates and I am able to work more efficiently with very few distractions.



Odette Wang Head of China A, Special Mandates, Shanghai

During the peak of the pandemic, Shanghai was locked down. I adapted to the situation quickly, starting the day by putting in grocery orders online, conducting all meetings with colleagues and companies digitally, and being disciplined enough to spend some time away from the computer.

and fairly, and we have drawn up policies on setting and reporting pay levels to prevent gender discrimination.

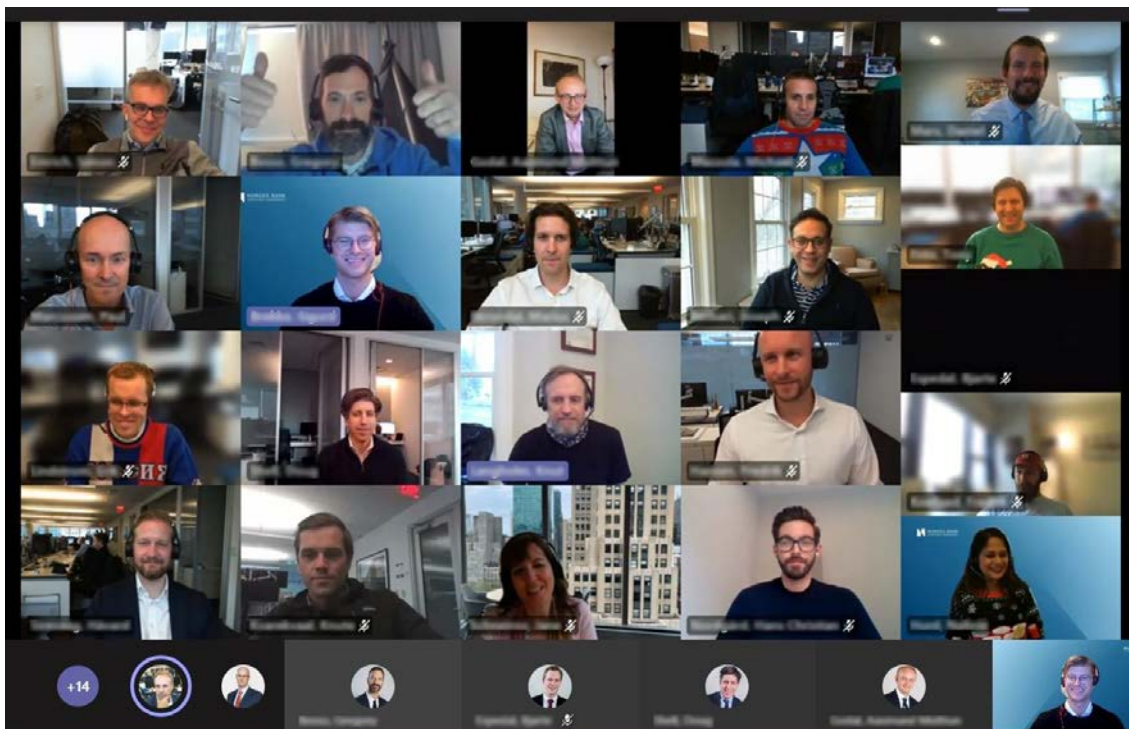
We have a strategy of actively highlighting the important role women have to play at Norges Bank. We ensure that they are well represented at events we attend. Female staff are also encouraged to participate in networks and external events such as career conventions, and give presentations at relevant academic institutions and events.

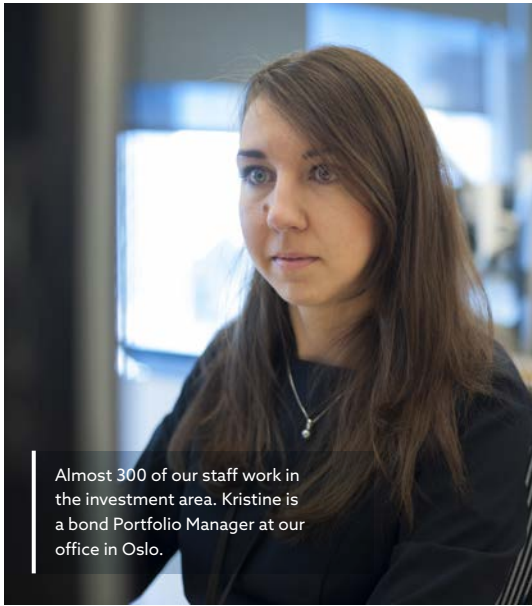
We operate in global investment markets. Proximity to the markets is therefore important for safeguarding the fund's long-term return. A total of 43 percent of our employees worked from our offices in London, New York, Singapore and Shanghai at the end of 2020, unchanged

from a year earlier. There were also 22 employees at subsidiaries linked to the management of the real estate portfolio.

Our organisation is built on trust, high ethical standards and diversity. To achieve this, good internal communication is essential. We have improved the dialogue and communication between management and the rest of the organisation, and we have worked on effective communication across all channels to drive strategic changes, increase co-operation and integrate the offices outside Norway more closely.

The global coronavirus pandemic presented a number of challenges in 2020. We were nevertheless able at all times to carry out our management assignment and manage the fund

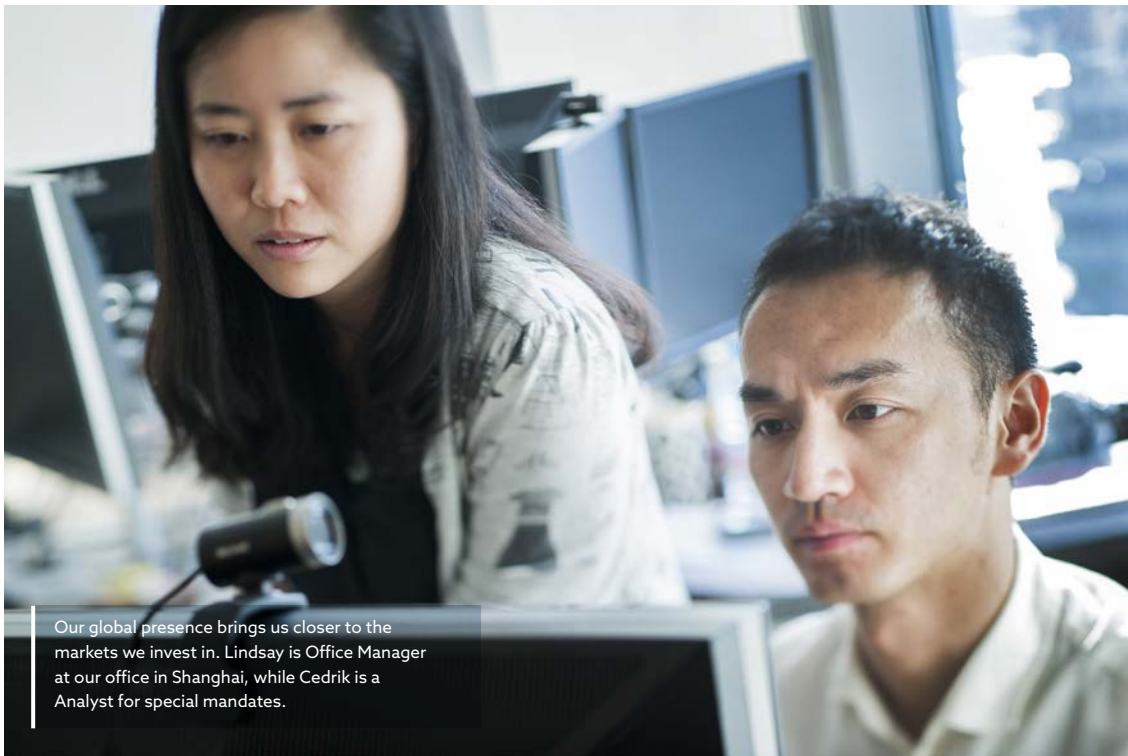




Almost 300 of our staff work in the investment area. Kristine is a bond Portfolio Manager at our office in Oslo.



We have 64 staff at our office in New York. Christopher works at our New York office as a Senior Legal Advisor for Real Asset. Isabela is a Associate for unlisted Real Estate.



Our global presence brings us closer to the markets we invest in. Lindsay is Office Manager at our office in Shanghai, while Cedrik is a Analyst for special mandates.

in line with the strategies set by the Executive Board. We have more than 500 employees, and almost all of them worked from home in the period when the markets were at their most volatile. Flexible employees, good IT solutions and local powers to take the necessary decisions have helped this to function well.

Investment platform

Investment management is highly IT- and data-intensive. We use IT systems in every area of the fund's management, including analysis, trading, securities lending, valuation, accounting and the measurement of performance and risk. All of our solutions are based on cloud services. Working processes related to the ongoing operation of these solutions are largely automated, which results in very high operational stability. Cloud services enable us to make changes more quickly than before, and to scale capacity up or down as required. The coronavirus pandemic presented new challenges in 2020. So that our staff could work effectively and securely from home, we rolled out a new cloud-based service for secure access.

We have a strong focus on information security and work continuously on monitoring and adapting to threats. We have various systems in place which protect our data and systems and which monitor activity in our network to detect any unauthorised access. We work with an external supplier of IT security services which, together with our in-house security team, ensures that this work is continuous. We have established robust solutions for access control, integrity and traceability in our systems and databases.

Most of our IT systems are standard solutions that are configured to our needs and are maintained and further developed by external suppliers. In some areas, our needs mean that

standard solutions cannot be used, and we develop our own. The transition to cloud services has made this easier. IT infrastructure is an important element of the operational execution of our management task and a source of operational risk in itself. We have processes in place to manage this risk and have established internal control activities for information security and change management.

Processes for the execution and settlement of securities trades are largely automated. We settled 330,810 transactions in 2020. For 96 percent of these transactions, the process was fully automated.

Transparency

Our role is to manage financial assets for future generations responsibly, efficiently and transparently. Given the fund's size and importance, there is considerable public interest in its management both in Norway and abroad.

The highest possible degree of transparency is a key element of our strategy. Openness about our results and management also helps create a result-oriented culture. We strive constantly to spread knowledge about the fund and provide clear and relevant information on all aspects of its management.

We held two press seminars and three press conferences during the year. We published five historical reviews of various aspects of the management of the fund, and arranged four NBIM Talks to accompany them. We hosted the Norwegian Finance Research Conference for the tenth time and published five letters to the Ministry of Finance with advice and information on the fund's investment strategy.

New leader group

Nicolai Tangen took over from Yngve Slyngstad as CEO of Norges Bank Investment Management on 1 September 2020. A new, leaner leader group was introduced the following month to strengthen the organisation's specialist areas and realise more synergies between them. The new leader group is a collective decision-making body. Its prime objective is to continue to deliver good returns.



Nicolai Tangen
Chief Executive Officer

Nicolai is responsible for the management of the fund. This includes the daily operation and the development of Norges Bank Investment Management.



Trond Grande
Chief of Staff/Deputy Chief Executive Officer

Trond is responsible for the administration area. He is also deputy head of the daily management of the fund and the operation and the development of Norges Bank Investment Management.



Carine Smith Ihenacho
Chief Governance and Compliance Officer

Carine is responsible for the governance and compliance area, which includes ownership and responsible investment activities, control and operational risk, compliance and legal services.



Petter Johnsen
Chief Equities Officer

Petter is responsible for company investments, including internal equity and credit security selection.



