

Government Pension Fund Global Half-year report 2022

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See www.nbim.no for further information on the fund's results.

Investments

The fund's market value fell 682 billion kroner to 11,657 billion kroner in the first half of 2022. A weaker krone cushioned the fall in the fund's market value in krone terms. The fund's return for the period was -14.4 percent, or -1,680 billion kroner. This was 1.14 percentage points better than the return on the benchmark index.

Equity investments had a market value of 7,986 billion at the end of the period, fixed-income investments 3,304 billion kroner, unlisted real estate investments 354 billion kroner and unlisted renewable energy infrastructure investments 13 billion kroner. Equities made up 68.5 percent of the fund, fixed income 28.3 percent, unlisted real estate 3.0 percent and unlisted renewable energy infrastructure 0.1 percent.

The change in the fund's market value consists of the return of -1,680 billion kroner, less transfers from the government of 356 billion kroner and 642 billion from a weakening of the krone exchange rate.

The fund invests in international securities in foreign currency. Returns are therefore measured primarily in international currency – a weighted combination of the currencies in the fund's benchmark indices for equities and bonds.

Chart 1 The fund's market value. Billions of kroner.

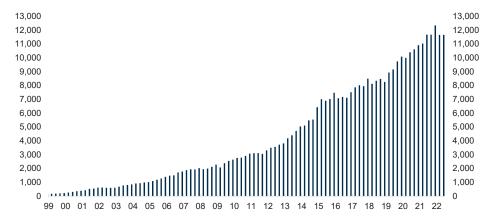


Chart 2 Changes in the fund's market value. Billions of kroner.

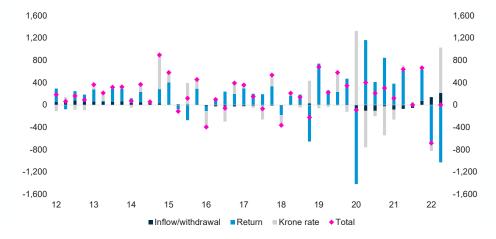


Table 1 Key figures. Billions of kroner.

	First half 2022	1Q 2022	2021
Market value			
Equity investments	7,986	8,262	8,878
Fixed-income investments	3,304	3,066	3,135
Unlisted real estate investments	354	315	312
Unlisted infrastructure investments ¹	13	13	14
Market value of fund ²	11,657	11,657	12,340
Accrued, not paid, management fees ³	0	-2	1
Owner's capital ²	11,657	11,655	12,340
Inflow of capital	358	140	80
Withdrawal of capital	-	-	-199
Paid management fees ⁴	-2	1	-10
Return on fund	-1,680	-653	1,580
Changes due to fluctuations in krone	642	-171	-25
Total change in market value	-682	-683	1,426
Changes in value since first capital inflow in 1996			
Total inflow of capital	4,012	3,794	3,654
Total withdrawal of capital ³	-687	-685	-687
Return on equity investments	5,100	5,968	6,485
Return on fixed-income investments	1,085	1,252	1,401
Return on unlisted real estate investments	143	133	120
Return on unlisted infrastructure investments ¹	-0	1	1
Management fees ⁴	-61	-60	-58
Changes due to fluctuations in krone	2,066	1,252	1,423
Market value of fund	11,657	11,657	12,340
Return on fund	6,327	7,355	8,007
Return after management costs	6,266	7,295	7,949

 $^{^{\}mbox{\tiny 1}}$ First unlisted infrastructure investment was made in second quarter of 2021.

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.

 $^{^{\}scriptscriptstyle 3}$ Total withdrawal of capital shown in this table is adjusted for accrued, not paid, management fees.

 $^{^{\}rm 4}\,$ Management fees are describe in note 11 in the financial statements.

Chart 3 The fund's quarterly return and accumulated annualised return. Percent.



Table 2 Return figures. Measured in the fund's currency basket. Percent.

First half 2022	2Q 2022	1Q 2022
-17.05	-12.49	-5.21
-9.32	-4.73	-4.81
7.12	2.87	4.13
-13.29	-10.30	-3.33
-14.41	-10.01	-4.89
0.02	0.01	0.01
-14.43	-10.02	-4.90
	-17.05 -9.32 7.12 -13.29 -14.41	-17.05 -12.49 -9.32 -4.73 7.12 2.87 -13.29 -10.30 -14.41 -10.01 0.02 0.01

Table 3 Historical key figures as at 30 June 2022. Annualised data, measured in the fund's currency basket. Percent.

