NORGES BANK
INVESTMENT MANAGEMENT

# Government Pension Fund Global

## Annual report

2020

No. 23

Our mission is to safeguard and build financial wealth for future generations


The fund's annual return
264 billion kroner
2010
2011
-86 billion kroner
447 billion kroner
2012
692 billion kroner
2013
544 billion kroner
2014
334 billion kroner
2015
447 billion kroner
2016
1,028 billion kroner
2017
2018
-485 billion kroner
1,692 billion kroner
2019
1,070 billion kroner
2020

# 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

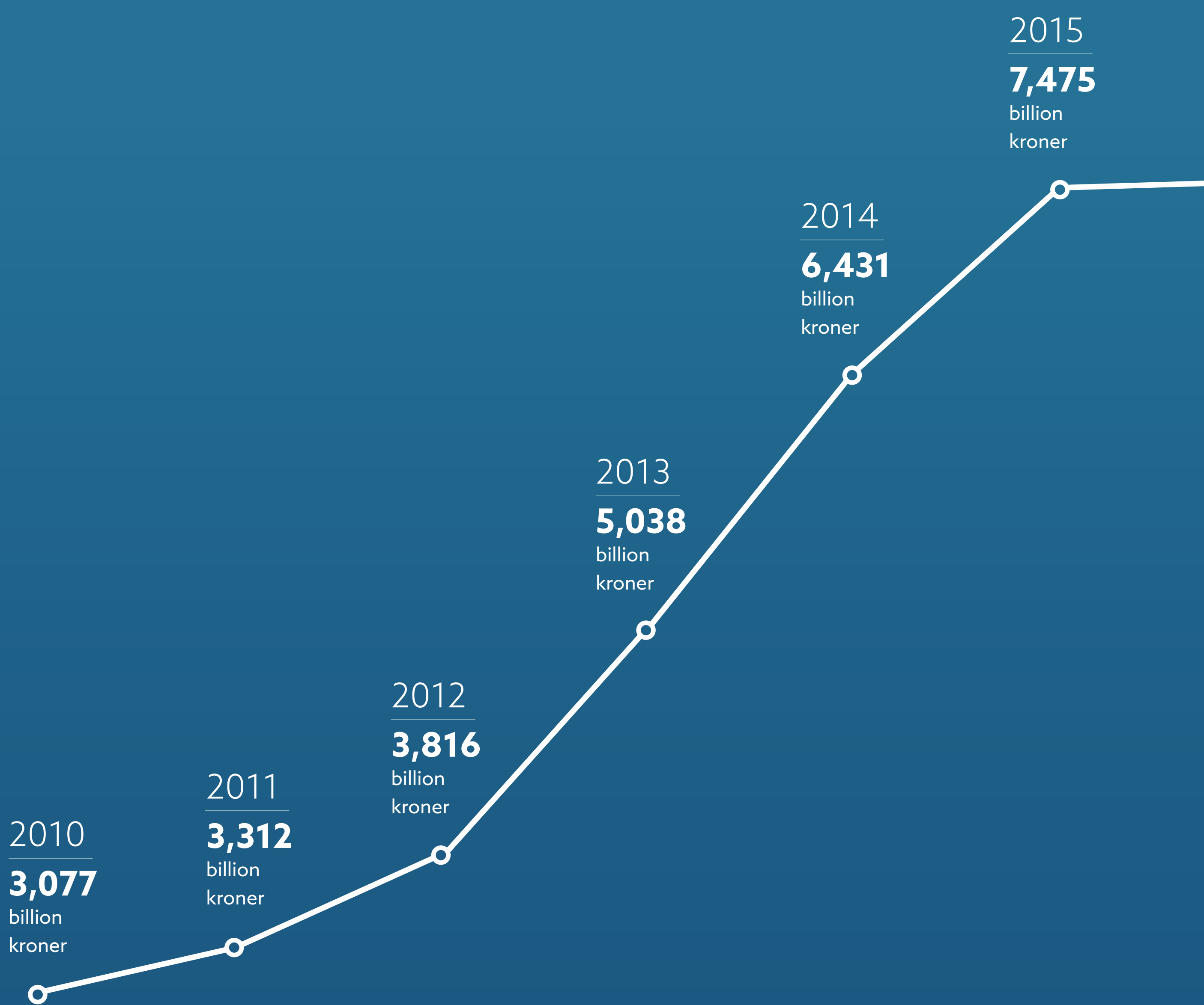
7.5%

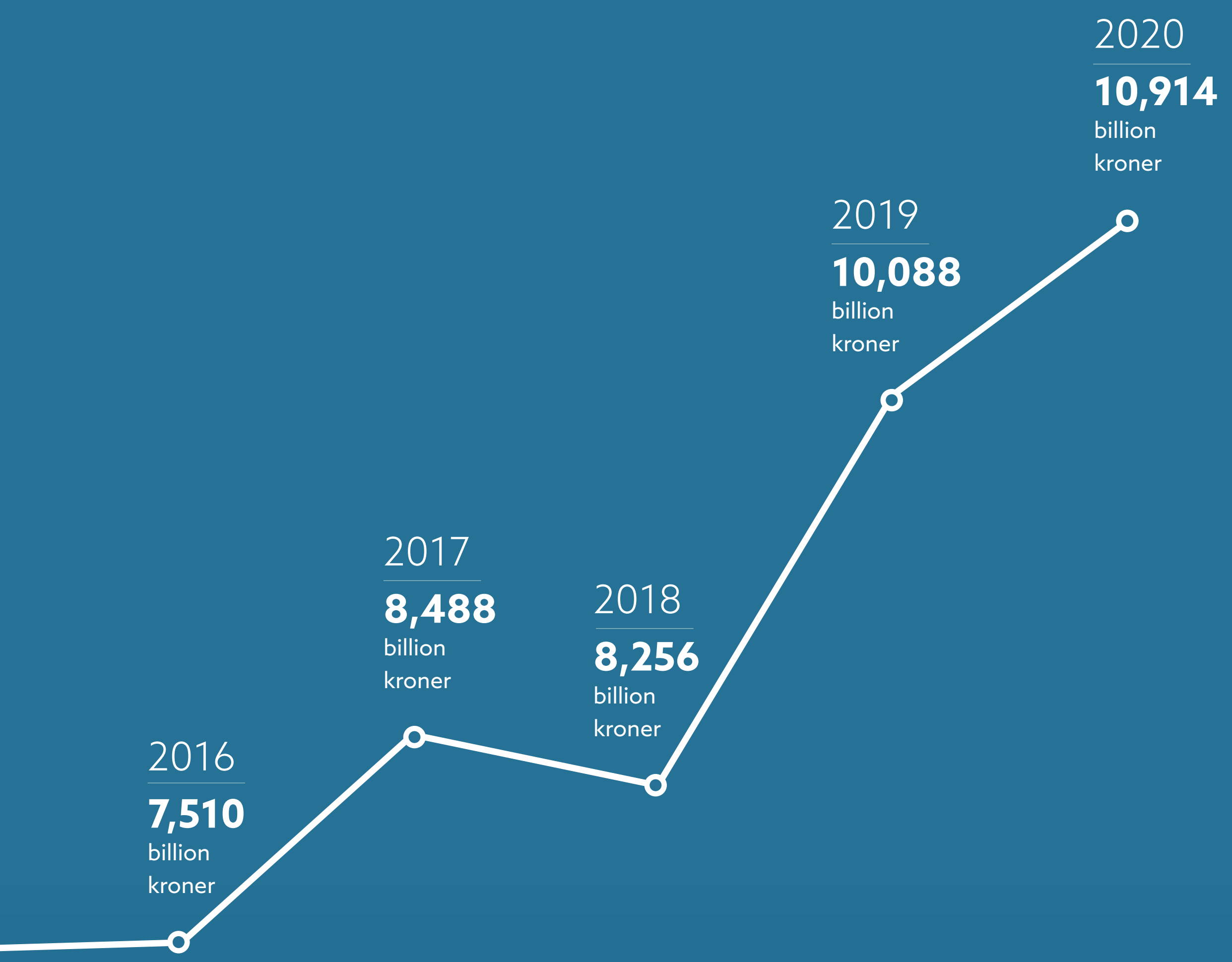
return on the fund's fixed-income investments

# 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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# 1 | Results