Mie Caroline Holstad
Chief Real Assets Officer

Mie is responsible for investments, portfolio and asset management of real estate and renewable infrastructure and for the real asset operations, guidelines, resources, tools and process improvements.



Geir Øivind Nygård
Chief Asset Strategies Officer

Geir Øivind is responsible for portfolio management, external management security selection, security lending and trading.

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Birgitte Bryne
Chief Operating Officer

Birgitte is responsible for trading processing, measurement and reporting and investment and administrative services in the operation area.



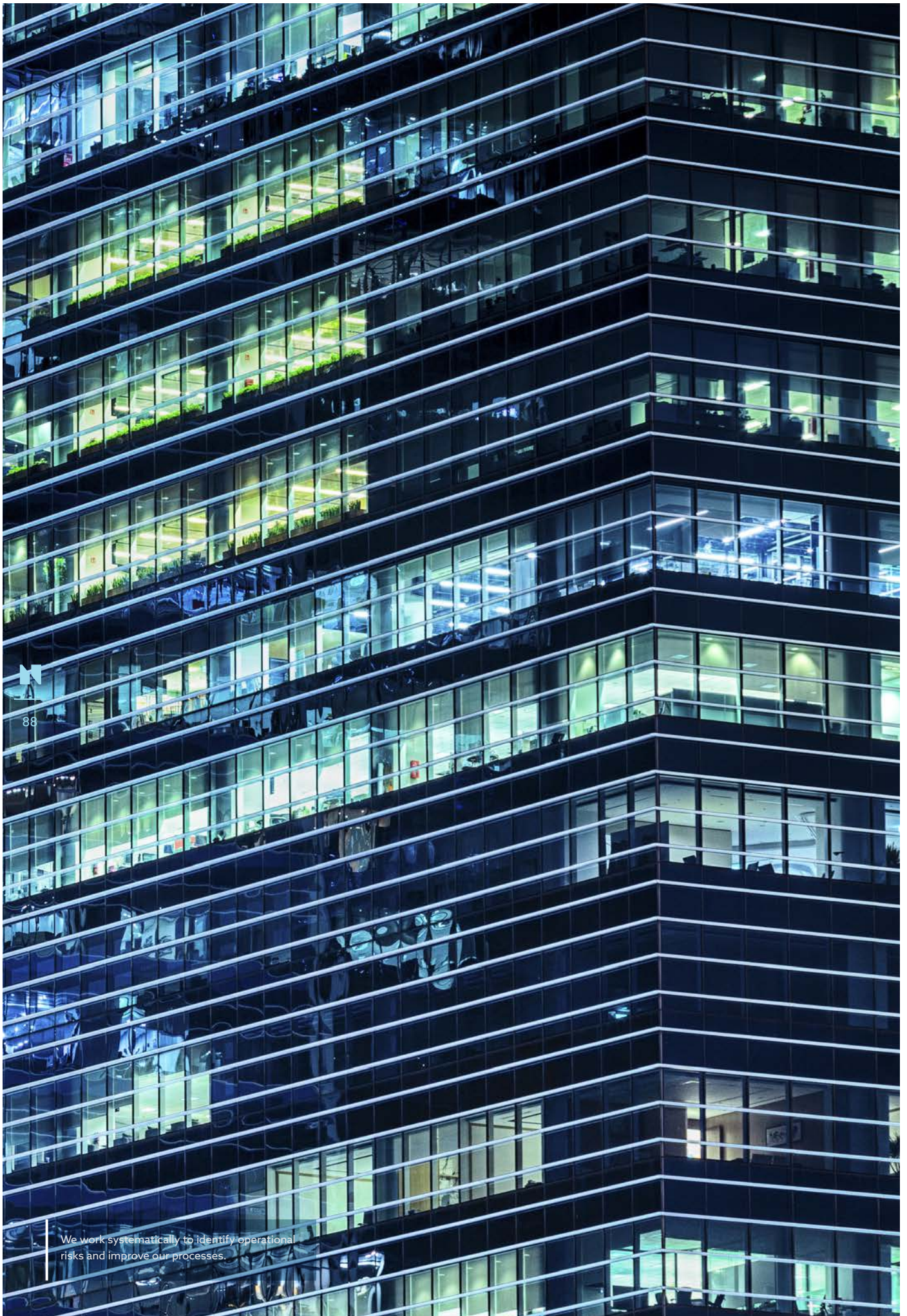
Age Bakker
Chief Technology Officer

Age is responsible for fulfilling the strategy and action plan for the Technology area, including processes in IT services and administrative services.



Dag Huse
Chief Risk Officer

Dag is responsible for the analysis, monitoring, measurement and reporting of investment risk and return for the fund.



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We work systematically to identify operational risks and improve our processes.

Limits for operational risk

Norges Bank's Executive Board sets limits for operational risk management and internal controls at Norges Bank Investment Management. We work systematically to identify operational risks and improve our processes.

The Executive Board has decided there must be less than a 20 percent probability that operational risk factors will result in financial consequences of 750 million kroner or more over a 12-month period. This is referred to as the Executive Board's operational risk tolerance.

Our estimated operational risk exposure was within this limit throughout 2020. We work systematically to identify operational risks and improve our processes to prevent unwanted incidents. Reporting and following up on these incidents is an important part of our efforts to improve operations and internal controls.

Unwanted incidents in 2020

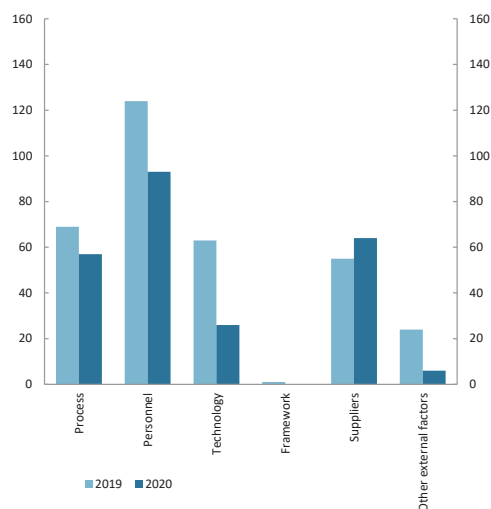
We registered 246 unwanted incidents in 2020, down from 336 in 2019. Most had no financial consequences. Altogether, these unwanted incidents had an estimated financial impact of 75.8 million kroner. Two incidents were considered critical, and six were considered significant.

The covid-19 pandemic outbreak was assessed as a critical incident as business travel was restricted and staff had to work remotely. The extensive media coverage and public debate following the CEO's return to Oslo from a seminar on a private flight paid for by the seminar organiser, was also assessed as critical. Four of the significant incidents had a total direct financial impact of 54.8 million kroner and were related to portfolio management, trading and management of corporate actions. The remaining incidents were related to system management and information security.

In compliance with guidelines

The Ministry of Finance has issued guidelines for the fund's management. No significant breaches of these guidelines were registered in 2020, and we did not receive any notifications from local supervisory authorities of any significant breaches of market rules or general legislation.

Chart 26 Unwanted events at Norges Bank Investment Management sorted by cause.



Low management costs

We maintain a high level of cost awareness in our management of the fund and work continually to simplify and streamline operations in order to realise economies of scale. Several large initiatives have been carried out in recent years to achieve this.

We place emphasis on upholding high quality in the fund's management and ensuring cost effectiveness, without compromising robust controls, good risk management and the opportunity to create added value in the management.

Internal management costs as a share of assets under management have fallen in recent years, despite the build-up of a portfolio of unlisted real estate investments and increased expectations and requirements related to responsible investment and reporting. The scope of the management mandate has increased over time, with a higher allocation to equities and investments in more markets and currencies. The fund's objective as set out in the management mandate from the Ministry of Finance is to achieve the highest possible return after costs, within the management framework. The management of the fund should be cost efficient, but low costs are not a goal in themselves.

Management costs measured as a share of assets under management are low in comparison with other funds. Management costs for 2020 amounted to 5.1 basis points of assets under management. An annual report prepared by CEM Benchmarking Inc. for the Ministry of Finance, which compares the fund's management costs with those of other large investment funds, shows that the fund's management costs have been between 11-14 basis points lower than for the peer group since 2012. This comparison takes account of the

fund's size and composition of different asset classes. The CEM report is considered the best source of information on cost levels at comparable funds.

Management costs

Total management costs in Norges Bank were 5.3 billion kroner in 2020, up from 4.3 billion kroner in 2019. The increase is mainly due to higher fees to external managers, higher custody costs and currency effects. This is partly offset by generally lower costs as a result of covid-19, including costs for specialist expertise, as well as lower depreciation costs due to previously capitalised projects being fully depreciated. Performance-based fees to external managers have increased compared to 2019 as a result of strong excess returns from external management. Base fees to external managers have also increased, in line with higher assets managed externally. Personnel costs have fallen compared to 2019, mainly due to the full-year effect of reduced headcount and lower travel activity as a result of covid-19. This is partly offset by currency effects, ordinary wage inflation and higher performance-based pay due to strong returns in 2020.

Each year, the Ministry of Finance sets an upper limit for the reimbursement of management costs. Norges Bank is only reimbursed for costs incurred up to this limit. Management costs in subsidiaries are measured against the limit but are not reimbursed because they are expensed directly in the portfolio result. Norges Bank is also reimbursed for performance-based fees to

external managers, which are not included in the limit. The sum of management costs incurred in Norges Bank and in subsidiaries, excluding performance-based fees to external managers, is limited to 4.9 billion kroner for 2020. Total management costs measured against the upper cost limit amounted to 4.1 billion kroner in 2020. Of this, management costs in Norges Bank, excluding performance-based fees to external managers, amounted to 4.0 billion kroner and management costs in subsidiaries amounted to 0.1 billion kroner. This corresponds to 0.040 percent of assets under management, a decrease from 0.045 percent in 2019.

Management costs are incurred in subsidiaries that are established as part of the fund's unlisted real estate investments. Management costs in subsidiaries amounted to 103 million kroner in 2020, compared to 111 million kroner in 2019. In

addition, other operating costs are incurred in subsidiaries for maintaining, operating and developing properties and leases. These are costs for operating the underlying properties once they are acquired, and are therefore not defined as management costs.

Fixed and variable fees to external managers accounted for 38 percent of management costs in 2020. External managers are largely used in segments and markets where it is not appropriate to build up internal expertise. Our strategy is to primarily use external managers for equity investments in emerging markets and for investments in small- and mid-cap companies. The use of external managers has played an important role in achieving the fund's goal of highest possible return after costs with moderate risk, with an excess return after costs of 1.8 percent annually in the fund's first 20 years.

Chart 27 Management costs as a share of assets under management. Basis points.