	Since 01.01.1998	Last 10 years	Last 12 months
Fund return	5.81	7.51	-10.43
Annual price inflation	2.04	2.19	7.77
Annual management costs	0.08	0.05	0.04
Net real return on fund	3.62	5.15	-16.94
The fund's actual standard deviation	8.12	8.52	9.82

Return on equity investments

The market in 2022 has been hit by rising interest rates, high inflation and war in Europe. The fund's Russian equities were frozen following Russia's invasion of Ukraine.

Equity investments returned -17.0 percent for the first half and accounted for 68.5 percent of the fund at the end of the period. Energy was the only sector with a positive return. The most negative returns were in technology, consumer durables and industry.

Energy stocks perform best

Energy companies delivered the period's strongest return of 13.2 percent. Prices for oil, gas and refined products rose sharply as a result of stronger demand and low investment levels. The war between Russia and Ukraine put further pressure on prices.

Technology companies produced the period's weakest return of -27.6 percent. The surge in demand during the pandemic for digital advertising, e-commerce and semiconductors has normalised. Growing fears of recession have also impacted particularly on tech stocks.

Consumer discretionary were the second-weakest sector in the first half with a return of -24.9 percent. These stocks had a difficult start to the year, with investors anticipating weaker demand from households in response to rapidly rising prices for essentials such as energy, housing and food.

Industrials were the third-weakest performers with a return of -21.8 percent. A weaker economy and fears of recession tend to reduce demand for industrial goods and services.

Table 4 Return on the fund's equity investments in first half of 2022. International currency. Percent.

Market	Return	Share of equity investments
North America	-17.6	46.4
Europe	-19.3	29.2
Asia and Oceania	-14.3	21.7
Emerging markets	-12.6	11.2

Table 5 Return on the fund's equity investments in first half of 2022 by sector. International currency. Percent.

Return	Share of equity investments ¹
-13.4	4.3
-8.5	6.5
-24.9	13.5
-11.3	15.0
-9.0	12.4
-21.8	12.5
13.2	4.0
-27.6	18.7
-6.5	3.6
-7.6	2.6
-19.0	6.2
	-13.4 -8.5 -24.9 -11.3 -9.0 -21.8 13.2 -27.6 -6.5 -7.6

 $^{^{\}scriptscriptstyle 1}$ Does not sum up to 100 percent because cash and derivatives are not included.

Chart 4 Price developments in regional equity markets. Measured in US dollars, except for the Stoxx Europe 600, which is measured in euros. Indexed total return 31.12.2021 = 100.

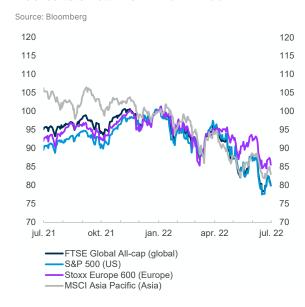


Chart 5 Price developments in stock sectors in the FTSE Global All Cap Index. Measured in US dollars. Indexed total return 31.12.2021 = 100.

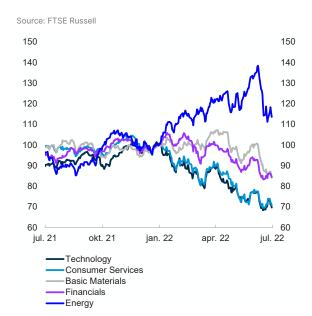


Table 6 The fund's largest equity holdings as at 30 June 2022. Millions of kroner.

Company	Country	Holding
Apple Inc	US	204,480
Microsoft Corp	US	199,374
Alphabet Inc	US	128,392
Amazon.com Inc	US	95,165
Nestlé SA	Switzerland	84,613
Roche Holding AG	Switzerland	62,086
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	60,493
Shell PLC	UK	55,092
Tesla Inc	US	53,550
Meta Platforms Inc	US	53,101
AstraZeneca PLC	UK	46,080
Novo Nordisk A/S	Denmark	44,655
UnitedHealth Group Inc	US	44,511
Novartis AG	Switzerland	43,905
ASML Holding NV	Netherlands	43,089
Berkshire Hathaway Inc	US	41,865
Johnson & Johnson	US	40,653
Exxon Mobil Corp	US	37,673
Samsung Electronics Co Ltd	South Korea	37,658
NVIDIA Corp	US	35,921

Return on fixed-income investments

Fixed-income investments returned -9.3 percent for the first half and accounted for 28.3 percent of the fund at the end of the period. Returns in the bond market were unusually weak in the first half of 2022.