**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 Sjursen**
Board member

**Nicolai Tangen**
Chief Executive Officer

**Age Bakker**
Chief Technology Officer

**Trond Grande**
Chief of Staff/Deputy Chief Executive Officer

**Mie Caroline Holstad**
Chief Real Assets Officer

**Petter Johnsen**
Chief Equities Officer

**Birgitte Bryne**
Chieef Operation Officer

**Dag Huse**
Chief Risk Officer

**Carine Smith Ihenacho**
Chief Governance and Compliance 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

**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.

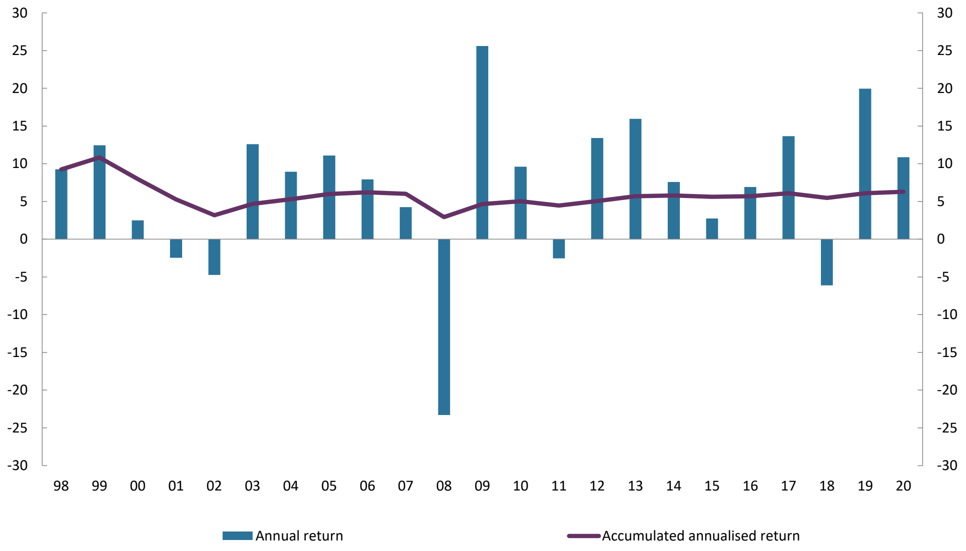



**Chart 2** Historical returns on the fund's investments. Percent.

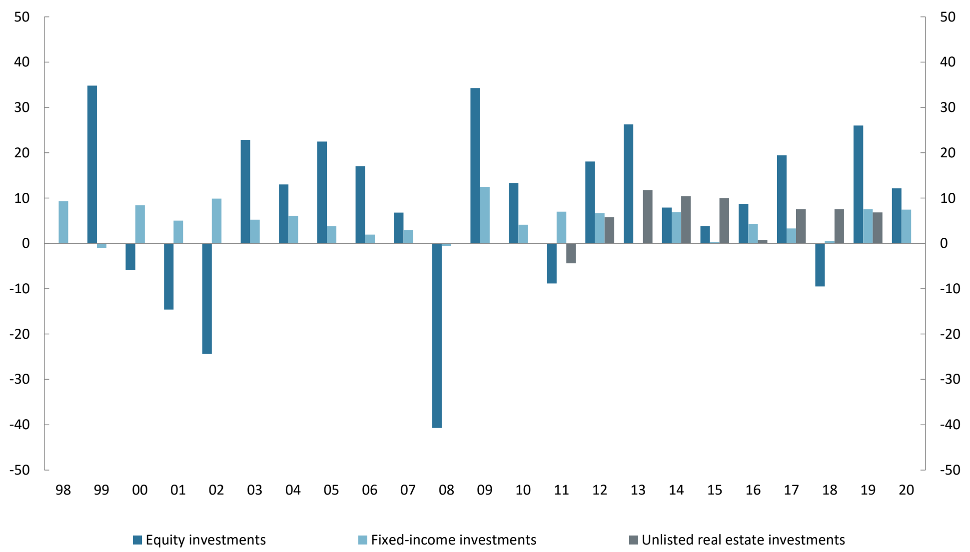


**Table 3** Return on the fund as at 31 December, measured in various currencies. Percent.

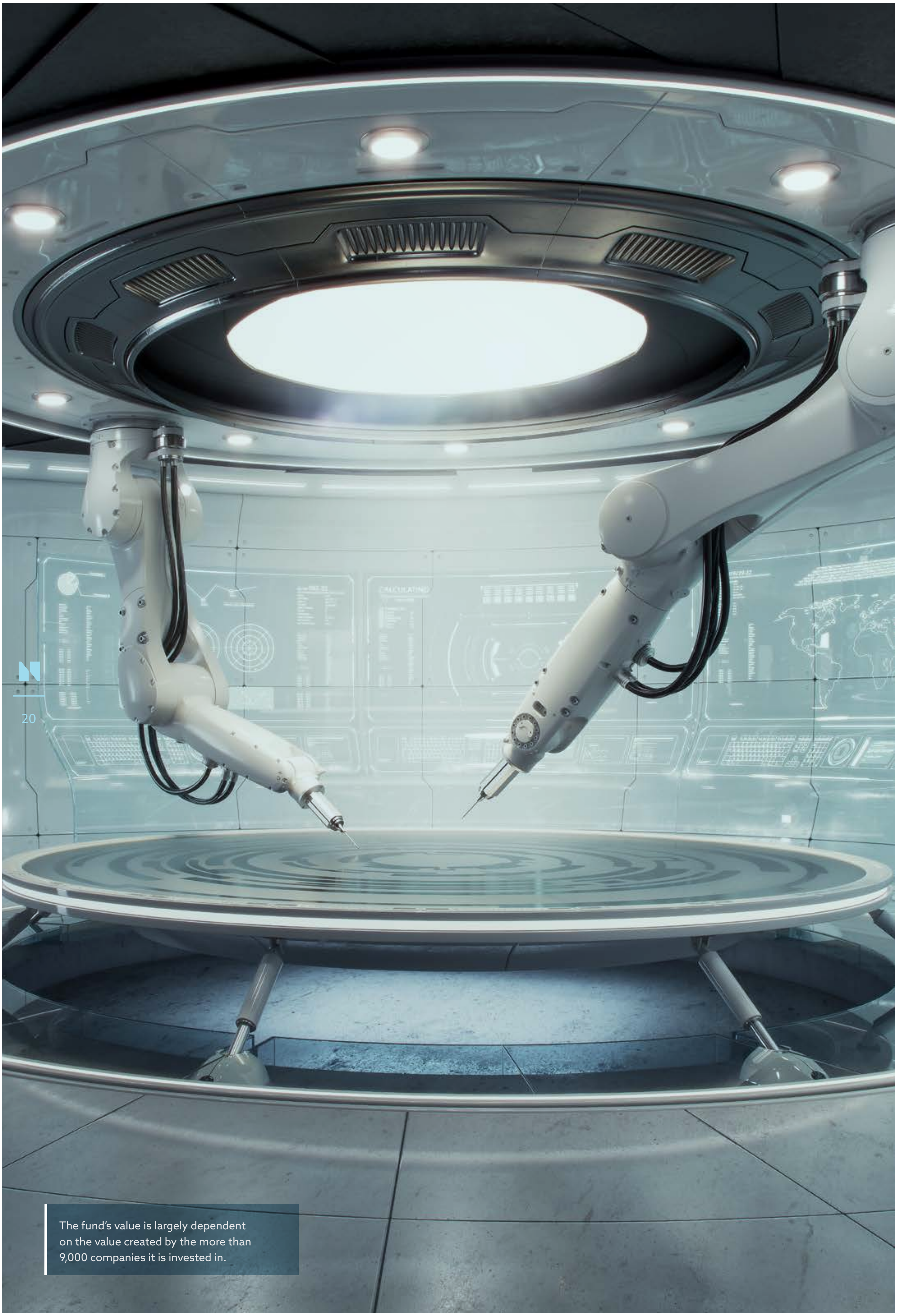
| | Since 01.01.1998 Annualised figures | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|---|
| US dollar | 6.65 | 14.35 | 20.24 | -8.44 | 19.92 | 4.83 |
| Euro[1] | 6.15 | 4.90 | 22.45 | -3.83 | 5.33 | 7.97 |
| British pound | 7.54 | 10.82 | 15.59 | -2.75 | 9.54 | 25.05 |
| Norwegian krone | 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 fund[2]** | **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 capital[3] | -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.

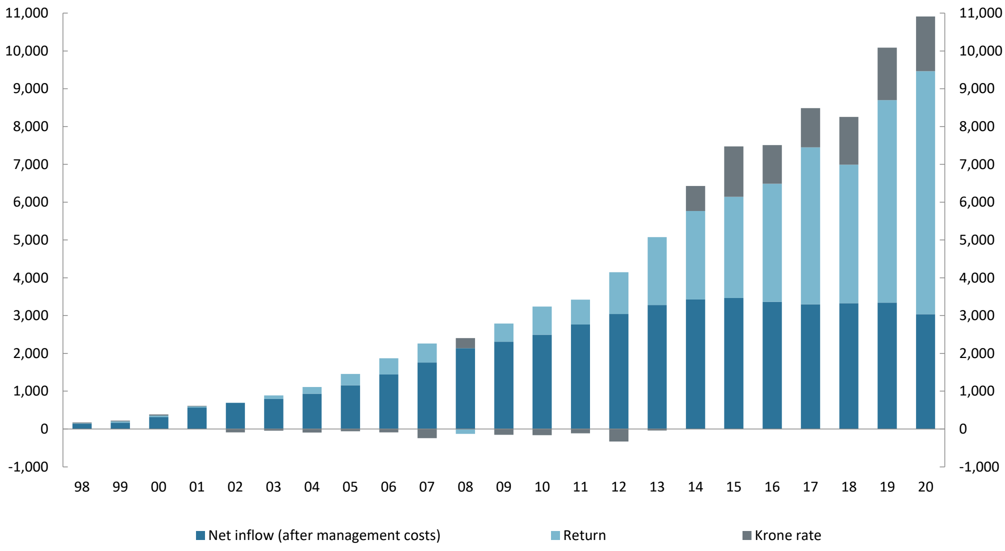



**Chart 4** Changes in the fund's market value. Billions of kroner.

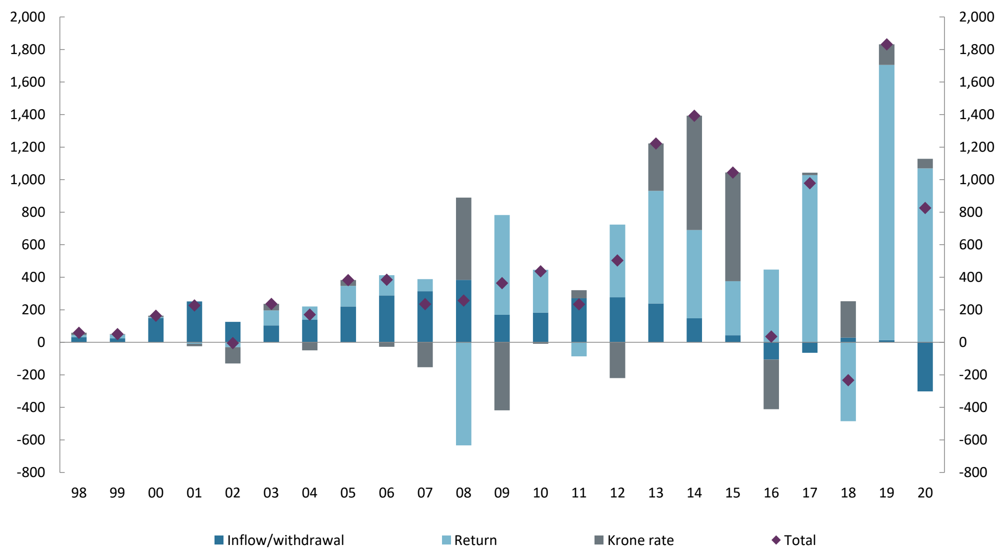


**Chart 5** The fund's market value. Billions of kroner.

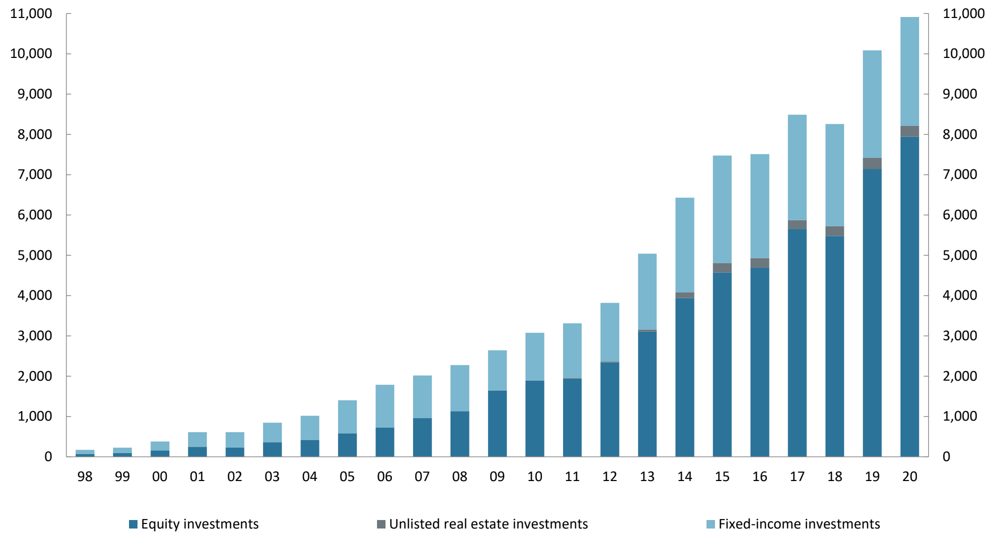



**Table 6** Changes in the fund's market value. Billions of kroner.

| 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

## 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.

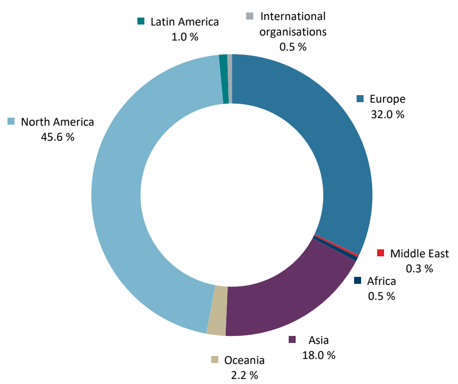



**Table 8** The fund's ten largest holdings by country as at 31 December 2020. Percent.

| 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 derivates 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 | Europe | Middle East | Asia | Oceania |
|---|---|---|---|---|
| 187 companies | 1,814 companies | 152 companies | 4,245 companies | 358 companies |
| 8 bonds from **1** issuer | 1,828 bonds from **484** issuers | | 528 bonds from **73** issuers | 185 bonds from **34** issuers |
| | 399 properties | | 6 properties | |