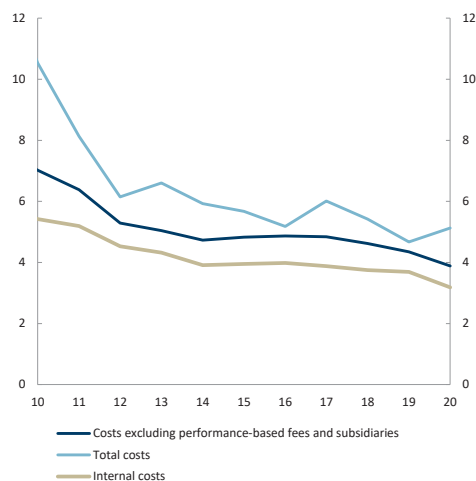
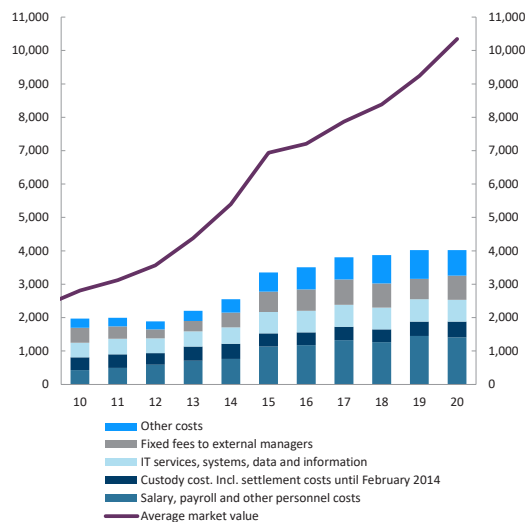


Chart 28 Development of individual cost components. Costs¹ (millions of kroner, left-hand axis) and average market value (billions of kroner, right-hand axis).



¹ Excluding performance-based fees and subsidiaries.

Some of the fees to external managers vary with the excess return achieved in relation to a benchmark index. Agreements with external managers for performance-based fees are structured in such a way that the bulk of the positive excess return is retained by the fund, and the agreements include caps on the fees that can be paid. Performance-based fees to external managers are therefore expected to be more than offset by excess returns for the fund and will increase with excess returns.

Performance-based fees to external managers have increased compared with 2019, due to higher excess returns from external management. Fixed fees to external managers have also increased as a result of a somewhat larger share of the fund being managed externally in 2020.

The fund's investments in equities and bonds must be registered with local securities depositories around the world. We have enlisted a global custodian institution to assist us with this process. Costs for custody and related services accounted for 9 percent of management costs in 2020 and have increased as a result of higher assets under management and increased transaction volumes as a result of withdrawals from the fund. Custody costs as a share of assets under management have fallen in recent years.

The fund's reporting currency is Norwegian kroner. Exchange rate fluctuations can have a significant accounting impact even if actual costs in foreign currency are unchanged. Over 70 percent of costs are invoiced and paid in foreign currency. This means, for example, that a 25 percent change in the krone exchange rate against other currencies will increase or decrease operating costs by around

1,000 million kroner. The weakening of the Norwegian krone against other currencies in recent years has resulted in a substantial increase in costs measured in kroner.

Transaction costs

Transaction costs are defined as all costs directly attributable to completed transactions. For equities and bonds, these normally consist of commission fees and transaction taxes, including stamp duty. For unlisted real estate, these are one-off costs incurred in buying and selling properties, such as stamp duty, registration fees, due diligence costs and insurance.

We work continuously to keep transaction costs low. We do this by taking account of these costs in our investment strategies and minimising the number of transactions. There may therefore be less activity in markets with high commissions or taxes than in markets with lower fixed transaction costs. We also choose counterparties that can execute our investment decisions most cost-effectively. Transaction costs are expensed directly in the portfolio result and are not included in management costs. Transaction costs amounted to 3.6 billion kroner in 2020, compared to 2.4 billion kroner in 2019. This includes 3.0 billion kroner related to equity transactions, 0.1 billion kroner related to fixed-income transactions and 0.5 billion kroner related to unlisted real estate transactions.

In addition to the direct costs described above, indirect costs are incurred because prices change from the time investment decisions are made until they are implemented in the market, or because prices reflect the liquidity the counterparty provides. Indirect costs are included in the portfolio result.

Management costs broken down by investment strategy

We pursue a variety of investment strategies in our management of the fund. These strategies complement and influence one another, and there are cost synergies between the strategies. We allocate costs to the different strategies in line with actual costs or using allocation keys based on factors such as number of employees or volumes.

Management costs for unlisted real estate were equivalent to 0.11 percent of assets under management in 2020. Management costs for external management during the same period amounted to 0.51 percent of assets under management, compared to 0.05 percent for internal security selection. Management costs for asset management amounted to 0.03 percent of assets under management.

Table 35 Management costs per investment strategy in 2020. Costs as reimbursed by the Ministry of Finance. Basis points.

	Contribution to the fund's management costs	Management costs based on assets under management
Fund allocation	0.5	
of which unlisted real estate	0.3	10.7
Security selection	2.7	14.4
Internal security selection	0.7	4.6
External security selection ¹	2.0	50.9
Asset management	1.9	2.5
Total	5.1	

¹ Includes all externally managed capital.

Table 36 Management cost per investment strategy 2013-2020. Costs as reimbursed by the Ministry of Finance. Basis points.

	Contribution to the fund's management costs	Management costs based on assets under management
Fund allocation	0.3	
Security selection	2.6	15.5
Internal security selection	0.7	5.7
External security selection ¹	1.8	44.8
Asset management	2.2	2.9
Unlisted real estate ²	0.4	21.5
Total	5.6	

¹ Includes all externally managed capital.

² Unlisted real estate is part of the fund allocation strategy from 2017.

Remuneration system

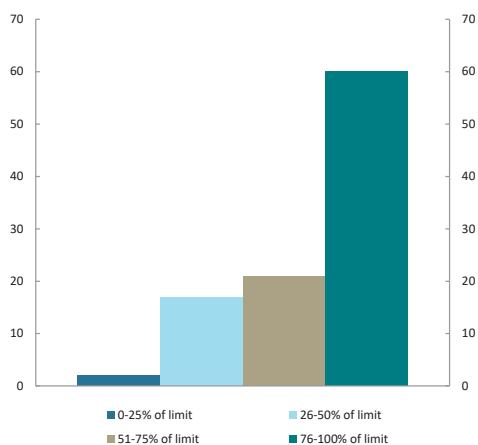
Norges Bank's Executive Board establishes the principles for the remuneration system at Norges Bank Investment Management. Members of the leader group receive only a fixed salary. New members of the leader group who were previously in receipt of performance-based pay will, however, still receive any such pay that has been held back over the following three years. The CEO's salary and pay bands for other members of the leader group are set by the Executive Board. Outgoing CEO Yngve Slyngstad was paid 4.5 million kroner through to his departure on 31 August, while incoming CEO Nicolai Tangen was paid 2.2 million kroner after taking over on 1 September 2020.

In addition to a fixed salary, those working directly on investment decisions and various other employees may also be entitled to performance-based pay. This is calculated on the basis of the performance of the fund, group and

individual measured against set targets, and is paid over a number of years. Half is paid the year after it is accrued, while half is held back and paid over the following three years. The amount held back is adjusted in line with the return on the fund. Where employees accrue performance-based pay in excess of 100 percent of fixed salary, 40 percent is paid the year after it is accrued, and the remaining 60 percent is held back and paid over the following three years. Performance-based pay may not normally exceed 100 percent of fixed salary for employees in Norway, but for a limited number of employees at the overseas offices the maximum limit is 200 percent. On average, employees eligible for performance-based pay accrued 71 percent of the limit for 2020 based on multi-year performance.

A total of 217 employees were entitled to performance-based pay at the end of 2020, including 13 at subsidiaries. The upper limit for performance-based pay for these 217 employees was 390 million kroner.

Chart 29 Performance-based pay relative to upper limit in 2020. Percentage of workforce.



The remuneration system is reviewed annually. Norges Bank's Internal Audit unit also issues an independent statement on compliance with rules and guidelines on remuneration. The review in 2020 confirmed that the remuneration system was operated in line with applicable rules in 2019. As stipulated by the management mandate from the Ministry of Finance, the remuneration system complies with the requirements of the regulations issued under the Norwegian Securities Fund Act with necessary adjustments. There were no significant changes to the remuneration system in 2020.

Table 37 Remuneration of Senior Management in 2020. Kroner.

Position	Name	Paid salary	Performance-based pay	Value of other benefits ⁹	Pension benefit earned	Employee loan
Chief Executive Officer	Nicolai Tangen ¹	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 ²	814,555	-	2,536	89,114	-
Chief Real Assets Officer	Mie Caroline Holstad ²	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 ^{3,4}	4,091,917	75,934	90,456	409,192	-
Chief Equities Officer	Petter Johnsen ³	8,438,073	-	110,216	843,807	-
Chief Real Assets Strategies Officer	Geir Øivind Nygård ⁴	4,521,252	351,680	7,296	241,751	-

Former senior executives who resigned in 2020

Chief Executive Officer	Yngve Slyngstad ⁷	4,511,094	-	11,482	433,722	-
Chief Investment Officer Allocation Strategies	Ole Christian Bech-Moen ⁶	4,486,923	-	6,398	206,374	-
Chief Compliance and Control Officer	Stephen A. Hirsch ⁵	3,217,419	-	8,744	313,892	-
Chief Financial Officer	Hege Gjerde ⁵	2,152,561	-	5,472	255,250	1,250,201
Chief People and Operations Officer	Nina Kathrine Hammerstad ⁵	2,325,845	-	5,564	275,935	-
Chief Investment Officer Real Estate	Karsten Kallevig ⁸	4,009,633	-	5,784	243,940	-

¹ Started in the position 01.09.2020. Remuneration is shown from the employment date.

² Started in the position 06.10.2020. Remuneration is shown from the employment date.

³ Receives a salary in GBP. The amount is converted to NOK and includes the currency effect. The pension benefit is based on the Defined Contribution pension plan.

⁴ Members of the Norges Bank Investment Management leader group only receive a fixed salary. Members of the leader group that previously were entitled to performance-based pay are no longer a part of this arrangement, but over the coming years will receive accrued performance-based pay that has been held back. The amounts reported in the table are performance-based pay disbursed during the financial year, but accrued and expensed in earlier periods.

⁵ Left the position on 05.10.2020. Remuneration is shown until resignation date.

⁶ Left the position on 14.10.2020. Remuneration is shown until resignation date.

⁷ Left the position on 31.08.2020. Remuneration is shown until resignation date.

⁸ Left the position on 30.09.2020. Remuneration is shown until resignation date.

⁹ Consist mainly of electronic communication tools, personnel insurance and certain travel costs.

Table 38 Remuneration of Senior Management, employees with performance-based pay and other employees paid in 2020. Million kroner.¹

	Number of employees	Fixed Remuneration	Variable Remuneration	Total Remuneration
Senior Management ²	15	54.6	0.4	55.0
Employees with performance pay ³	246	432.1	228.6	660.8
Other employees ⁴	337	358.3	-	358.3

¹ 1 Remuneration paid in foreign currency is converted to Norwegian kroner.

² Senior managers receive only a fixed salary. Senior managers who were previously in receipt of performance-based pay will, expensed in earlier periods however, still receive any such pay that has been held back. The amounts reported in the table are performance-based pay disbursed during the financial year, but accrued and expensed in earlier periods.

³ Of which 14 were employees in subsidiaries.

⁴ Of which 9 were employees in subsidiaries.