For example, Bloomberg's US Treasury index returned -9.1 percent, the weakest half-year return since the index started in 1973. Excessive inflation was a key theme in the markets and led to a tightening of monetary policy and an increase in global interest rates.

Higher interest rates reduce value of bond portfolio

Government bonds returned -9.0 percent for the first half and accounted for 55.5 percent of the fund's fixed-income investments at the end of the period. The fund's three largest holdings were of US, Japanese and German government bonds.

US Treasuries accounted for 25.9 percent of fixed-income investments and returned -5.1 percent, while Japanese government bonds made up 10.3 percent of fixed-income investments and returned -14.0 percent, and euro-denominated government bonds amounted to 8.9 percent of fixed-income investments and returned -15.5 percent.

The Federal Reserve raised its policy rate by a total of 1.5 percentage points in the first half of the year. There was only a modest increase in interest rates in Japan, but the yen weakened considerably. In the euro area, higher interest rates and a weak euro brought a record-low half-year return.

Chart 6 10-year government bond yields. Percent.



Chart 7 Price developments in fixed-income sectors. Measured in US dollars. Indexed total return 31.12.2021 = 100.

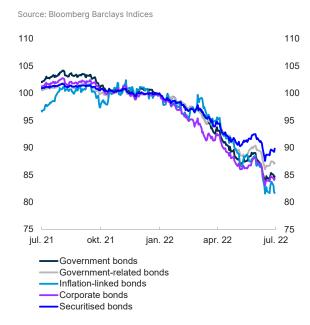


Table 7 Return on the fund's fixed-income investments in the first half of 2022 by sector. International currency. Percent.

Sector	Return	Share of fixed-income investments ¹
Government bonds ²	-9.0	55.5
Government-related bonds ²	-11.3	11.6
Inflation-linked bonds ²	-10.1	6.6
Corporate bonds	-11.0	23.8
Securitised bonds	-9.3	6.8

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

 Table 8
 The fund's largest bond holdings as at 30 June 2022. Millions of kroner.

Issuer	Country	Holding
Government of United States of America	US	965,671
Government of Japan	Japan	347,006
Government of Germany	Germany	111,066
Monetary Authority of Singapore	Singapore	82,251
United Kingdom Government	UK	80,788
Government of France	France	58,194
Government of Canada	Canada	55,298
Government of Italy	Italy	50,388
Canada Mortgage & Housing Corp	Canada	40,959
Government of Spain	Spain	40,276
Government of Australia	Australia	39,724
European Union	International Organisations	27,675
Bank of America Corp	US	22,636
Government of South Korea	South Korea	21,366
Morgan Stanley	US	20,809
Kreditanstalt fur Wiederaufbau	Germany	18,835
Goldman Sachs Group Inc/The	US	18,660
Government of Singapore	Singapore	18,157
Government of the Netherlands	Netherlands	17,300
Government of Austria	Austria	16,990

Table 9 The fund's bond holdings as at 30 June 2022 based on credit ratings. Percentage of bond holdings.

	AAA	AA	А	BBB	Lower rating	Total
Government bonds	34.5	4.7	11.4	1.9	0.7	53.2
Government-related bonds	4.8	4.1	1.6	0.5	0.1	11.1
Inflation-linked bonds	4.2	1.5	0.2	0.4	-	6.3
Corporate bonds	0.2	1.6	9.8	10.8	0.4	22.8
Securitised bonds	5.6	0.9	0.1	0.0	0.0	6.6
Total	49.3	12.8	23.1	13.6	1.2	100.0

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.

Return on real estate investments

Total real estate investments returned -5.7 percent for the first half and amounted to 5.0 percent of the fund at the end of the period. Unlisted and listed real estate investments are managed under a combined strategy for real estate.

Unlisted real estate investments returned 7.1 percent and accounted for 60.6 percent of the overall real estate portfolio, while investments in listed real estate returned -20.9 percent.

The main driver of returns in unlisted real estate is the investments in logistics, which was strong in the first half of 2022. The listed portfolio performed less well, as the market turmoil had a greater impact on this part of the real estate market.

Table 10 Value of real estate investments as at 30 June 2022. Millions of kroner.

	Value ¹
Unlisted real estate investments	353,895
Listed real estate investments	230,291
Total real estate investments	584,187

¹ Including bank deposits and other receivables.

Table 11 Return on unlisted real estate investments in the first half of 2022. Percentage points.