# 3 | Investments

# 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.

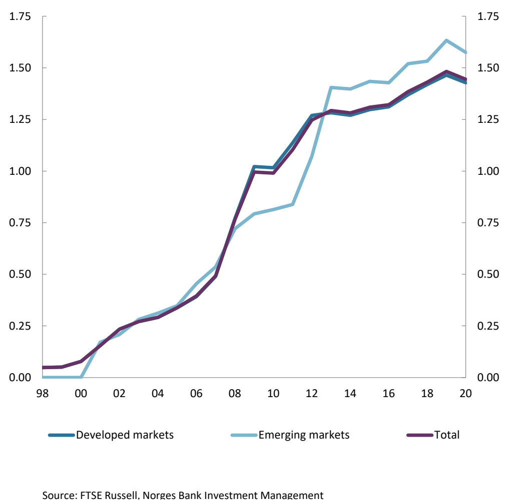
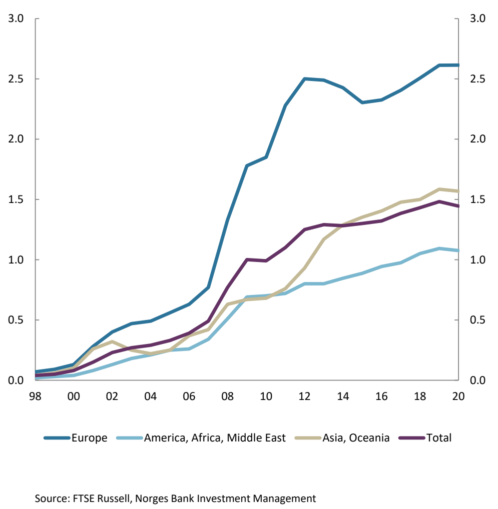



**Chart 8** The fund's holdings in equity markets. Percentage of market value of equities in the benchmark index.

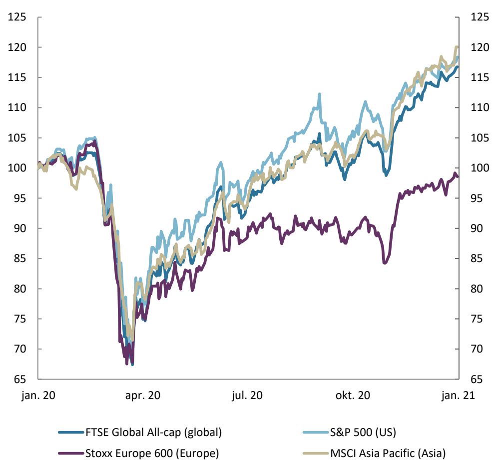


region returned 22.9 percent. Japanese stocks made up 8.2 percent of the fund's equity holdings and returned 8.3 percent in local currency. Measured in the fund's currency basket, the return was 10.5 percent, due to the yen strengthening against the currency basket.

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.

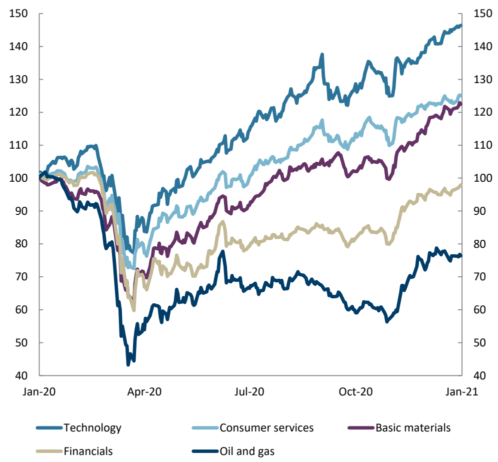


**Table 11** Return on the fund's equity investments in 2020 by sector. International currency. Percent.

| 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.

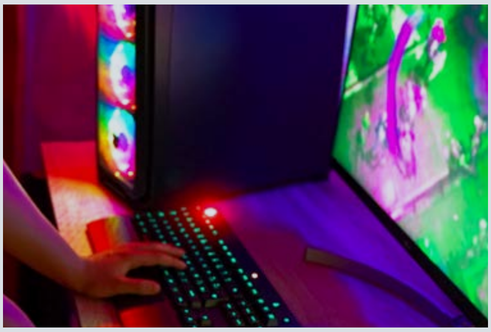


**Table 14** Regional composition of the fund's equity holdings.

| 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 serives | 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.

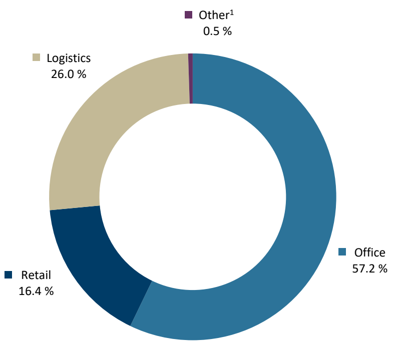
Real estate investments in Japan returned -11.5 percent in local currency and accounted for 3.3 percent of the fund's unlisted real estate investments at the end of the year. Market rents for our office properties in Tokyo fell by 1.3 percent, while vacancy in the market was stable at record-low levels.



**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.




[1]Other sectors, bank deposits and other claims.

**Chart 12** The fund's unlisted real estate investments by country as at 31 December 2020. Percent.

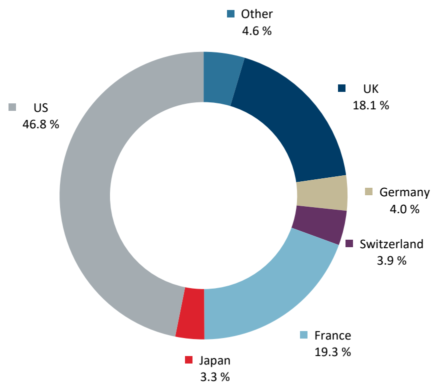





**Table 18** The fund's largest unlisted real estate investments, excluding logistics, by city as at 31 December 2020.

| 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 |
| Hunary | 1.3 |

**Chart 13** Changes in the fund's market value by unlisted real estate investments in 2020. Billions of kroner.

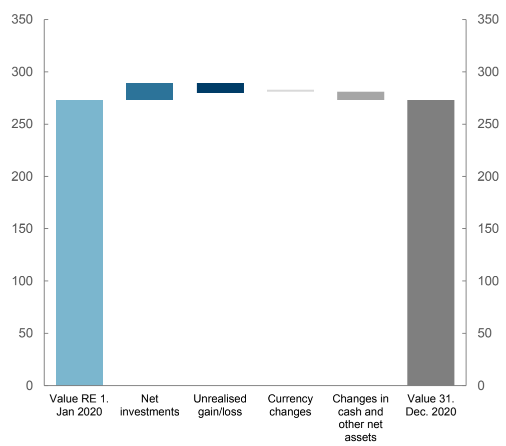



**Chart 14** Annual investments in unlisted real estate. Completed transactions. Billions of kroner.

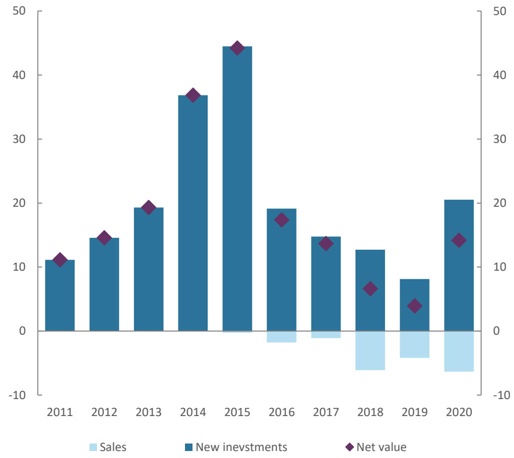





**Table 20** Announced new investments and disposals in 2020.

| 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 |

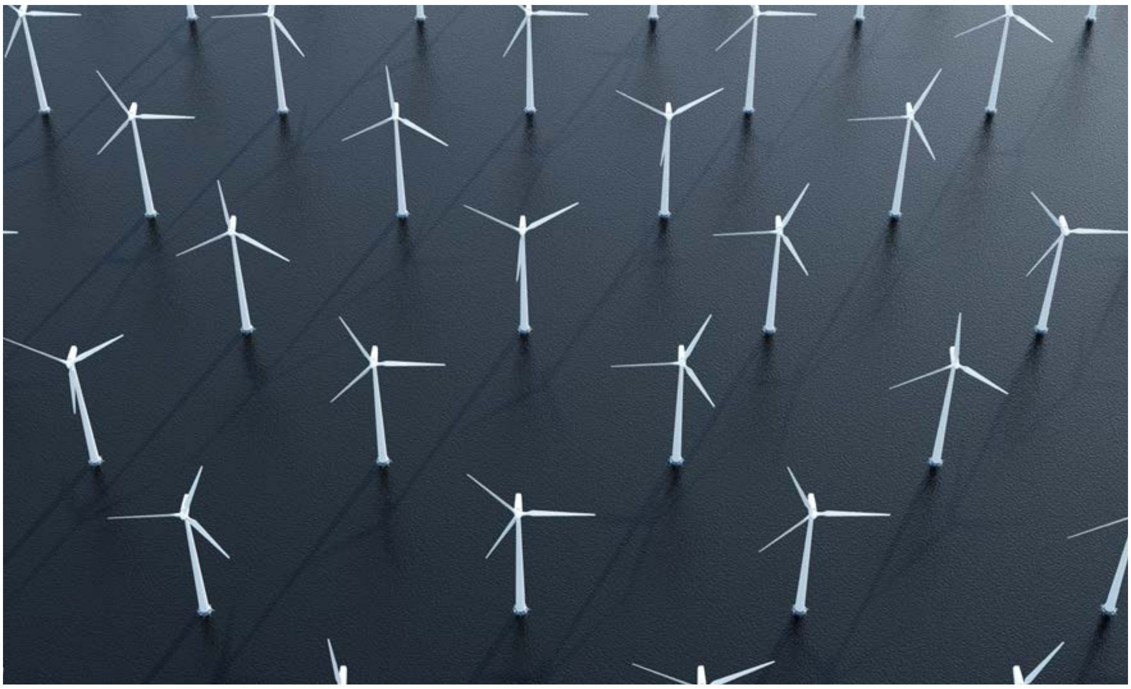
[1] The figures for ownership share and holdings also include holdings that are a part of the equity management.