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Other assets and other liabilities _____	162		

Income statement

Amounts in NOK million	Note	2020	2019
Profit/loss on the portfolio before foreign exchange gain/loss			
Income/expense from:			
- Equities	4	883 788	1 486 909
- Bonds	4	198 080	192 820
- Unlisted real estate	6	-1 017	16 175
- Financial derivatives	4	-6 891	353
- Secured lending	12	4 028	4 529
- Secured borrowing	12	-751	-1 926
Tax expense	9	-7 513	-6 827
Interest income/expense		25	77
Other income/expense		-35	-8
Profit/loss on the portfolio before foreign exchange gain/loss		1 069 713	1 692 103
Foreign exchange gain/loss	10	57 948	126 679
Profit/loss on the portfolio		1 127 661	1 818 782
Management fee	11	-5 305	-4 312
Profit/loss and total comprehensive income		1 122 356	1 814 470

Balance sheet

Amounts in NOK million	Note	31.12.2020	31.12.2019
Assets			
Deposits in banks		18 258	14 476
Secured lending	12,13	192 526	222 946
Cash collateral posted	13	5 715	1 090
Unsettled trades		4 460	3 169
Equities	5	7 538 156	6 714 195
Equities lent	5,12	438 353	426 623
Bonds	5	2 343 362	2 316 823
Bonds lent	5,12	520 978	479 852
Financial derivatives	5,13	2 551	3 335
Unlisted real estate	6	272 507	264 538
Other assets	16	3 574	3 737
Total assets		11 340 440	10 450 786
Liabilities and owner's capital			
Secured borrowing	12,13	390 380	338 266
Cash collateral received	13	6 004	6 754
Unsettled trades		20 326	13 894
Financial derivatives	5,13	7 619	3 294
Other liabilities	16	2 350	495
Management fee payable	11	5 305	4 312
Total liabilities		431 983	367 015
Owner's capital		10 908 457	10 083 771
Total liabilities and owner's capital		11 340 440	10 450 786

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 GPF 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*.

Management fee shown in the *Statement of cash flows* for a period is the settlement of the fee that was accrued and expensed in the previous year.

Statement of cash flows

Amounts in NOK million, receipt (+) / payment (-)	Note	2020	2019
Operating activities			
Receipts of dividend from equities		152 788	172 591
Receipts of interest from bonds		60 255	67 751
Receipts of interest and dividend from unlisted real estate	6	8 375	5 865
Net receipts of interest and fee from secured lending and borrowing		3 053	2 711
<i>Receipts of dividend, interest and fee from holdings of equities, bonds and unlisted real estate</i>		<i>224 470</i>	<i>248 918</i>
Net cash flow from purchase and sale of equities			
Net cash flow from purchase and sale of equities		-80 610	-256 760
Net cash flow from purchase and sale of bonds		102 085	23 993
Net cash flow to/from investments in unlisted real estate	6	-15 997	-5 300
Net cash flow financial derivatives		-5 499	-357
Net cash flow cash collateral related to derivative transactions		-6 080	3 556
Net cash flow secured lending and borrowing		94 317	-18 907
Net payment of taxes	9	-5 724	-6 648
Net cash flow related to interest on deposits in banks and bank overdraft		-10	44
Net cash flow related to other income/expense, other assets and other liabilities		-623	22
Management fee paid to Norges Bank	11	-4 312	-4 544
Net cash inflow/outflow from operating activities		302 018	-15 983
Financing activities			
Inflow from the Norwegian government		5 032	32 051
Withdrawal by the Norwegian government		-301 800	-14 400
Net cash inflow/outflow from financing activities		-296 768	17 651
Net change deposits in banks			
Deposits in banks at 1 January		14 476	11 561
Net increase/decrease of cash in the period		5 250	1 668
Net foreign exchange gain/loss on cash		-1 467	1 246
Deposits in banks at end of period		18 258	14 476

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.

Statement of changes in owner's capital

Amounts in NOK million	Inflows from owner	Retained earnings	Total owner's capital
1 January 2019	3 366 340	4 885 061	8 251 401
Profit/loss and total comprehensive income	-	1 814 470	1 814 470
Inflow during the period ¹	32 300	-	32 300
Withdrawal during the period ¹	-14 400	-	-14 400
31 December 2019	3 384 240	6 699 531	10 083 771
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 ¹	4 130	-	4 130
Withdrawal during the period ¹	-301 800	-	-301 800
31 December 2020	3 086 570	7 821 887	10 908 457

¹ There was an inflow to the krone account of NOK 4.1 billion 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. There was an inflow of NOK 32.3 billion to the krone account in 2019, while NOK 18.9 billion was withdrawn from the krone account. Of this, NOK 4.5 billion was used to pay the accrued management fee for 2018.

Notes to the 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. Norges Bank manages the Government Pension Fund Global (GPFG) 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 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 GPFG to Norges Bank Investment Management (NBIM).

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*). 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 GPFG 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 on the management mandate for the GPFG, Norges Bank's governance structure and risk management, see note 8 *Investment risk*.

2. Approval of the financial statements

The annual financial reporting for the GPFG is an excerpt from Norges Bank's financial reporting and is included in Norges Bank's annual financial statements as note 20. The annual financial statements of Norges Bank for 2020 were approved by the Executive Board on 4 February 2021 and approved by the Supervisory Council on 24 February 2021.

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 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 *provisions on the financial reporting of Norges Bank (the provisions)*, which have 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 provisions. 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 are applied consistently with those of the previous financial year. There are no new or amended IFRS standards and interpretations that have become effective for the financial year starting 1 January 2020, that have had a material impact on the financial statements.

3. New and amended standards and interpretations effective from 2021 or later

Issued IFRS standards, changes in existing standards and interpretations with effective dates from 2021 or later are expected to be immaterial or not applicable for the financial reporting for the GPFG 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 12 *Secured lending and borrowing* for details of 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 GPFG's financial assets are therefore measured at fair value through profit or loss.

Financial liabilities, except for *Management fee payable*, are integrated in the investment portfolio

which is managed and evaluated on a fair value basis. These 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.

4.2 Subsidiaries

Investments in unlisted real estate 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 15 *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 through ownership interests in other entities, are investment entities. These subsidiaries are measured at fair value through profit or loss in accordance with the principles for financial assets, as described in section 4.1 above, and are presented in the balance sheet as *Unlisted real estate*. See note 6 *Unlisted real estate* for supplementary 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.

Accounting judgement

The GPFG is an investment entity based on the following:

- a) The GPFG receives funds from the Norwegian government, a related party and its sole owner, and delivers professional investment services in the form of management of the fund, to the Norwegian government,
- b) The GPFG commits to the Norwegian government that it will invest solely for capital appreciation and investment income,
- c) The GPFG measures and evaluates returns for all 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. Following an overall assessment, it has been concluded that the GPFG meets the criteria in the definition of an investment entity.

Note 3 Returns

Table 3.1 Returns

	2020	2019
Returns measured in the fund's currency basket (percent)		
Return on equity investments	12.14	26.02
Return on fixed-income investments	7.46	7.56
Return on unlisted real estate investments	-0.08	6.84
Return on fund	10.86	19.95
Relative return on fund (percentage points)	0.27	0.23
Returns measured in Norwegian kroner (percent)		
Return on equity investments	12.70	28.20
Return on fixed-income investments	8.00	9.41
Return on unlisted real estate investments	0.42	8.68
Return on fund	11.41	22.01

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.

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.

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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	2020	2019
Dividends	157 477	173 225
Realised gain/loss	103 946	104 429
Unrealised gain/loss	622 365	1 209 256
Income/expense from equities before foreign exchange gain/loss	883 788	1 486 909

Table 4.2 Specification Income/expense from bonds

Amounts in NOK million	2020	2019
Interest	62 213	67 097
Realised gain/loss	71 432	38 143
Unrealised gain/loss	64 436	87 580
Income/expense from bonds before foreign exchange gain/loss	198 080	192 820

Table 4.3 Specification Income/expense from financial derivatives

Amounts in NOK million	2020	2019
Interest	-1 186	1 146
Realised gain/loss	-5 702	-57
Unrealised gain/loss	-3	-735
Income/expense from financial derivatives before foreign exchange gain/loss	-6 891	353

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 12 *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 7 *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	31.12.2020		31.12.2019	
	Fair value incl. accrued dividends	Accrued dividends	Fair value incl. accrued dividends	Accrued dividends
Equities	7 976 509	6 973	7 140 818	8 292
Total equities	7 976 509	6 973	7 140 818	8 292
<i>Of which equities lent</i>	438 353		426 623	

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	31.12.2020			31.12.2019		
	Nominal value	Fair value incl. accrued interest	Accrued interest	Nominal value	Fair value incl. accrued interest	Accrued interest
Government bonds						
Government bonds issued in the government's local currency	1 389 636	1 523 986	6 406	1 404 163	1 526 110	10 076
Total government bonds	1 389 636	1 523 986	6 406	1 404 163	1 526 110	10 076
Government-related bonds						
Sovereign bonds	5 251	5 525	45	7 099	7 642	94
Bonds issued by local authorities	108 392	121 827	600	94 219	104 104	629
Bonds issued by supranational bodies	53 855	57 155	219	47 506	49 790	285
Bonds issued by federal agencies	122 001	128 258	399	150 843	155 619	587
Total government-related bonds	289 498	312 765	1 263	299 667	317 155	1 596
Inflation-linked bonds						
Inflation-linked bonds issued by government authorities	141 583	169 965	350	157 821	174 406	424
Total inflation-linked bonds	141 583	169 965	350	157 821	174 406	424
Corporate bonds						
Bonds issued by utilities	55 620	63 618	591	45 768	50 253	532
Bonds issued by financial institutions	255 026	272 234	2 039	245 018	253 261	2 214
Bonds issued by industrial companies	328 095	366 365	2 855	304 445	325 659	2 801
Total corporate bonds	638 741	702 216	5 485	595 230	629 172	5 547
Securitised bonds						
Covered bonds	160 209	155 409	657	155 564	149 833	848
Total securitised bonds	160 209	155 409	657	155 564	149 833	848
Total bonds	2 619 667	2 864 341	14 161	2 612 446	2 796 675	18 490
<i>Of which bonds lent</i>		520 978			479 852	

Financial derivatives

Financial derivatives such as foreign exchange derivatives, interest rate 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	31.12.2020			31.12.2019		
	Notional amount	Fair value		Notional amount	Fair value	
		Asset	Liability		Asset	Liability
Foreign exchange derivatives	359 170	1 620	6 475	330 125	2 884	2 740
Interest rate derivatives	37 523	725	1 144	21 605	291	554
Equity derivatives ¹	-	206	-	-	159	-
Exchange-traded futures contracts ²	28 587	-	-	27 287	-	-
Total financial derivatives	425 280	2 551	7 619	379 017	3 335	3 294

¹ Notional amounts are not considered relevant for equity derivatives and are therefore not included in the table.

² Exchange-traded futures contracts are settled daily with margin payments. Fair value is therefore zero at the balance sheet date.

Over-the-counter (OTC) financial derivatives

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.

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.

Exchange-traded 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 12 *Secured lending and borrowing* for further information. At the end of 2020, equities purchased in combination with offsetting equity swaps amounted to NOK 56 billion (NOK 67 billion at the end of 2019). Equity sales in combination with offsetting equity swaps amounted to NOK 54 billion (NOK 47 billion at the end of 2019). See also table 13.1 in note 13 *Collateral and offsetting*. The GPFG has virtually no net exposure from equity swaps in combination with purchase or sale of equities.

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 GPF. 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 GPF's share of assets and liabilities in the underlying subsidiaries, measured at fair value. For further information, see note 7 *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/equivalent decision-making body, or is paid out as a result of the company's articles of association.