	Return
Rental income	1.5
Changes in value	5.5
Transaction costs	0.0
Result of currency adjustments	0.1
Total	7.1

Return on unlisted renewable energy infrastructure investments

Investments in unlisted renewable energy infrastructure returned -13.3 percent and amounted to 0.1 percent of the fund at the end of the period. The main driver of returns in unlisted renewable energy infrastructure was primarily due to an increased capital requirement as a result of higher interest rates, changes to expected future production and write-downs over the expected life of the project. The increase in power prices in the short term made a positive contribution to the return.

Table 12 Value of unlisted renewable energy infrastructure investments as at 30 June 2022. Millions of kroner.

	Value ¹
Unlisted infrastructure investments	13,061

¹ Including bank deposits and other receivables.

Table 13 Return of unlisted renewable energy infrastructure investments in the first half of 2022. Percentage points.

	Return
Unlisted infrastructure investments	-13.3

The fund's relative return

The return on the fund for the first half of the year was 1.14 percentage points better than the return on the benchmark index from the Ministry of Finance, corresponding to an excess return of 156 billion kroner. This is the first time in two decades that we have generated an excess return in a sharply falling equity market. We do not expect a similarly strong relative return in the future.

The relative return is broken down between equity, fixed-income and real asset management, and an allocation effect between them.

Equity management contributed 0.31 percentage point to the fund's relative return in the first half of the year. Investments in the energy sector made the most positive contribution to the relative return for the period, while the technology sector made the most negative. Broken down by country, equity investments in the US and the UK made the most positive contributions to the relative return, and Chinese stocks the most negative. An overweight of value stocks relative to the benchmark index contributed positively to the relative return.

Fixed-income management contributed 0.33 percentage point to the fund's relative return for the period. The fund's fixed-income investments have a lower duration than the benchmark index, which contributed positively to the relative return.

Real asset management contributed 0.42 percentage point to the fund's relative return, measured against the equities and bonds sold to finance these investments. Listed real estate investments contributed -0.09 percentage point and unlisted real estate investments 0.51 percentage point, while infrastructure made a negligible contribution to the relative return for the period.

The relative return may also be affected by an allocation effect between these management areas. The contribution from this effect during the period was 0.07 percentage point, as the fund was underweight in equities relative to bonds.

Chart 8 The fund's quarterly relative return and accumulated annualised relative return. Calculations based on aggregated equity and fixed-income investments until end of 2016. Percentage points.

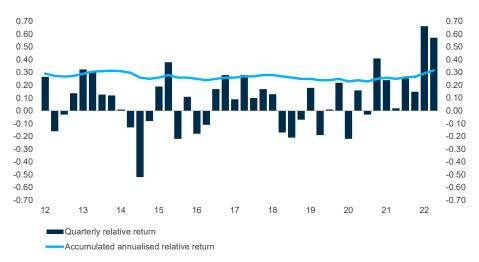


Table 14 Historic relative return as at 30 June 2022. Annualised figures measured in the fund's currency basket. Percentage points.

	Since 1998	Last 15 years	Last 10 years	Last 5 years	Last 12 months
Relative return on fund (percentage points) ¹	0.32	0.20	0.38	0.50	1.54
The fund's tracking error (percentage points) ¹	0.65	0.77	0.38	0.38	0.47
The fund's information ratio (IR) ^{1,2}	0.50	0.29	0.96	1.24	3.63

 $^{^{\}mbox{\tiny 1}}$ Based on aggregated equity and fixed-income investments until end of 2016.

Table 15 Contributions from management areas to the fund's relative return in the first half of 2022. Percentage points.

	Total
Equity management	0.31
Fixed-income management	0.33
Real assets management	0.42
Allocation effect	0.07
Total	1.14

Investment framework

The fund is managed on the basis of limits set in the mandate from the Ministry of Finance.

Table 16 Key figures for the fund's risk and exposure.

	Limits set by the Ministry of Finance	30.06.2022
Allocation	Equity portfolio 60–80 percent of fund's market value ¹	68.3
	Unlisted real estate no more than 7 percent of the fund's market value	3.0
	Fixed-income portfolio 20–40 percent of fund's market value ¹	29.0
	Unlisted renewable energy infrastructure no more than 2 percent of the fund's market value	0.1
Market risk	1.25 percentage points expected relative volatility for the fund's investments	0.4
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	3.4
Ownership	Maximum 10 percent of voting shares in a listed company in the equity portfolio ²	9.6

¹ Derivatives are represented with their underlying economic exposure.