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.

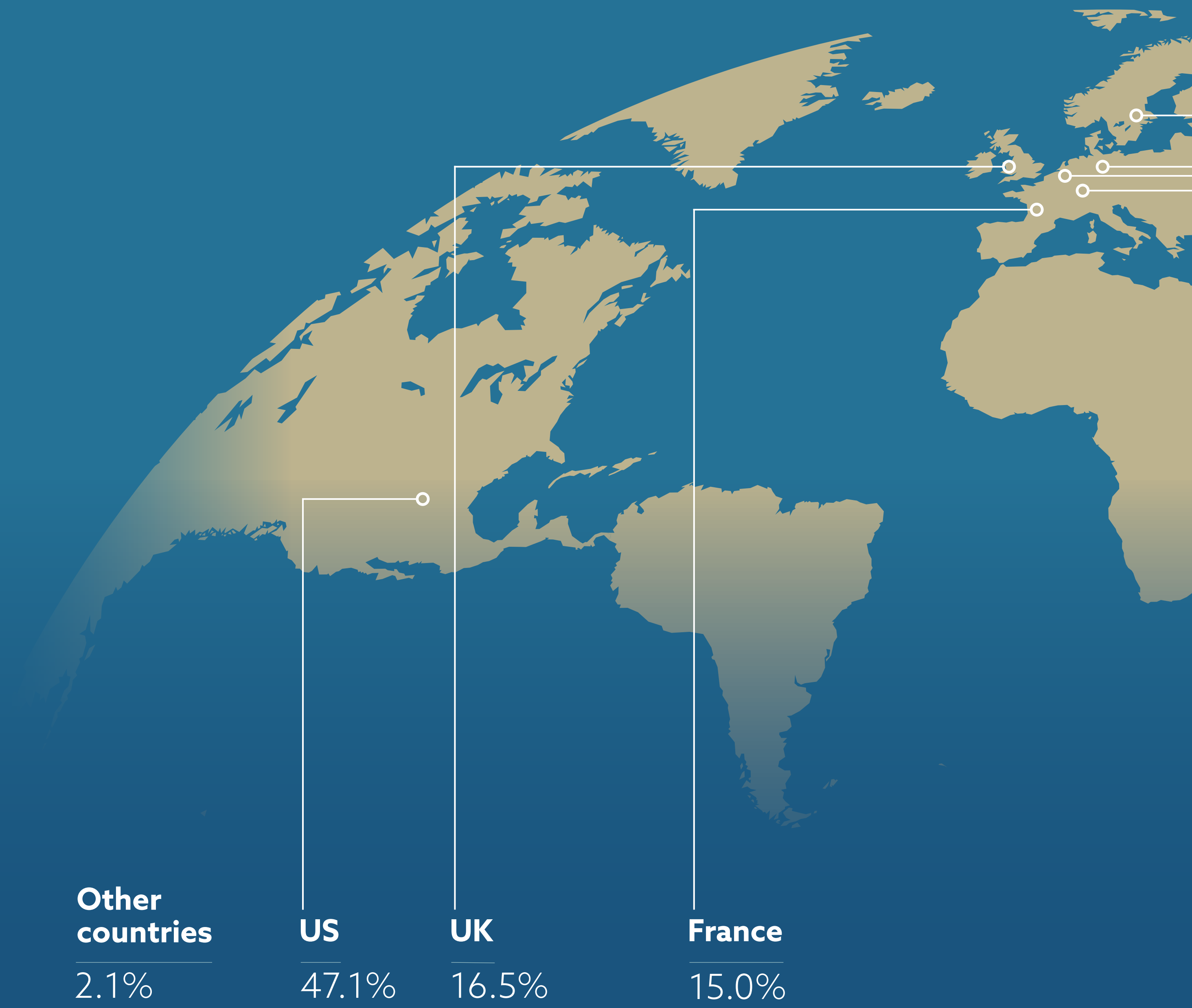
The fund built up a group dedicated to investing in unlisted renewable energy infrastructure during the year, and we worked on assessing specific investment opportunities. In line with the strategy plan for 2020-2022, we are concentrating mainly on wind and solar projects in Europe and North America 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.**

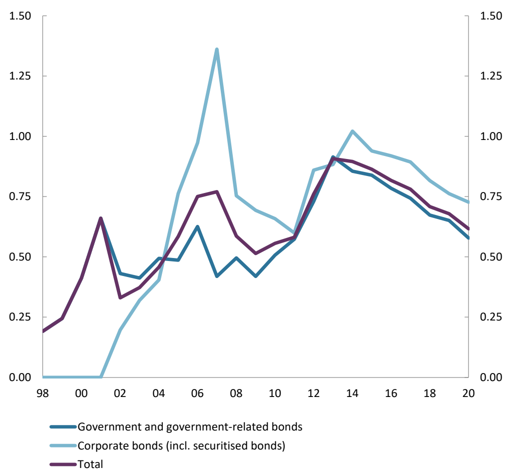
Fixed-income investments accounted for 24.7 percent of the fund at the end of the year. These investments were mainly in bonds, with the remainder in short-term securities and bank deposits. The fixed-income market began to discount the expected economic consequences of the coronavirus pandemic in late 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.

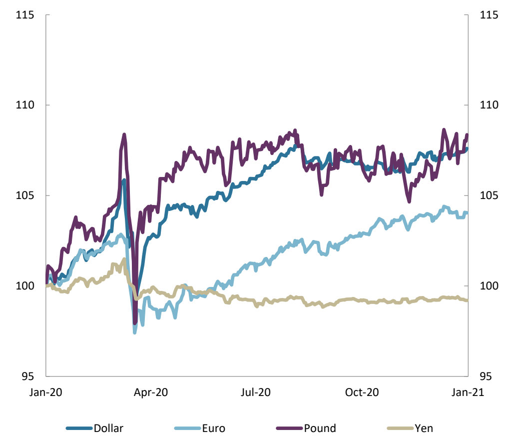
US Treasuries returned 8.7 percent in local currency and 5.3 percent measured in the fund's currency basket, and accounted for 23.2 percent of fixed-income investments, making them the fund's largest holding of government debt from

**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.

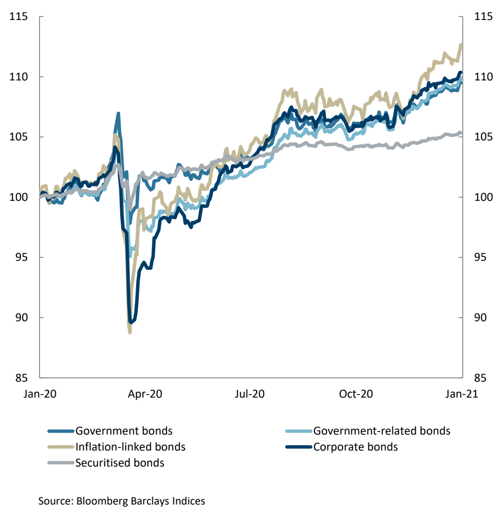



**Chart 18** Price developments for 10-year government bonds issued in emerging market currencies. Measured in US dollars. Indexed total return 31.12.2019 = 100.

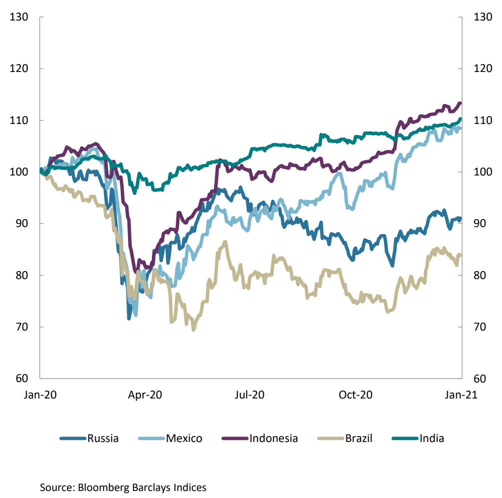


**Table 23** Return on the fund's fixed-income investments in 2020 by sector. International currency. Percent.

| 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.