Table 6.1 Income/expense from unlisted real estate

Amounts in NOK million	2020	2019
Payments of interest and dividend from unlisted real estate	8 375	5 865
Unrealised gain/loss ¹	-9 392	10 311
Income/expense from unlisted real estate before foreign exchange gain/loss	-1 017	16 175

¹ 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	31.12.2020	31.12.2019
Unlisted real estate at 1 January	264 538	243 818
Net cash flow to/from investments in unlisted real estate	15 997	5 300
Unrealised gain/loss	-9 392	10 311
Foreign exchange gain/loss	1 363	5 109
Unlisted real estate, closing balance for the period	272 507	264 538

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.

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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	2020	2019
Interest and dividend from ongoing operations	5 976	5 099
Repayments of intercompany loans from ongoing operations	1 697	1 267
<i>Cash flow from ongoing operations unlisted real estate</i>	<i>7 673</i>	<i>6 366</i>
Payments for new investments	-20 531	-8 126
Payments for property development	-1 109	-1 419
Net payments external debt	-	-451
Repayments of intercompany loans from sales	3 945	3 429
Interest and dividend from sales	2 399	766
<i>Cash flow to/from other activities unlisted real estate</i>	<i>-15 295</i>	<i>-5 801</i>
Net cash flow unlisted real estate¹	-7 622	565

¹ Shown in the cash flow statement 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 2020 this amounted to NOK 8 375 million (NOK 5 865 million in 2019).

Cash flows between the GPFG and 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 2020 this amounted to NOK -15 997 million (NOK -5 300 million in 2019).

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 15 *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 are 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	2020	2019
Net rental income	11 609	10 478
External asset management - fixed fees	-728	-576
External asset management - variable fees	-71	-91
Internal asset management - fixed fees ¹	-65	-63
Management costs within the limit from the Ministry of Finance ²	-64	-70
Other operating costs, not within the limit from the Ministry of Finance	-110	-101
Interest expense external debt	-555	-525
Tax expense	-211	-290
<i>Net income from ongoing operations</i>	<i>9 805</i>	<i>8 762</i>
Realised gain/loss	2 151	1 114
Unrealised gain/loss ³	-12 472	6 510
<i>Realised and unrealised gain/loss</i>	<i>-10 321</i>	<i>7 624</i>
<i>Transaction costs and fees from purchases and sales</i>	<i>-500</i>	<i>-211</i>
Net income underlying real estate companies	-1 017	16 175

¹ Internal asset management is carried out on 100 percent owned properties by employees in a wholly-owned, consolidated subsidiary.

² See table 11.2 for specification of management costs that are measured against the upper limit from the Ministry of Finance.

³ *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	31.12.2020	31.12.2019
Properties	293 408	283 191
External debt	-18 783	-18 407
Net other assets and liabilities ¹	-2 118	-246
Total assets and liabilities underlying real estate companies	272 507	264 538

¹ 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 25 million are announced. Previously announced agreements for purchases

and sales which are not yet completed at the end of 2020, 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 fourth quarter of 2022 and the fourth quarter of 2023, respectively. The buildings will be purchased, and the final purchase price determined upon completed construction.

Note 7 Fair value measurement

Accounting policy

All assets and liabilities presented as *Equities, Bonds, Unlisted real estate, Financial derivatives, Secured lending and borrowing, Deposits in banks 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 require 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 7.1. 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 per 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 7.1 Categorisation of the investment portfolio by level in the fair value hierarchy

Amounts in NOK million	Level 1		Level 2		Level 3		Total	
	31.12.2020	31.12.2019	31.12.2020	31.12.2019	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Equities	7 932 488	7 093 963	43 424	46 039	597	816	7 976 509	7 140 818
Government bonds	1 319 168	1 386 488	204 818	139 622	-	-	1 523 986	1 526 110
Government-related bonds	235 974	256 537	76 791	60 618	-	-	312 765	317 155
Inflation-linked bonds	153 784	162 582	16 181	11 824	-	-	169 965	174 406
Corporate bonds	591 372	546 322	110 816	82 834	28	16	702 216	629 172
Securitised bonds	128 141	119 821	27 268	30 012	-	-	155 409	149 833
Total bonds	2 428 439	2 471 750	435 874	324 910	28	16	2 864 341	2 796 675
Financial derivatives (assets)	76	140	2 471	3 192	4	3	2 551	3 335
Financial derivatives (liabilities)	-	-	-7 619	-3 294	-	-	-7 619	-3 294
Total financial derivatives	76	140	-5 148	-102	4	3	-5 068	41
Unlisted real estate	-	-	-	-	272 507	264 538	272 507	264 538
Other (assets)¹	-	-	224 533	245 418	-	-	224 533	245 418
Other (liabilities)²	-	-	-419 059	-359 409	-	-	-419 059	-359 409
Total	10 361 003	9 565 853	279 623	256 856	273 136	265 373	10 913 762	10 088 083
Total (percent)	94.9	94.8	2.6	2.6	2.5	2.6	100.0	100.0

¹ Other (assets) consists of the balance sheet lines *Deposits in banks, Secured lending, Cash collateral posted, Unsettled trades (assets)* and *Other assets*.

² Other (liabilities) consists of the balance sheet lines *Secured borrowing, Cash collateral received, Unsettled trades (liabilities)* and *Other liabilities*.

The majority of the total portfolio is priced based on observable market prices. At the end of 2020, 97.5 percent of the portfolio was classified as Level 1 or 2, which is a marginal increase compared to year-end 2019. 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 (99.45 percent) are valued based on official closing prices from stock exchanges and are classified as Level 1. A small share of equities (0.54 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 (0.01 percent) that are not listed, or where trading has been suspended over a longer period, 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 (84.78 percent) have observable, executable market quotes in active markets and are classified as Level 1. Bonds classified as Level 2 amount to 15.22 percent. These are

securities that do not have a sufficient number of observable quotes or that are priced based on comparable liquid bonds. A negligible proportion of 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 that adjustments to valuations are warranted.

Market activity in many sectors of the unlisted real estate market was disrupted during the year, with lower transaction volumes due to the impact of the covid-19 pandemic. Due to uncertainty regarding the impact of the pandemic, combined with a lack of transactional evidence from comparable completed transactions, the majority of the external valuation reports received per 30 June included a *material valuation uncertainty* clause. There was an increase in market activity towards the end of the year, with increased availability of transactional evidence. While transaction volumes were not yet back to normal levels, there was an adequate level of market evidence upon which external valuers could base their fair value estimates at year-end 2020. The uncertainty clauses have been removed from the external valuation reports at year-end for the vast majority of the portfolio.

The impact of the pandemic has not been uniform across sectors and markets. This has been evident

in NBIM's real estate portfolio, with vastly different development between sectors and markets.

Although the clauses regarding material valuation uncertainty have been removed, the external valuers highlight that there is elevated market uncertainty with regards to the long-term impact of the pandemic on cash flows and yield requirements. At year-end, most valuation reports included statements indicating that values and income may change more quickly than in normal market conditions, as new information becomes available.

There has been no change to the valuation methodology due to covid-19. However, additional controls have been performed as described in section 6 of this note.

Norges Bank Investment Management has performed a detailed review of the independent external valuation reports received per 31 December. Based on this, the assessment is that the external valuers have incorporated the impact of the pandemic at the measurement date, in accordance with the assumptions that market participants would reasonably apply under current market conditions. The values determined by the external valuers are accordingly assessed to represent the best estimate of fair value at year-end 2020.

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

There have been no significant reclassifications of equities between Level 1 and Level 2. The share of equities classified as Level 1 is virtually unchanged compared to year-end 2019.

Due to reduced liquidity, there has been a net reclassification of bond holdings of NOK 92 918 million from Level 1 to Level 2. These holdings mainly consist of government bonds in both developed and emerging markets, as well as

corporate bonds denominated in US dollar and Euro. The share of bonds classified as Level 1 has decreased by 3.6 percentage points compared to year-end 2019, with a corresponding increase in the share of Level 2 holdings. In addition to reclassifications between levels, Level 2 holdings have increased in 2020 due to the purchase of government bonds in this level just prior to year-end.

The relative share of holdings classified as Level 3 was 2.5 percent at the end of 2020, a decrease



Table 7.2 Changes in Level 3 holdings

Amounts in NOK million	01.01.2020	Purchases	Sales	Settle-ments	Net gain/loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31.12.2020
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 ¹	264 538	15 997	-	-	-9 392	-	-	1 363	272 507
Total	265 373	16 013	-22	6	-9 585	75	-70	1 345	273 136

Amounts in NOK million	01.01.2019	Purchases	Sales	Settle-ments	Net gain/loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31.12.2019
Equities	353	696	-128	-2	-90	44	-60	3	816
Bonds	453	-	-425	-	-9	-	-3	-	16
Financial derivatives (assets)	12	-	-	-	-7	-	-2	-	3
Unlisted real estate ¹	243 818	5 300	-	-	10 311	-	-	5 109	264 538
Total	244 636	5 996	-553	-2	10 205	44	-65	5 112	265 373

¹ Purchases represent the net cash flow to investments in unlisted real estate. See *Net cash flow to/from investments in unlisted real estate* in the Statement of cash flows.

from 2.6 percent at year-end 2019. The GPF's aggregate holdings in Level 3 amounted to NOK 273 136 million at year-end 2020, an increase of NOK 7 763 million compared to year-end 2019. The increase is mainly due to investments in unlisted real estate which are all classified as Level 3.

Investments in unlisted real estate amounted to NOK 272 507 million at year-end 2020, an increase of NOK 7 969 million compared to year-end 2019. The increase is due to new investments and positive currency effects, offset by unrealised losses.

4. Valuation techniques

Norges Bank Investment Management has defined hierarchies for which price sources to be used for 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 which provide access to market prices, quotes and transactions at the measurement date.

The next section sets out the main valuation techniques for instruments classified in Level 2 and Level 3 of the fair value hierarchy. Furthermore, it highlights the most significant observable and unobservable inputs used in the valuation models.

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 based on actual lease terms and conditions and 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 investor preferences.

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 have been suspended from trading for a prolonged period. 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, such as rights and warrants, are mainly valued based on prices provided by vendors according to the fair value 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.

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 market rental values 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.

As mentioned above, the covid-19 pandemic has had an impact on the unlisted real estate market, with lower transaction volumes than normal. The range of reasonable alternative assumptions applied in the sensitivity analysis has therefore been assessed at year-end. There are variances across sectors and geographical markets. The level of leasing activity and investment transactions has been high for logistics, while there has been less market activity particularly in the retail sector, but also in the office sector. Based on an overall assessment, it is concluded that there is sufficient transactional evidence in the different sectors and markets to maintain the range used for reasonable alternative assumptions for yields and market rents in the sensitivity analysis at year-end 2020.

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 17 109 million or 6.3 percent (6.3 percent at year-end 2019). 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

Table 7.3 Additional specification Level 3 and sensitivities

Amounts in NOK million	Key assumptions	Change in key assumptions	Specification of Level 3 holdings 31.12.2020	Sensitivities 31.12.2020		Specification of Level 3 holdings 31.12.2019	Sensitivities 31.12.2019 ¹	
				Unfavourable changes	Favourable changes		Unfavourable changes	Favourable changes
Equities	Suspension adjustment ²	20.0 percent	597	-119	119	816	-163	163
Total bonds	Probability of future cash flows ³	10.0 percent	28	-3	3	16	-2	2
Financial derivatives (assets)	Other		4	-4	-	3	-3	-
Unlisted real estate	Yield	0.2 percentage point		-12 708	14 864		-11 954	9 720
	Market rent	2.0 percent		-4 401	4 383		-4 608	4 639
			272 507	-17 109	19 247	264 538	-16 563	14 359
Total			273 136	-17 235	19 369	265 373	-16 731	14 524

¹ The comparable amounts for equities and bonds have been restated to conform to current period presentation.

² For equities that have been suspended from trading for a prolonged period, a suspension adjustment is applied to the last traded price, based on an assessment of company-specific factors.

³ Holdings consist mainly of defaulted bonds.

unlisted real estate portfolio of approximately NOK 19 247 million or 7.1 percent (5.4 percent at year-end 2019).

For unlisted real estate, changes in yields are a more significant factor for valuation than changes in market rents. The isolated effects of changes in yields and future market rents are presented in table 7.3.

6. Control environment

The control environment for fair value measurement of financial instruments and investments in unlisted real estate 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 unlisted real estate investments where valuations are performed quarterly. 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 each month-end for financial instruments and at the end of each quarter for unlisted real estate investments, more extensive controls are performed to ensure the valuation represents fair value in accordance with IFRS. As part of this review, particular attention is paid to illiquid financial instruments and unlisted real estate 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.

In accordance with this control framework, additional analyses and controls have been performed by the valuation department due to the reduced activity in the unlisted real estate market during 2020. This includes expanded interaction with the external valuers, increased review of independent market research and forecasts, comparison with available quarterly and monthly MSCI and NCREIF property index information as well as increased comparative analysis to valuations and pricing of the listed property sector.

Valuation memos and reports are prepared each quarter-end, documenting the results of the controls performed and the most important sources of uncertainties 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 investment meeting, attended by several members of Norges Bank Investment Management's leader group.

Note 8 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.

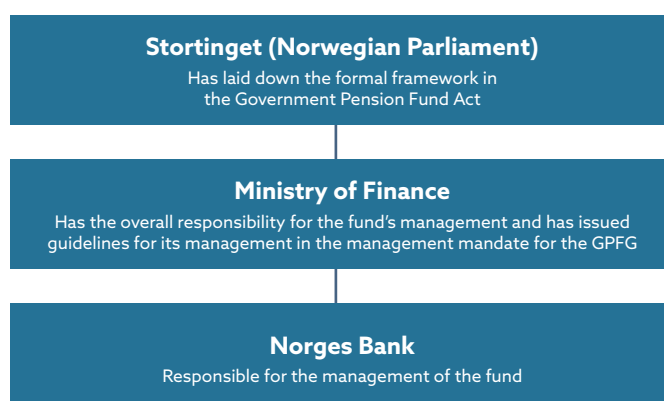
The benchmark index for equities is constructed based on the market capitalisation for equities in the countries included in the benchmark. The benchmark index for bonds specifies a defined allocation between government bonds and corporate bonds, with a weight of 70 percent to government bonds and 30 percent to corporate bonds. The currency distribution is a result of these weighting principles.

Investments in real estate 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. The fund's allocation to unlisted real estate 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 real estate within the limits set in the management mandate, and how it shall be financed.

The management mandate also opens for investments in unlisted infrastructure for renewable energy of up to 2 percent of the investment portfolio.

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 8.1 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 8.2 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 GPFG, 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 are regulated by a separate management framework in the investment mandate. The framework underpins how a diversified exposure to unlisted real estate 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.

Table 8.1 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 and real estate 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 <ul style="list-style-type: none"> - Concentration risk - Volatility and correlation risk - Systematic factor risk - Liquidity risk 	Measured at single issuer and portfolio levels <ul style="list-style-type: none"> - Probability of default - Loss given default - Correlation between instruments and issuers at portfolio level 	Measured risk exposure by type of position <ul style="list-style-type: none"> - 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 and real estate 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. 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 portfolio. 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 GPFG.

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 GPFG.

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 8.2.

Table 8.2 Allocation by asset class, country and currency

Asset class	Market	Market value in percent by country and currency ¹		Market value in percent by asset class		Assets minus liabilities excluding management fee ²	
		31.12.2020	Market 31.12.2019	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Equities	Developed	88.0	Developed	88.6			
	US	41.7	US	39.7			
	Japan	8.2	UK	8.8			
	UK	7.3	Japan	8.4			
	France	4.8	France	5.2			
	Switzerland	4.6	Germany	4.8			
	Total other	21.4	Total other	21.7			
	Emerging	12.0	Emerging	11.4			
	China	5.3	China	4.3			
	Taiwan	2.1	Taiwan	1.8			
	India	1.3	India	1.2			
	Brazil	0.6	Brazil	1.0			
	South Africa	0.5	South Africa	0.6			
	Total other	2.2	Total other	2.6			
Total equities					72.80	70.83	7 945 475 7 145 463
Fixed income	Developed	97.2	Developed	92.0			
	US dollar	47.7	US dollar	45.9			
	Euro	28.1	Euro	26.9			
	Japanese yen	7.6	Japanese yen	7.5			
	British pound	4.9	British pound	4.3			
	Canadian dollar	3.6	Canadian dollar	3.1			
	Total other	5.2	Total other	4.4			
	Emerging	2.8	Emerging	8.0			
	South Korean won	0.8	Mexican peso	1.6			
	Mexican peso	0.7	South Korean won	1.1			
	Russian ruble	0.3	Indonesian rupiah	1.0			
	Indonesian rupiah	0.2	Indian rupee	0.7			
	Columbian peso	0.2	Brasilian real	0.7			
	Total other	0.7	Total other	2.9			
Total fixed income					24.70	26.46	2 695 184 2 669 606
Unlisted real estate	US	46.8	US	48.5			
	France	19.3	UK	21.2			
	UK	18.1	France	17.9			
	Germany	4.0	Switzerland	3.5			
	Switzerland	3.9	Germany	3.4			
	Total other	7.9	Total other	5.6			
Total unlisted real estate					2.50	2.71	273 109 273 014

¹ Market value in percent per country and currency includes derivatives and cash.

² 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 2020, the equity portfolio's share of the fund was 72.8 percent, up from 70.8 percent at year-end 2019. The bond portfolio's share of the fund was 24.7 percent, down from 26.5 percent at year-end 2019. Fixed income investments in

emerging market currencies fell from 8.0 percent at the end of 2019 to 2.8 percent at year-end 2020. The unlisted real estate portfolio's share of the fund was 2.5 percent, compared with 2.7 percent at year-end 2019.

For equity investments, concentration in the portfolio is further measured by sector. Table 8.3 shows the composition of the equity asset class by sector.

Table 8.3 Allocation of equity investments by sector¹, percent

Sector	31.12.2020	31.12.2019
Financials	20.4	23.6
Technology	18.5	14.6
Industrials	13.8	13.4
Consumer goods	12.0	11.5
Health care	11.7	11.3
Consumer services	11.5	10.7
Basic materials	4.4	4.4
Oil and gas	3.0	5.0
Utilities	2.6	2.8
Telecommunications	2.4	2.7

¹ Does not sum up to 100 percent because cash and derivatives are not included.

The GPFG has substantial investments in government-issued bonds. Table 8.4 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 8.4 Largest holdings within the segment government bonds

Amounts in NOK million	Market value 31.12.2020	Amounts in NOK million	Market value 31.12.2019
US	717 935	US	701 616
Japan	294 195	Japan	244 195
Germany	138 176	Germany	98 548
UK	87 746	France	80 783
France	72 442	UK	72 793
Spain	51 345	Spain	51 554
Australia	41 065	South Korea	49 049
South Korea	36 045	Mexico	43 360
Italy	31 261	Italy	42 427
Canada	31 242	Canada	30 640

The portfolio is also invested in companies which issue both equities and bonds. Table 8.5 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 8.5 Largest holdings excluding sovereigns, both bonds and equities

Amounts in NOK million, 31.12.2020	Sector	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 services	124 334	5 970	130 304
Alphabet Inc	Technology	97 343	2 614	99 957
Nestlé SA	Consumer goods	77 028	2 503	79 531
Taiwan Semiconductor Manufacturing Co Ltd	Technology	66 089	1 784	67 872
Facebook Inc	Technology	67 424	0	67 424
Roche Holding AG	Health care	59 125	424	59 549
Samsung Electronics Co Ltd	Technology	56 598	0	56 598
Alibaba Group Holding Ltd	Consumer services	55 559	439	55 998

Amounts in NOK million, 31.12.2019	Sector	Equities	Bonds	Total
Apple Inc	Technology	116 967	7 711	124 677
Microsoft Corp	Technology	104 640	1 258	105 897
Alphabet Inc	Technology	77 831	529	78 360
Nestlé SA	Consumer goods	71 686	1 900	73 585
Amazon.com Inc	Consumer services	68 631	3 716	72 347
Roche Holding AG	Health care	55 297	360	55 657
Alibaba Group Holding Ltd	Consumer services	51 992	1 073	53 065
Royal Dutch Shell Plc	Oil and gas	52 193	496	52 689
Novartis AG	Health care	44 604	3 679	48 283
Facebook Inc	Technology	46 241	0	46 241

Table 8.6 shows the composition of the unlisted real estate asset class by sector.

Table 8.6 Distribution of unlisted real estate investments by sector, percent

Sector	31.12.2020	31.12.2019
Office	57.2	56.5
Retail	16.4	18.2
Logistics	26.0	21.9
Other	0.5	3.4
Total	100.0	100.0

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 Barra Private Real Estate 2 (PRE2) model from MSCI is used to calculate market risk for the fund's investments in unlisted real estate. As a general

modelling issue there are few, if any, available historical prices for individual properties. Available data sources which may be used as approximations for the pricing of unlisted real estate investments include return time series from listed real estate companies (REITs) and valuation-based indices. The risk model from MSCI uses time series of valuations and actual transactions as a starting point, but also includes listed real estate share prices to establish representative time series for unlisted real estate prices. This hybrid model is calibrated to market data for each location and type of property, and constructs synthetic time series of risk factor returns with daily frequency. The main risk sources from being exposed to these risk factors are currency risk, variance and correlation of the location and property type specific appraisal data and, via exposure to listed real estate returns, correlation to the equity and fixed-income markets. The risk model from MSCI then uses these factors for unlisted real estate 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 8.7 and 8.8 present risk both in terms of the portfolio's absolute risk and the relative risk.

Table 8.7 Portfolio risk, expected volatility, percent

	Expected volatility, actual portfolio							
	31.12.2020	Min 2020	Max 2020	Average 2020	31.12.2019	Min 2019	Max 2019	Average 2019
Portfolio	10.4	7.7	10.5	9.4	7.7	7.7	8.6	7.9
Equities	14.3	9.9	14.4	12.9	9.9	9.9	11.5	10.2
Fixed income	9.7	6.9	9.7	8.7	7.0	6.7	7.2	6.9
Unlisted real estate	10.5	8.7	10.7	10.1	8.7	8.7	9.4	9.0

Table 8.8 Relative risk measured against the fund's reference index, expected relative volatility, basis points

	Expected relative volatility							
	31.12.2020	Min 2020	Max 2020	Average 2020	31.12.2019	Min 2019	Max 2019	Average 2019
Portfolio	56	32	58	49	33	31	34	32

Risk measured as expected volatility indicates an expected annual value fluctuation in the fund of 10.4 percent, or approximately NOK 1 130 billion at the end of 2020, compared to 7.7 percent at year-end 2019. Expected volatility for the equity portfolio was 14.3 percent at year-end, up from 9.9 percent at year-end 2019, while expected volatility for the bond portfolio was 9.7 percent at the end of 2020, up from 7.0 percent at year-end 2019. The increase in expected volatility for the fund in 2020 is mainly due to increased price volatility in the equity markets for the last three years than was the case at the end of 2019.