**Chart 19** 10-year government bond yields. Percent

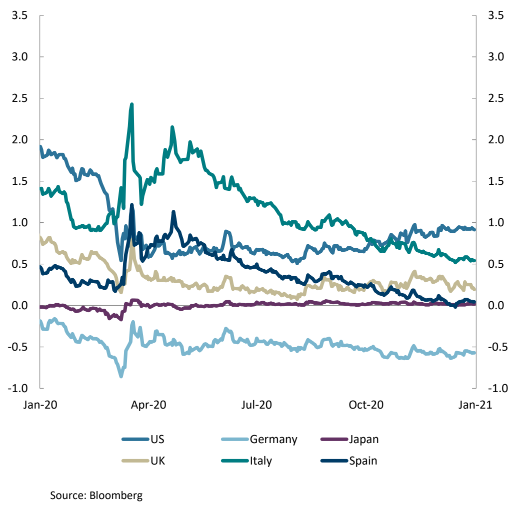



**Table 24** The fund's largest bond holdings as at 31 December 2020. Millions of kroner.

| 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 |

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 |

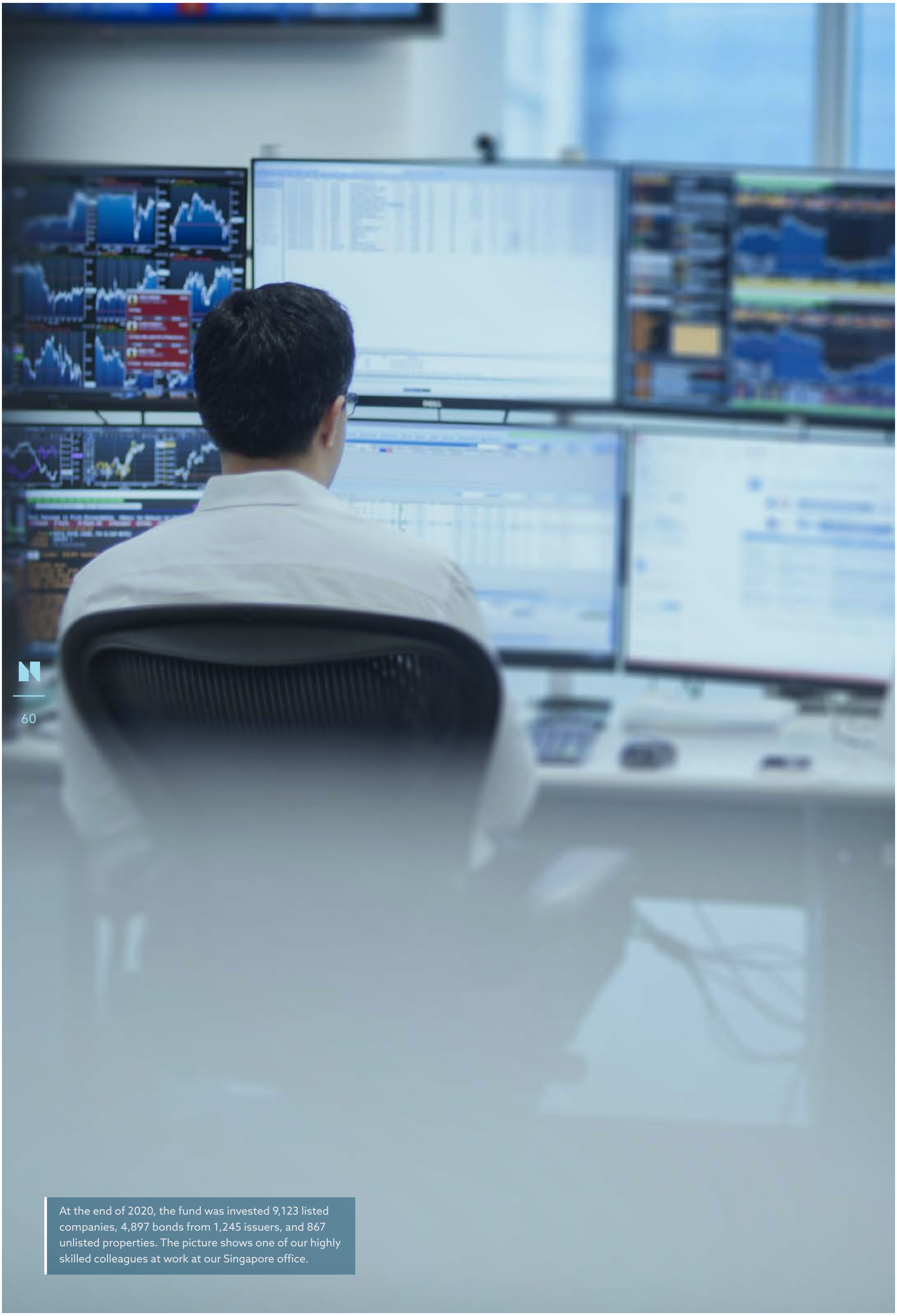
[1] Does not sum up to total market value because cash and derivatives are not included.

**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.

# 4 | Management





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.

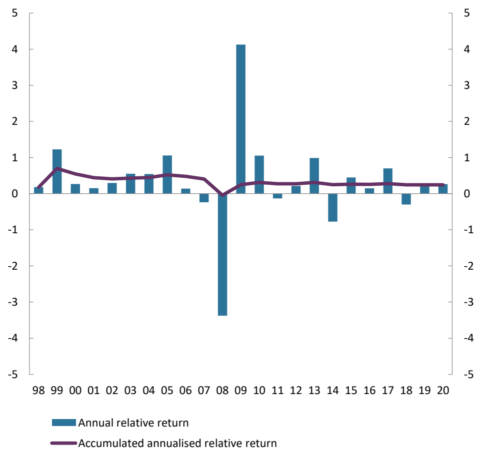



**Table 28** Relative return on the fund's asset management. Percentage points.

| 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.

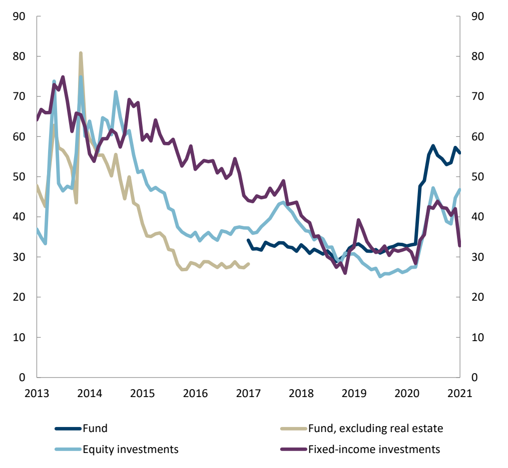
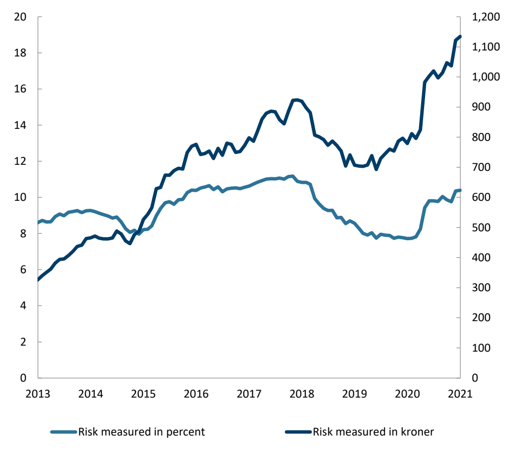



**Chart 22** Expected absolute volatility of the fund. Percent (left-hand axis) and billions of kroner (right-hand axis).



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.

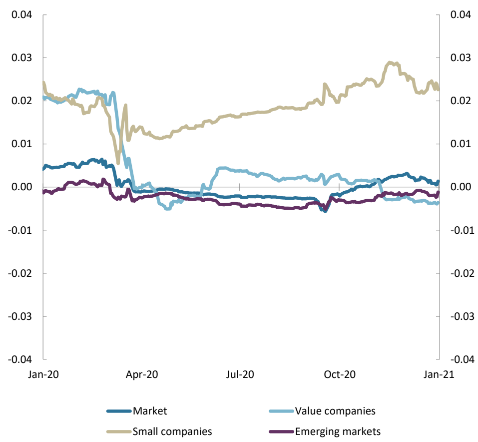



**Chart 24** Factor exposures of the fund's fixed-income investments. Coefficients.

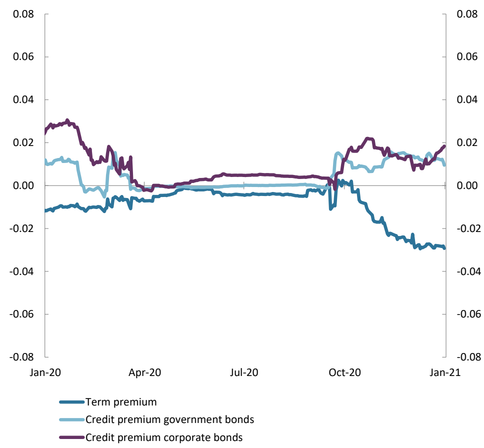
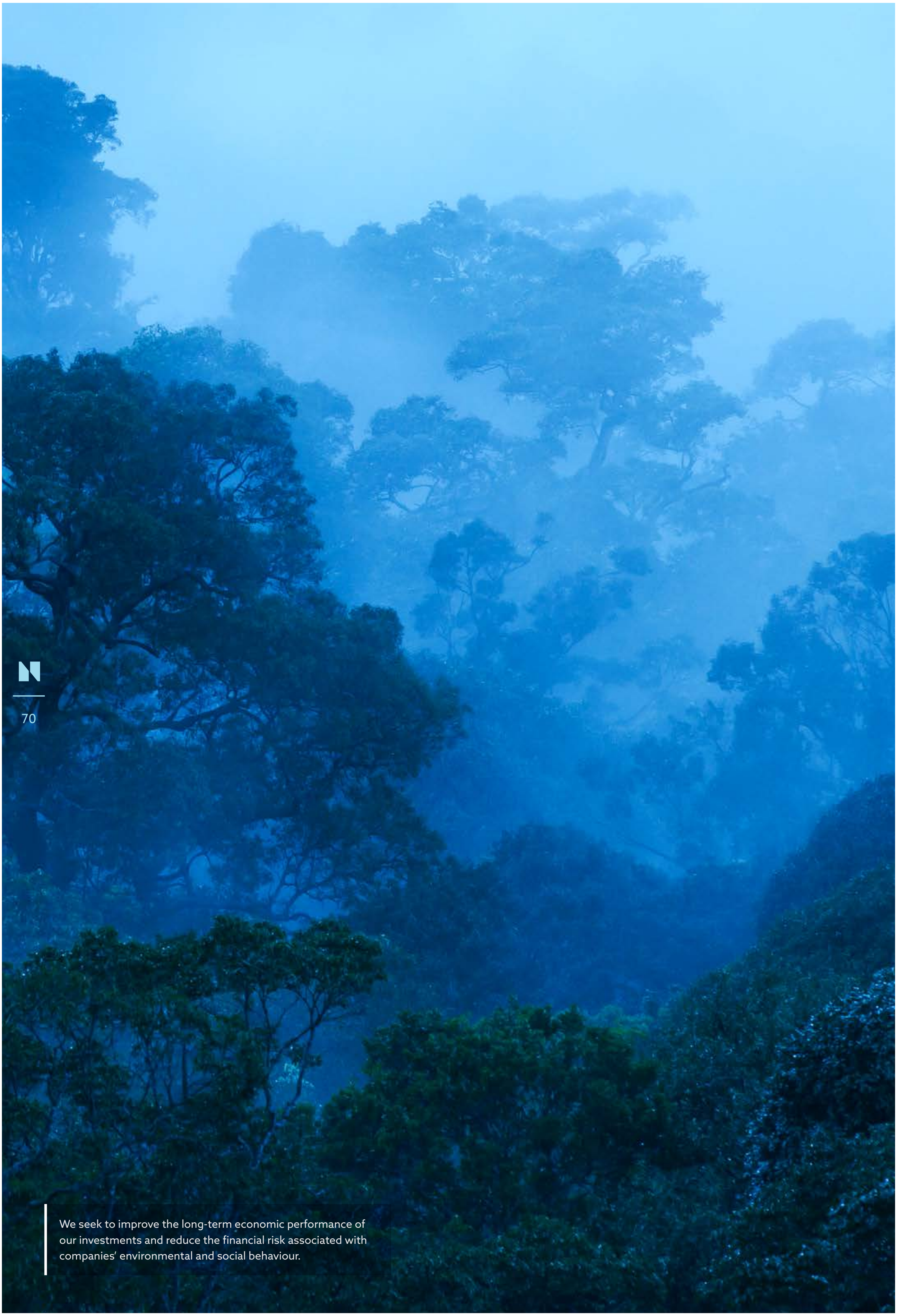





**Table 33** Expected relative volatility of investment strategies as at 31 December 2020. Each strategy measured stand-alone with the other strategies positioned in line with the benchmarks. All numbers measured at fund level. Basis points.

| | 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 $CO_2$-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.

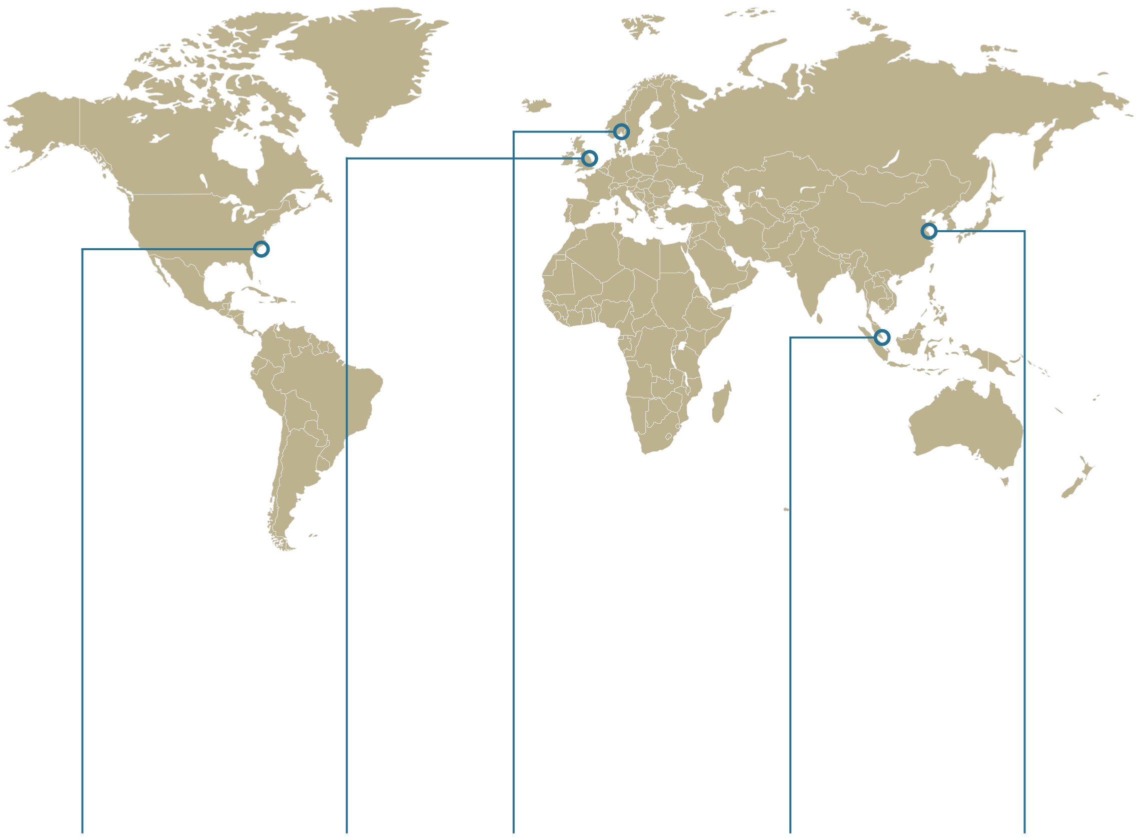

**Report on responsible investment**
An extended report on responsible investment in 2020 is available on the fund's website: www.nbim.no

# 5 | Organisation

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



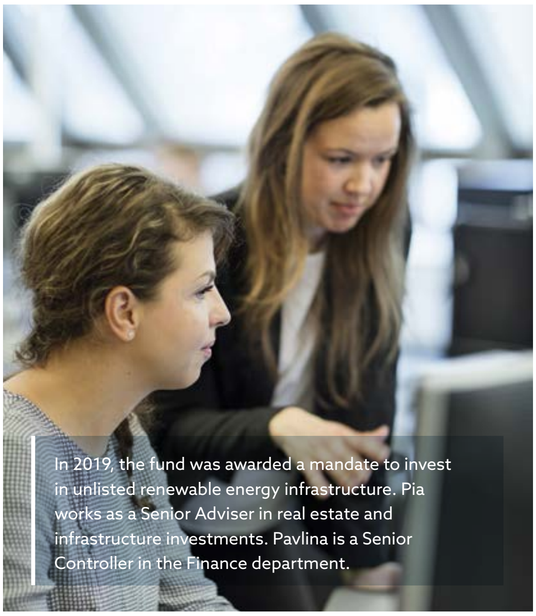
| New York | London | Oslo | Singapore | Shanghai |
|---|---|---|---|---|
| 64 | 103 | 300 | 42 | 9 |

518

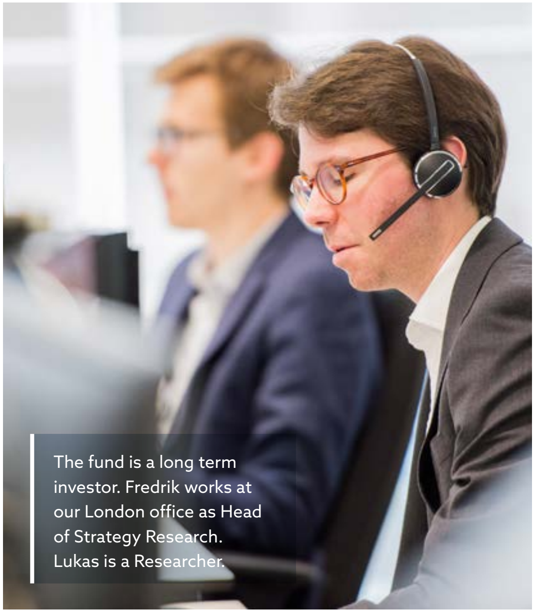
**Employees**

33

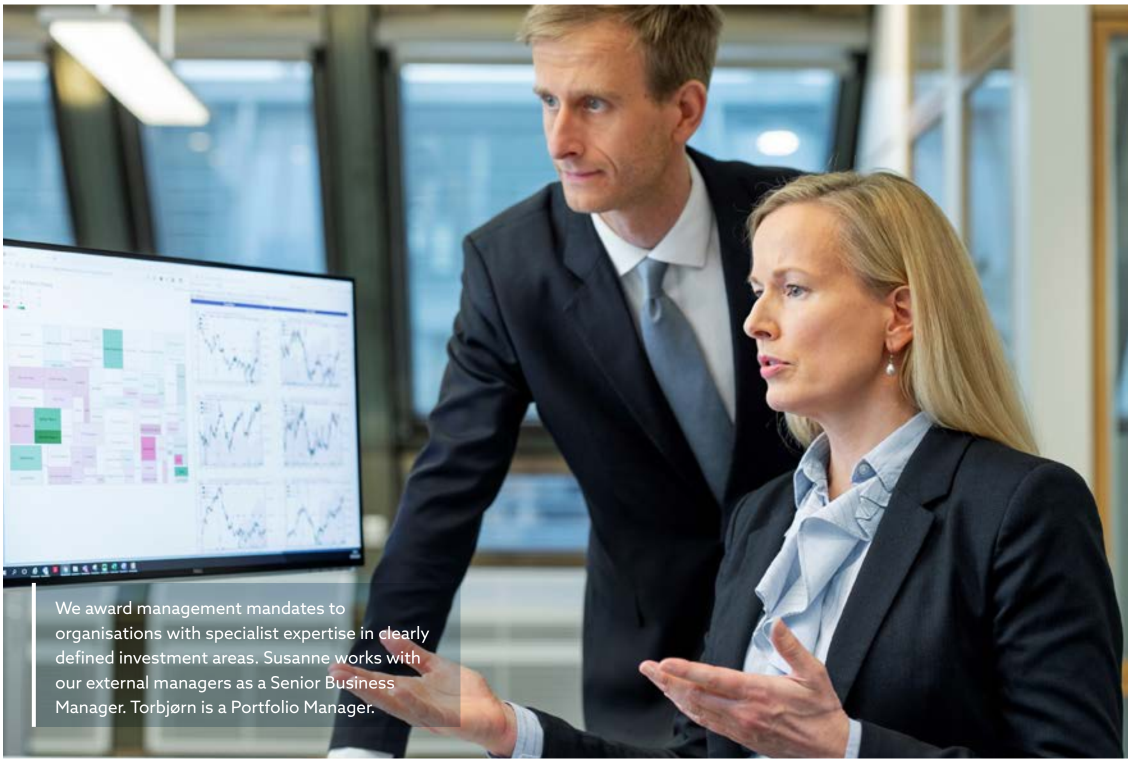
**Nationalities**



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.

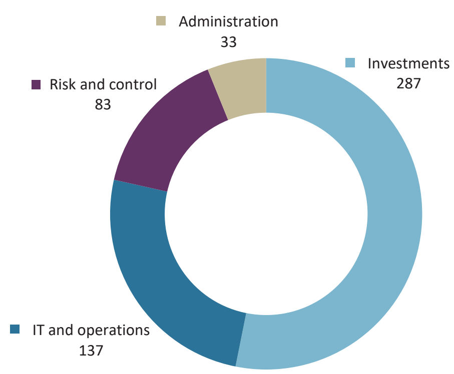
Equal opportunities and diversity provide the best starting point for achieving good results. We are therefore working systematically on improvements, and this is reflected in the way we approach recruitment, pay and other benefits, employee development and the working environment.

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.

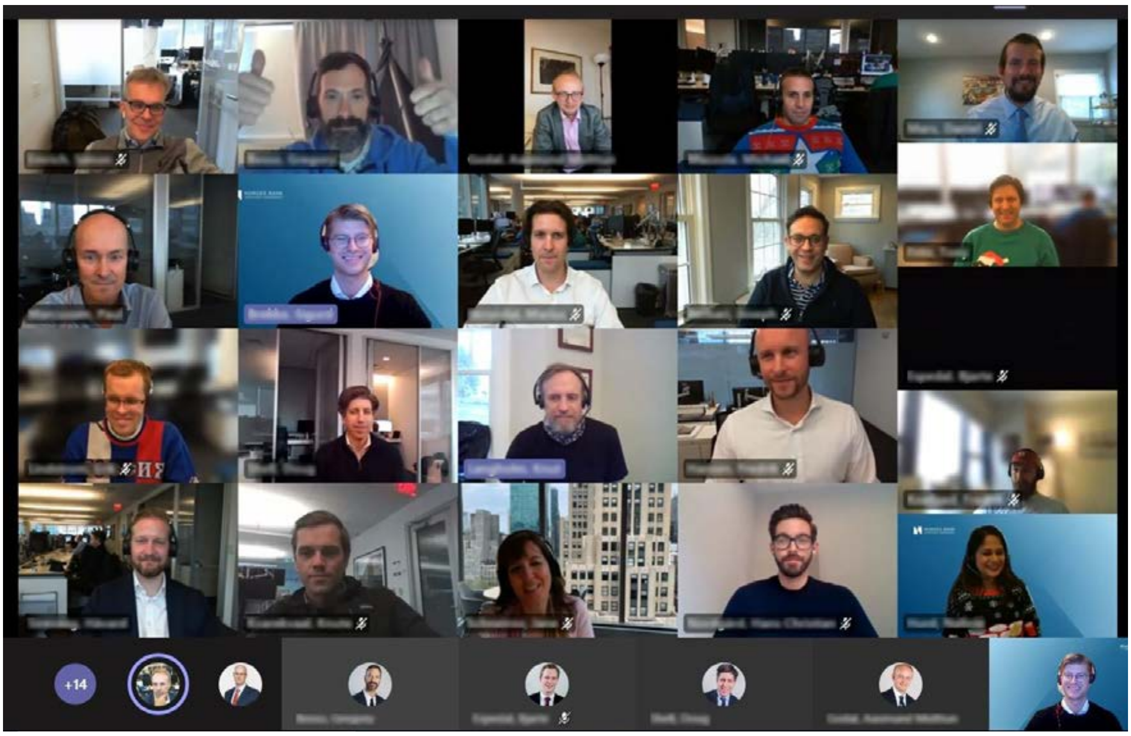
and fairly, and we have drawn up policies on setting and reporting pay levels to prevent gender discrimination.