The management mandate for the GPFG 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 56 basis points at the end of the year, up from 33 basis points at year-end 2019. The increase in the expected relative volatility in 2020 is mainly due to increased price volatility in the markets.

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 1.80 percentage points, compared to 1.50 percentage points at year-end 2019.



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 model 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 8.9 Bond portfolio specified by credit rating

Amounts in NOK million, 31.12.2020	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
Total bonds	1 234 296	426 156	706 697	461 905	35 288	2 864 341

Amounts in NOK million, 31.12.2019	AAA	AA	A	BBB	Lower rating	Total
Government bonds	784 270	219 428	367 235	113 426	41 750	1 526 110
Government-related bonds	127 462	131 904	42 359	14 164	1 265	317 155
Inflation-linked bonds	127 523	29 901	7 433	9 549	-	174 406
Corporate bonds	5 567	39 019	260 796	317 812	5 978	629 172
Securitised bonds	122 767	24 524	1 583	526	433	149 833
Total bonds	1 167 588	444 778	679 406	455 478	49 425	2 796 675

The share of holdings in corporate bonds increased by 2.0 percentage points during the year, to 24.5 percent of the bond portfolio at year-end 2020. The largest increase was for corporate bonds within the category BBB and A. Government bonds, including inflation-linked bonds, comprised 59.1 percent of the bond portfolio at year-end, compared to 60.8 percent at year-end 2019.

The share of bonds with credit rating AAA increased by 1.4 percentage points compared to year-end 2019, to 43.1 percent of the total bond portfolio at year-end. This increase was mainly due to an increase in the holdings in government bonds. The share of bonds with credit rating AA decreased by 1.0 percentage point compared to year-end 2019, to 14.9 percent of the total bond portfolio at year-end 2020. This decrease was

mainly due to a decrease in the holdings in government-related bonds. The share of bonds with credit rating A increased by 0.4 percentage point compared to year-end 2019, to 24.7 percent at year-end 2020. The decrease is due to a reduction in corporate bond holdings, mainly issued in US dollars.

The share of bonds grouped under *Lower rating* was reduced to 1.2 percent of the bond portfolio at year-end 2020, from 1.8 percent at year-end 2019. This is mainly due to reduced holdings of emerging market government bonds within this category. Defaulted bonds had a market value of NOK 51 million at year-end 2020, compared to NOK 129 million at year-end 2019. Defaulted bonds are grouped under *Lower rating*. The overall credit quality of the bond portfolio improved slightly during the year.

Table 8.10 Bond portfolio by credit rating and currency, percent

31.12.2020	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
Total	43.1	14.9	24.7	16.1	1.2	100.0

31.12.2019	AAA	AA	A	BBB	Lower rating	Total
US dollar	26.1	2.1	6.8	8.4	0.2	43.5
Euro	9.1	7.3	5.3	4.5	0.1	26.2
Japanese yen	-	-	9.4	-	-	9.4
British pound	0.3	2.8	0.5	0.6	-	4.2
Canadian dollar	2.4	0.8	0.1	-	-	3.4
Other currencies	3.9	2.9	2.2	2.8	1.5	13.3
Total	41.7	15.9	24.3	16.3	1.8	100.0

There were no credit derivatives in the portfolio at year-end 2020.

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 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, repurchase and reverse repurchase agreements, securities lending, and holdings of securities that are considered to be unsecured. Counterparty risk also arises from unsecured bank deposits and in connection with the daily liquidity management of the fund, as well as in connection with purchases and sales of unlisted real estate. 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 and repurchase and reverse repurchase agreements, in order to reduce counterparty risk. 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 transactions are conducted. Counterparty risk that arises is analysed in advance of the transaction and requires approval by the CRO. In 2020, 7 transactions were approved by the CRO through this process, compared to 11 transactions in 2019.

Counterparty risk is also limited by setting exposure limits for individual counterparties. 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 for most currency trades is low. 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 8.11.

Norges Bank Investment Management has invested in Saudi Arabian equities. Counterparty risk arises from these listed equities as they are considered to be unsecured.

In table 8.11, exposure is broken down by type of activity/instrument associated with counterparty risk.

Total counterparty risk was NOK 117.5 billion at year-end 2020, a slight increase from NOK 116.4 billion at year-end 2019. There was an increase in risk exposure from unsecured securities and derivatives, including foreign exchange contracts, while the risk exposure from securities lending and repurchase and reverse repurchase agreements was reduced during the year. Both equities and bonds are lent through the securities lending programme. The risk exposure for the programme decreased to NOK 55.9 billion at year-end 2020, from NOK 58.5 billion at year-end 2019. Counterparty risk exposure from securities lending amounted to 48 percent of the fund's total counterparty risk exposure at year-end 2020, compared to 50 percent at year-end 2019.

Table 8.11 Counterparty risk by type of position

Amounts in NOK million	Risk exposure	
	31.12.2020	31.12.2019
Securities lending	55 928	58 488
Derivatives including foreign exchange contracts	33 784	32 611
Unsecured bank deposits ¹ and securities	22 863	18 501
Repurchase and reverse repurchase agreements	4 286	6 535
Settlement risk towards brokers and long settlement transactions	625	266
Total	117 487	116 401

¹ 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 8.12 shows approved counterparties classified by credit rating category. The table also includes brokers that are used when purchasing and selling securities.

Table 8.12 Counterparties by credit rating¹

	Norges Bank's counterparties (excluding brokers)		Brokers	
	31.12.2020	31.12.2019	31.12.2020	31.12.2019
AAA	3	1	1	1
AA	32	34	33	35
A	63	61	83	79
BBB	10	10	35	32
BB	2	2	15	19
B	1	-	7	7
Total	111	108	174	173

¹ 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 increased slightly during the year. There were 111 counterparties at year-end 2020, compared to 108 at year-end 2019. The number of brokers increased to 174 at year-end 2020, from 173 at year-end 2019. The overall credit quality of brokers and counterparties remained unchanged from year-end 2019.

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 1.5 percent for the aggregated equity and bond portfolio at the end of 2020, compared to 1.1 percent at the end of 2019. For investments in unlisted real estate, requirements are set in the investment mandate, limiting the maximum debt ratio of the portfolio to 35 percent. The unlisted real estate investments had a debt ratio of 6.4 percent at the end of 2020, compared to 6.1 percent at the end of 2019.

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 2020.

Note 9 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*. Refundable withholding tax is recognised in the balance sheet as a receivable within *Other assets*.

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 on capital gains is recognised as a liability in the balance sheet within *Other liabilities*, 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 line *Unlisted real estate* is recognised in the income statement as *Income/expense from unlisted real estate*. Only the tax expense in consolidated subsidiaries is included in the income statement line *Tax expense*. This is specified in table 9.1 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 9.1 shows tax expense by type of investment and type of tax.

Table 9.1 Specification tax expense

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	-
Tax expense		-5 624	-1 884	-5	-7 513	

Amounts in NOK million, 2019	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	1 486 909	-6 214	-472	-	-6 685	1 480 224
Bonds	192 820	-22	-38	-	-60	192 760
Secured lending	4 529	-73	-	-	-73	4 456
Other	-	-	-	-9	-9	-
Tax expense		-6 308	-510	-9	-6 827	

Table 9.2 shows receivables and liabilities recognised in the balance sheet related to tax.

Table 9.2 Specification of balance sheet items related to tax

Amounts in NOK million	31.12.2020	31.12.2019
Included in <i>Other assets</i> :		
Withholding tax receivable	2 234	2 163
Included in <i>Other liabilities</i> :		
Tax payable	12	9
Deferred tax	2 308	450

Table 9.3 specifies the line *Net payment of taxes* in the statement of cash flows.

Table 9.3 Specification of net payment of taxes

Amounts in NOK million	2020	2019
Receipt of refunded withholding tax	6 748	5 201
Payment of taxes	-12 472	-11 848
Net payment of taxes	-5 724	-6 648

Note 10 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 in relation to 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 for the holding 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 10.1.

Table 10.1 Specification foreign exchange gain/loss

Amounts in NOK million	2020	2019
Foreign exchange gain/loss - EUR/NOK	106 910	-5 461
Foreign exchange gain/loss - JPY/NOK	18 103	15 693
Foreign exchange gain/loss - GBP/NOK	4 854	33 334
Foreign exchange gain/loss - USD/NOK	-79 242	44 005
Foreign exchange gain/loss - other	7 324	39 108
Foreign exchange gain/loss	57 948	126 679

Table 10.2 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 8.2 in note 8 *Investment risk*.

Table 10.2 Specification of the investment portfolio by currency

Amounts in NOK million	31.12.2020	31.12.2019
US dollar	4 644 534	4 325 398
Euro	1 995 892	1 999 881
Japanese yen	845 642	807 056
British pound	800 602	758 899
Other currencies	2 627 092	2 196 849
Market value investment portfolio	10 913 762	10 088 083

Table 10.3 gives an overview of exchange rates at the balance sheet date for the main currencies the GPFG is exposed to.

Table 10.3 Exchange rates

	31.12.2020	31.12.2019	Percent change
US dollar	8.56	8.79	-2.6
Euro	10.48	9.86	6.2
Japanese yen	0.08	0.08	2.6
British pound	11.70	11.64	0.5

Note 11 Management costs

Accounting policy

Management fee is recognised in the GPFG's income statement as an expense when incurred, but it is cash-settled in the following year. Management fee payable is a financial liability measured at amortised cost.

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.



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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.

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 11.1.

Table 11.1 Management fee

Amounts in NOK million	2020		2019	
		Basis points		Basis points
Salary, social security and other personnel-related costs	1 408		1 448	
Custody costs	474		431	
IT services, systems, data and information	650		671	
Research, consulting and legal fees	214		258	
Other costs	269		428	
Allocated costs Norges Bank	281		174	
Base fees to external managers	728		611	
Management fee excluding performance-based fees	4 023	3.9	4 021	4.4
Performance-based fees to external managers	1 282		291	
Management fee	5 305	5.1	4 312	4.7

Management costs in subsidiaries

Management costs incurred in subsidiaries consist of costs related to the management of the unlisted real estate portfolio. These costs are expensed directly in the portfolio result and are not part of the management fee.

Management costs incurred in non-consolidated and consolidated subsidiaries are presented in the income statement as *Income/expense from unlisted real estate* and *Other income/expense*, respectively. These costs are specified in table 11.2.

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Table 11.2 Management costs, unlisted real estate subsidiaries

Amounts in NOK million	2020		2019	
		Basis points		Basis points
Salary, social security and other personnel-related costs	26		34	
IT services, systems, data and information	21		19	
Research, consulting and legal fees	31		36	
Other costs	25		22	
Total management costs, unlisted real estate subsidiaries	103	0.1	111	0.1
<i>Of which management costs non-consolidated subsidiaries</i>	64		70	
<i>Of which management costs consolidated subsidiaries</i>	40		41	

Upper limit for reimbursement of management costs

The Ministry of Finance has established an upper limit for the reimbursement of management costs. Norges Bank is only reimbursed for costs incurred up to this limit. Norges Bank is also reimbursed for performance-based fees to external managers, which are not included in the limit.