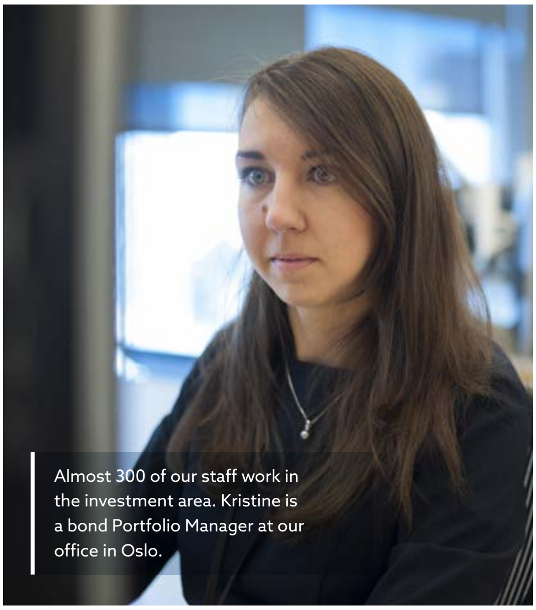
We have a strategy of actively highlighting the important role women have to play at Norges Bank. We ensure that they are well represented at events we attend. Female staff are also encouraged to participate in networks and external events such as career conventions, and give presentations at relevant 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.

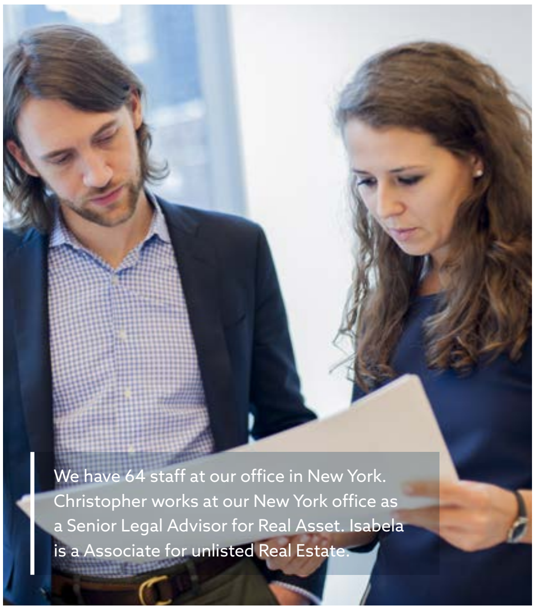
Our organisation is built on trust, high ethical standards and diversity. To achieve this, good internal communication is essential. We have improved the dialogue and communication between management and the rest of the organisation, and we have worked on effective communication across all channels to 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

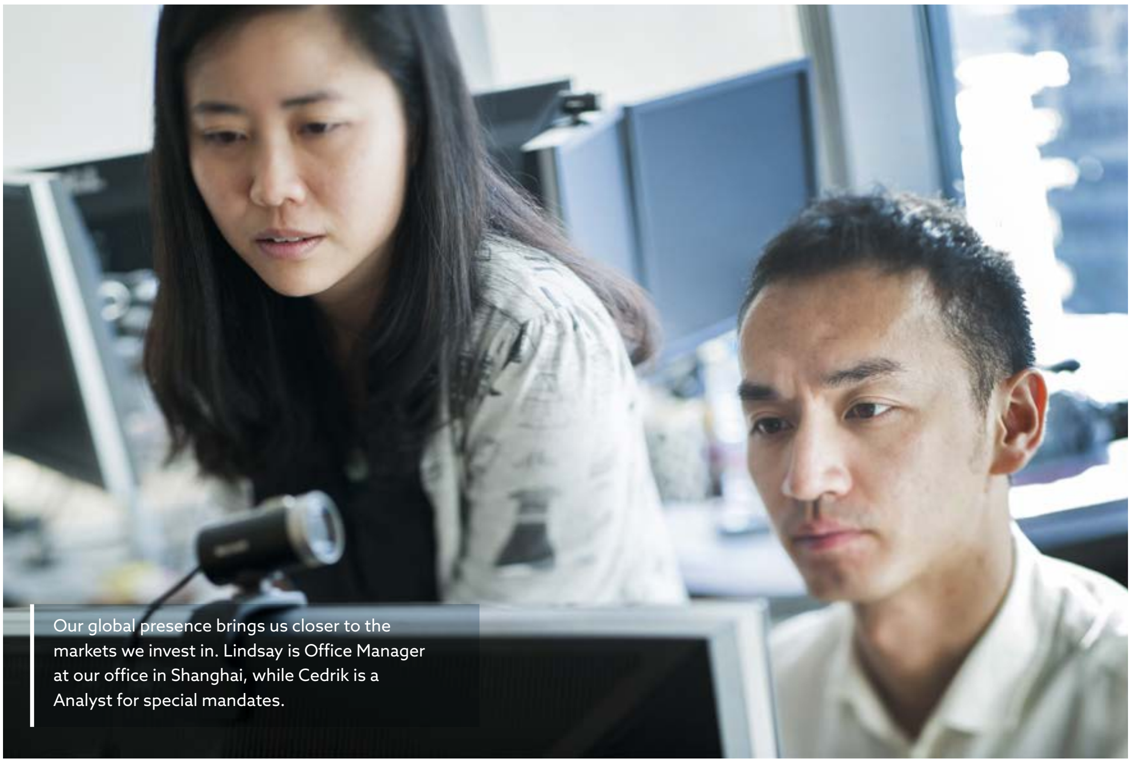




Almost 300 of our staff work in the investment area. Kristine is a bond Portfolio Manager at our office in Oslo.



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 rel 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.



**Birgitte Bryne**
Chief Operating Officer

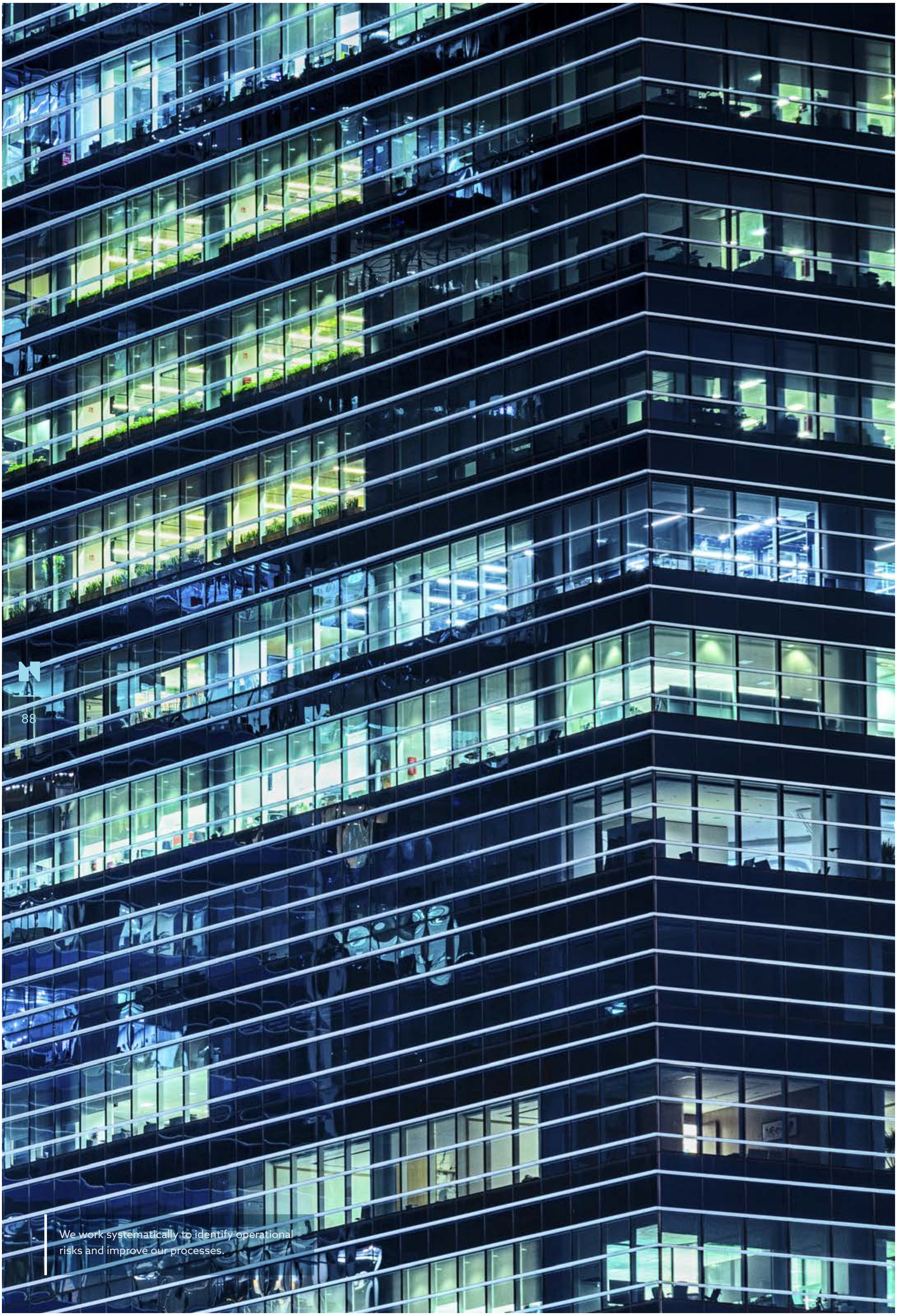
Birgitte is responsible for trading processing, measurement and reporting and investment and administrative services in the operation area.

**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.



We work systematically to identify operational risks and improve our processes.

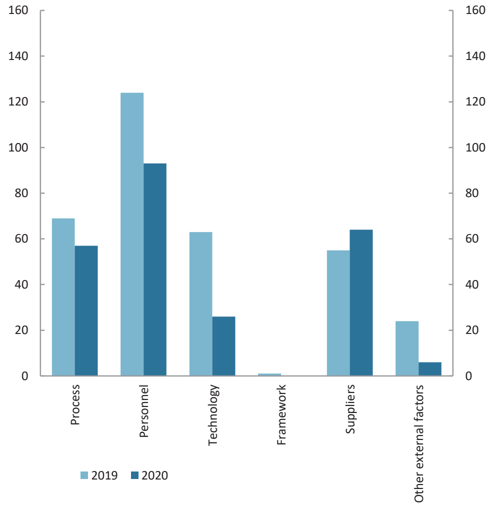
# Limits for operational risk

**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.

**Chart 26** Unwanted events at Norges Bank Investment Management sorted by cause.




**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.

# 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.

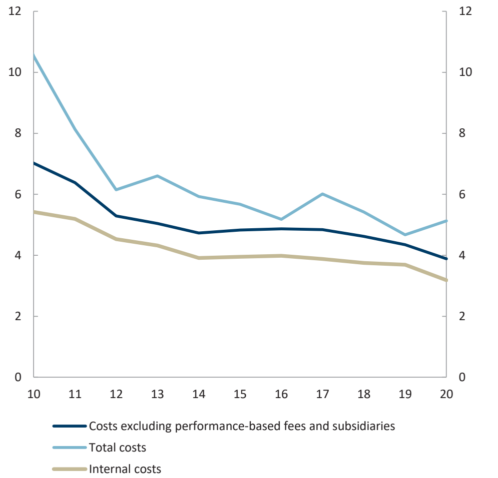
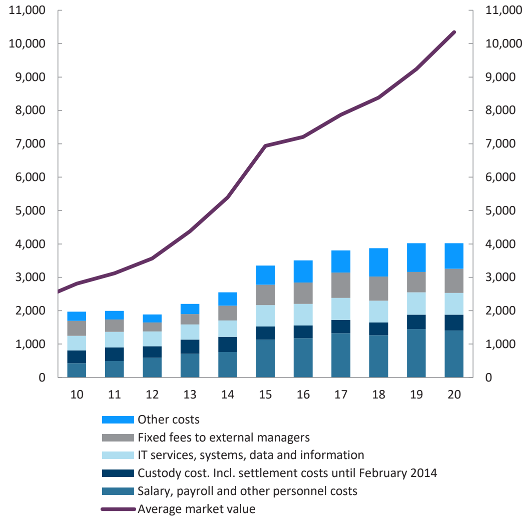



**Chart 28** Development of individual cost components. Costs[1] (millions of kroner, left-hand axis) and average market value (billions of kroner, right-hand axis).




[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.

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.

**Chart 29** Performance-based pay relative to upper limit in 2020. Percentage of workforce.

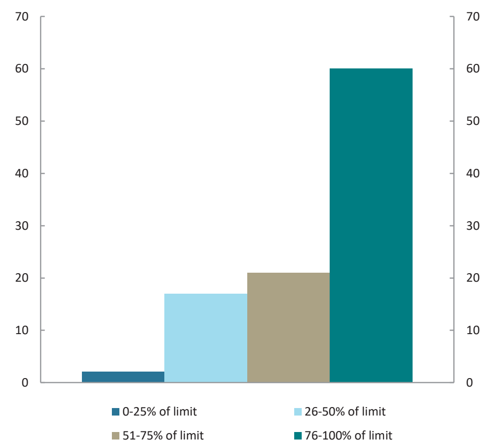


**Table 37** Remuneration of Senior Management in 2020. Kroner.

| 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 1Remuneration 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.

# 6 | Financial statements

# Financial reporting

## Financial statements





## Notes to the financial reporting

## Auditor

## 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 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 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 |
| *Receipts of dividend, interest and fee from holdings of equities, bonds and unlisted real estate* | | *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 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.



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

| | 31.12.2020 | | 31.12.2019 | |
|---|---|---|---|---|
| Amounts in NOK million | 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** |
| *Of which equities lent* | *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

| | 31.12.2020 | | | 31.12.2019 | | |
|---|---|---|---|---|---|---|
| Amounts in NOK million | 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** |
| *Of which bonds lent* | | *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

| | 31.12.2020 | | | 31.12.2019 | | |
|---|---|---|---|---|---|---|
| | Notional | Fair value | | Notional | Fair value | |
| Amounts in NOK million | amount | Asset | Liability | amount | 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 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 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.



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 |
| *Cash flow from ongoing operations unlisted real estate* | *7 673* | *6 366* |
| | | |
| 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 |
| *Cash flow to/from other activities unlisted real estate* | *-15 295* | *-5 801* |
| **Net cash flow unlisted real estate**[1] | **-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 |
| *Net income from ongoing operations* | *9 805* | *8 762* |
| | | |
| Realised gain/loss | 2 151 | 1 114 |
| Unrealised gain/loss[3] | -12 472 | 6 510 |
| *Realised and unrealised gain/loss* | *-10 321* | *7 624* |
| | | |
| *Transaction costs and fees from purchases and sales* | *-500* | *-211* |
| | | |
| **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

| | Level 1 | | Level 2 | | Level 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| Amounts in NOK million | 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 GPFG'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 Unfavourable changes | Sensitivities 31.12.2020 Favourable changes | Specification of Level 3 holdings 31.12.2019 | Sensitivities 31.12.2019[1] Unfavourable changes | Sensitivities 31.12.2019[1] 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.

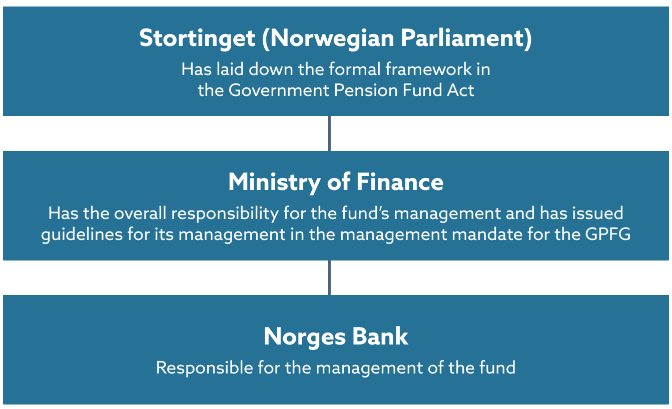
Investments in real estate are not defined by the fund's benchmark index. The management mandate sets a maximum allocation to unlisted real estate of 7 percent of the investment portfolio. The fund's allocation to unlisted real estate is further regulated in the investment mandate issued by the Executive 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<br>- Concentration risk<br>- Volatility and correlation risk<br>- Systematic factor risk<br>- Liquidity risk | Measured at single issuer and portfolio levels<br>- Probability of default<br>- Loss given default<br>- Correlation between instruments and issuers at portfolio level | Measured risk exposure by type of position<br>- Securities lending<br>- Unsecured bank deposits and securities<br>- Derivatives including FX contracts<br>- Repurchase and reverse repurchase agreements<br>- 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 | 31.12.2020 | Market | 31.12.2019 | Market value in percent by asset class 31.12.2020 | Market value in percent by asset class 31.12.2019 | Assets minus liabilities excluding management fee[2] 31.12.2020 | Assets minus liabilities excluding management fee[2] 31.12.2019 |
|---|---|---|---|---|---|---|---|---|
| | Market value in percent by country and currency[1] | | | | | | | |
| 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 sector[1], 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 |
|---|---|
| US | 717 935 |
| Japan | 294 195 |
| Germany | 138 176 |
| UK | 87 746 |
| France | 72 442 |
| Spain | 51 345 |
| Australia | 41 065 |
| South Korea | 36 045 |
| Italy | 31 261 |
| Canada | 31 242 |

| Amounts in NOK million | Market value 31.12.2019 |
|---|---|
| US | 701 616 |
| Japan | 244 195 |
| Germany | 98 548 |
| France | 80 783 |
| UK | 72 793 |
| Spain | 51 554 |
| South Korea | 49 049 |
| Mexico | 43 360 |
| Italy | 42 427 |
| 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 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 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

| | Risk exposure | |
|---|---|---|
| Amounts in NOK million | 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 rating[1]

| | 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 GPFG'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 *Other assets*: | | |
| Withholding tax receivable | 2 234 | 2 163 |
| | | |
| Included in *Other liabilities*: | | |
| 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.



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

| | 2020 | | 2019 | |
|---|---|---|---|---|
| Amounts in NOK million | | 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

| | 2020 | | 2019 | |
|---|---|---|---|---|
| Amounts in NOK million | | 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** |
| *Of which management costs non-consolidated subsidiaries* | *64* | | *70* | |
| *Of which management costs consolidated subsidiaries* | *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 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 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 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 million, 31.12.2020 | | | Amounts subject to enforceable master netting agreements | | | | |
|---|---|---|---|---|---|---|---|
| Description | Gross financial assets recognised in the balance sheet | Assets not subject to enforceable netting agreements[1] | 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 million, 31.12.2020 | | | Amounts subject to enforceable master netting agreements | | | | |
|---|---|---|---|---|---|---|---|
| Description | Gross financial liabilities recognised in the balance sheet | Liabilities not subject to enforceable netting agreements[2] | 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 million, 31.12.2019 | | | Amounts subject to enforceable master netting agreements | | | | |
|---|---|---|---|---|---|---|---|
| Description | Gross financial assets recognised in the balance sheet | Assets not subject to enforceable netting agreements[1] | 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 million, 31.12.2019 | | | Amounts subject to enforceable master netting agreements | | | | |
|---|---|---|---|---|---|---|---|
| Description | Gross financial liabilities recognised in the balance sheet | Liabilities not subject to enforceable netting agreements[2] | 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 GPFG. 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 |
|---|---|
| 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.<br><br>Deviations in the automated investment management processes are analysed and followed up.<br><br>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.<br><br>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.<br><br>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. | Norges Bank has established overall governance models and control activities for evaluation of the equity and fixed-income management.<br><br>We assessed those elements of the overall governance models that are relevant to financial reporting.<br><br>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.<br><br>We assessed whether selected valuation and calculation methods, including the method for currency conversion, were in accordance with IFRS.<br><br>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.<br><br>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.<br><br>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.<br><br>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. |

**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 |
|---|---|
| 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.<br><br>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.<br><br>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.<br><br>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.<br><br>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.<br><br>The assumptions and estimates are essential for the valuation, and the valuation of unlisted real estate is therefore a key audit matter. | 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.<br><br>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.<br><br>We used our own experts in the review of the valuation reports.<br><br>We reconciled the fair value in the financial reporting with the valuation reports.<br><br>We assessed whether the disclosures in notes 6 and 7 regarding valuation of unlisted real estate was adequate. |

### Returns disclosures

| Key audit matter | How the matter was addressed in our audit |
|---|---|
| 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.<br><br>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.<br><br>Absolute and relative return information for the Government Pension Fund Global's equity and fixed-income investments is presented in note 3.<br><br>Measurement of absolute and relative returns is a complex area for the financial reporting and is therefore a key audit matter. | Norges Bank has established various control activities related to the calculation of returns.<br><br>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.<br><br>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.<br><br>We assessed whether the returns disclosures in note 3 were adequate. |

*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*

**Note: This translation from Norwegian has been prepared for information purposes only.**

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