For 2020, total management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external managers, are limited to NOK 4 900 million. In 2019, the limit was set based on a share of the fund's value and was then limited to 7.0 basis points of average assets under management.

Total management costs measured against the upper limit amounted to NOK 4 126 million in 2020. This consisted of management costs in Norges Bank, excluding performance-based fees to external managers, of NOK 4 023 million and management costs in subsidiaries of NOK 103 million. Total management costs including performance-based fees to external managers amounted to NOK 5 409 million in 2020.

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 2020, management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external managers, corresponded to 4.0 basis points of assets under management. Management costs including performance-based fees to external managers corresponded to 5.2 basis points of assets under management.

Other operating costs in subsidiaries

In addition to the management costs presented in table 11.2, other operating costs are also incurred in subsidiaries related to the ongoing maintenance, operation and development of properties and leases. These are not costs related to investing in real estate, they are costs of operating the underlying properties 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 line *Income/expense from unlisted real estate*. See table 6.4 in note 6 *Unlisted real estate* for further information. Other operating costs incurred in consolidated subsidiaries are expensed in the income statement line *Other income/expense*.

Note 12 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 12.1 Income/expense from secured lending and borrowing

Amounts in NOK million	2020	2019
Income/expense from secured lending	4 028	4 529
Income/expense from secured borrowing	-751	-1 926
Net income/expense from secured lending and borrowing	3 277	2 603

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 an equity swap, the sold equity is presented in the balance sheet as *Equities lent*, since the GPF'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 an equity swap, the GPF 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 GPF has the right to sell or pledge the security, is not recognised in the balance sheet unless reinvested.

Table 12.2 shows the amount presented as *Secured lending*, and the associated collateral received in the form of securities.

Table 12.2 Secured lending

Amounts in NOK million	31.12.2020	31.12.2019
Secured lending	192 526	222 946
Total secured lending	192 526	222 946
Associated collateral in the form of securities (off balance sheet)		
Equities received as collateral	62 514	68 147
Bonds received as collateral	134 307	155 990
Total collateral received in the form of securities related to secured lending	196 821	224 137

Table 12.3 shows transferred securities with the associated liability presented as *Secured borrowing*, and collateral received in the form of securities or guarantees.

Table 12.3 Transferred financial assets and secured borrowing

Amounts in NOK million	31.12.2020	31.12.2019
Transferred financial assets		
Equities lent	438 353	426 623
Bonds lent	520 978	479 852
Total transferred financial assets	959 332	906 475
Associated cash collateral, recognised as liability		
Secured borrowing	390 380	338 266
Total secured borrowing	390 380	338 266
Associated collateral in the form of securities or guarantees (off balance sheet)		
Equities received as collateral	345 111	436 482
Bonds received as collateral	278 691	178 250
Guarantees	959	8 548
Total collateral received in the form of securities or guarantees related to transferred financial assets	624 761	623 280

Note 13 Collateral and offsetting

Accounting policy

Cash collateral OTC derivative transactions

Cash collateral posted in connection with OTC 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 OTC 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 13.1 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 13.1.

Cash collateral posted and *Cash collateral received* in the balance sheet are related exclusively to OTC 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 12 *Secured lending and borrowing* for further information.

Offsetting

Table 13.1 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

effects of potential netting of recognised financial assets and liabilities 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 GPF 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 13.1 Assets and liabilities subject to netting agreements

Description	Amounts in NOK million, 31.12.2020	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements ¹	Amounts subject to enforceable master netting agreements				
				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
Assets								
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	-	-	-
Total		200 791	57 676	143 116	8 060	74 398	60 658	-

Description	Amounts in NOK million, 31.12.2020	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements ²	Amounts subject to enforceable master netting agreements				
				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
Liabilities								
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
Total		404 003	55 976	348 027	3 797	78 837	259 135	6 257

Description	Gross financial assets recognised in the balance sheet	Assets not subject to enforceable netting agreements ¹	Amounts subject to enforceable master netting agreements				
			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
Assets							
Secured lending	222 946	80 807	142 140	-	90 773	51 367	-
Cash collateral posted	1 090	-	1 090	984	-	-	107
Financial derivatives	3 335	159	3 176	2 441	598	-	136
Total	227 372	80 966	146 406	3 425	91 371	51 367	243

Description	Gross financial liabilities recognised in the balance sheet	Liabilities not subject to enforceable netting agreements ²	Amounts subject to enforceable master netting agreements				
			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
Liabilities							
Secured borrowing	338 266	71 979	266 287	-	100 734	164 663	890
Cash collateral received	6 754	-	6 754	920	-	-	5 834
Financial derivatives	3 294	-	3 294	2 441	570	-	283
Total	348 314	71 979	276 335	3 362	101 304	164 663	7 006

¹ Secured lending includes amounts related to shares purchased in combination with equity swaps. In 2020, this amounted to NOK 56 billion (NOK 67 billion in 2019). See note 12 Secured lending and borrowing for further information.

² Secured borrowing includes amounts related to shares sold in combination with equity swaps. In 2020, this amounted to NOK 54 billion (NOK 47 billion in 2019). See note 12 Secured lending and borrowing for further information.

Note 14 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 11 *Management costs*. In 2020, NOK 4.3 billion was deducted from the krone account to pay the accrued management fee for 2019 to Norges Bank, compared to NOK 4.5 billion in 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 2020, the net balance between the portfolios represented a receivable for the GPFG of NOK 806 million, compared to a receivable of NOK 195 million at the end of 2019. 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. For an overview of the companies that own and manage the properties, as well as consolidated subsidiaries, see note 15 *Interests in other entities*. For further information regarding transactions with subsidiaries, see note 6 *Unlisted real estate*.

Note 15 Interests in other entities

Investments in unlisted real estate are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. These subsidiaries invest, through holding companies, in entities that invest in properties. These entities may be subsidiaries or joint ventures.

The overall objective of the ownership structures used for unlisted real estate investments 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 real estate investments. Expected tax expense for the fund is therefore one of the factors considered when determining the ownership structure.

Table 15.1 shows the companies that own and manage the properties, as well as consolidated subsidiaries.

Table 15.1 Real estate companies

Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
Non-consolidated companies					
United Kingdom					
NBIM George Partners LP ¹	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
Luxembourg					
NBIM S.à r.l.	Luxembourg	N/A	100.00	N/A	2011
France					
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
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

Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
Germany					
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
Switzerland					
NBIM Antoine CHF S.à r.l.	Luxembourg	Zürich	100.00	100.00	2012
Europe					
Prologis European Logistics Partners S.à r.l.	Luxembourg	Multiple European cities	50.00	50.00	2013
United States					
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



Company	Business address	Property address	Ownership share and voting right in percent	Effective ownership share of underlying properties in percent	Recognised from
ConSquare LLC	Wilmington, DE	Washington	47.50	47.50	2016
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
Japan					
TMK Tokyo TN1	Tokyo	Tokyo	70.00	70.00	2017
Tokyo MN1 TMK	Tokyo	Tokyo	100.00	39.90	2020
Consolidated subsidiaries					
Japan					
NBRE Management Japan Advisors K.K.	Tokyo	N/A	100.00	N/A	2015
United Kingdom					
NBRE Management Europe Limited	London	N/A	100.00	N/A	2016

¹ One property in this company, 20 Air Street, has an ownership share of 50 percent from 1 September 2017.

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 15.1, Norges Bank has wholly-owned holding companies established in connection with investments in unlisted real estate. These holding companies

do not engage in any operations and do not own any properties directly. The holding companies have their business address either in the same country as the property, in connection with NBIM S.à r.l. in Luxembourg or in Norway for the holding companies established for property investments in Japan, France and Germany. In addition, a wholly-owned holding company in Norway is established for future investments in unlisted infrastructure for renewable energy.

Note 16 Other assets and other liabilities

Table 16.1 Other assets

Amounts in NOK million	31.12.2020	31.12.2019
Withholding tax receivable	2 234	2 163
Net balance Norges Bank's foreign exchange reserves	806	195
Unsettled inflow krone deposit	227	1 129
Accrued income/expense from secured lending	299	232
Other	9	19
Other assets	3 574	3 737

Table 16.2 Other liabilities

Amounts in NOK million	31.12.2020	31.12.2019
Tax payable	12	9
Deferred tax	2 308	450
Other	30	36
Other liabilities	2 350	495

To the Supervisory Council of Norges Bank

Independent auditor's report

Report on the Audit of the Financial Reporting

Opinion

We have audited the financial reporting for the investment portfolio of the Government Pension Fund Global, which is included in Norges Bank's annual financial statements. Subsidiaries of Norges Bank that exclusively constitute investments as part of the management of the investment portfolio are included in the financial reporting. The financial reporting comprises the balance sheet as at 31 December 2020, the income statement, the statement of changes in owner's capital, the statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial reporting is prepared in accordance with laws and regulations and give a true and fair view of the financial position for the investment portfolio of the Government Pension Fund Global as at 31 December 2020, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by EU.

Basis for Opinion

We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the financial reporting section of our report. We are independent of Norges Bank as required by laws and regulations, 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 judgement, were of most significance in our audit of the financial reporting for 2020. These matters were addressed in the context of our audit of the financial reporting 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

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>For a more detailed description of the development, management and operation of IT systems in Norges Bank, see chapter 5 regarding Management organisation in the annual report 2020.</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>Norges Bank has established overall governance models and 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>

Valuation of investments using models with significant use of unobservable input (Level 3 assets)

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 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 273.1 billion at 31 December 2020. Of this, investments in unlisted real estate amount to NOK 272.5 billion.</p> <p>Unlisted real estate in the Government Pension Fund Global is valued by external valuers. Market activity in many sectors of the unlisted real estate market was disrupted during the year, with lower transaction volumes as a result of the impact of the covid-19 pandemic.</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 2020, 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.</p> <p>We used our own experts in the review of the valuation reports.</p> <p>We reconciled the fair value in the financial reporting with the valuation reports.</p> <p>We assessed whether the disclosures in notes 6 and 7 regarding valuation of unlisted real estate was adequate.</p>

Returns disclosures

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 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 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 methods 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 3.</p> <p>We assessed whether the returns disclosures in note 3 were adequate.</p>

Other information

Management is responsible for the other information. The other information comprises information in the annual report, except the financial statements and our auditor's report thereon.

Our opinion on the financial reporting does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial reporting, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial reporting or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Board and management for the financial reporting

The Executive Board and management are responsible for the preparation of the financial reporting in accordance with laws and regulations, including ensuring that it provides a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU. The Executive Board and management are also responsible for such internal control as they determine 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 reporting

Our objectives are to obtain reasonable assurance about whether the financial reporting as a whole is 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 laws, regulations, and auditing standards and practices generally accepted in Norway, including 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 this financial reporting.

As part of an audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs, we exercise professional judgement 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 the Norges Bank's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Executive Board and management.
- evaluate the overall presentation, structure and content of the financial reporting, including the disclosures, and whether the financial reporting represents the underlying transactions and events in a manner that achieves a true and fair view.

We communicate with the Executive Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Executive Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Executive Board, we determine those matters that were of most significance in the audit of the financial reporting 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.

Oslo, 4 February 2021
Deloitte AS

Henrik Woxholt
State Authorised Public Accountant

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