Operational risk management

Norges Bank's Executive Board has decided there must be less than a 20 percent probability that operational risk factors will have a financial impact of 750 million kroner or more over a 12-month period.

Estimated operational risk exposure remained within the Executive Board's tolerance limit in the first half of the year. A total of 152 unwanted operational events were registered, with an estimated financial impact of around 22.5 million kroner.

Responsible investment

Voting is one of the most important instruments available to us for exercising our ownership rights. We voted on a total of 96,317 proposals at 8,691 meetings in the first half of the year. The second quarter is the busy season for voting, with more than two thirds of annual shareholder meetings taking place between April and June. We continuously update all of our voting on our website: www.nbim.no.

We had 1,485 meetings with companies in the first half of the year, raising governance and sustainability issues at 68.4 percent of them. These issues mostly concerned capital management, climate change and human capital.

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.

² Investments in listed and unlisted real estate companies are exempt from this restriction.

Financial reporting

1 Financial statements

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Income statement

Amounts in NOK million	Note	1H 2022	1H 2021	2021
Profit/loss on the portfolio before foreign exchange gain/loss				
Income/expense from:				
- Equities	4	-1 383 671	1 035 066	1 593 618
- Bonds	4	-339 903	-51 442	-40 905
- Unlisted real estate	6	21 732	11 308	35 811
- Unlisted infrastructure	7	-1 162	-	1 198
- Financial derivatives	4	21 271	-2 086	-4 839
- Secured lending		2 008	1 843	3 842
- Secured borrowing		-101	-19	21
Tax expense		-563	-4 865	-8 887
Interest income/expense		4	-11	-13
Other income/expense		-13	10	11
Profit/loss on the portfolio before foreign exchange gain/loss		-1 680 400	989 803	1 579 857
Foreign exchange gain/loss	10	642 339	-78 706	-24 589
Profit/loss on the portfolio		-1 038 061	911 097	1 555 269
Management fee	11	-2 780	-2 668	-4 640
Profit/loss and total comprehensive income		-1 040 841	908 430	1 550 628

Balance sheet

Amounts in NOK million	Note	30.06.2022	31.12.2021
Assets			
Deposits in banks		32 134	18 450
Secured lending		396 425	297 405
Cash collateral posted		2 884	3 725
Unsettled trades		79 577	15 767
Equities	5	7 377 089	8 383 302
Equities lent	5	575 805	505 117
Bonds	5	2 996 733	2 795 536
Bonds lent	5	449 622	623 367
Financial derivatives	5	26 760	7 879
Unlisted real estate	6	349 495	310 134
Unlisted infrastructure	7	13 040	14 287
Withholding tax receivable		8 957	3 427
Other assets		3 986	1 860
Management fee receivable		20	536
Total assets		12 312 527	12 980 791
Liabilities and owner's capital			
Secured borrowing		478 880	591 960
Cash collateral received		20 843	11 848
Unsettled trades		138 045	22 607
Financial derivatives	5	14 449	9 055
Deferred tax		2 992	5 180
Other liabilities		73	56
Total liabilities		655 283	640 706
Owner's capital		11 657 245	12 340 085
Total liabilities and owner's capital		12 312 527	12 980 791

Statement of cash flows

Amounts in NOK million, receipt (+) / payment (-)	Note	1H 2022	1H 2021	2021
Operating activities				
Receipts of dividend from equities		103 720	89 780	166 040
Receipts of interest from bonds		24 789	23 714	46 449
Receipts of interest and dividend from unlisted real estate	6	2 969	2 763	6 088
Receipts of interest and dividend from unlisted infrastructure	7	96	-	80
Net receipts of interest and fee from secured lending and borrowing		1 939	1 782	3 883
Receipts of dividend, interest and fee from holdings of equities, bonds, unlisted real estate and unlisted infrastructure		133 513	118 039	222 540
Net cash flow from purchase and sale of equities		-157 205	364 662	495 674
Net cash flow from purchase and sale of bonds		-157 636	-105 099	-646 867
Net cash flow to/from investments in unlisted real estate	6	2 148	-406	-7 056
Net cash flow to/from investments in unlisted infrastructure	7	373	-14 023	-13 375
Net cash flow financial derivatives		27 844	-1 169	-542
Net cash flow cash collateral related to derivative transactions		7 052	3 468	8 502
Net cash flow secured lending and borrowing		-192 642	-204 237	74 976
Net payment of taxes		-8 281	-6 866	-7 202
Net cash flow related to interest on deposits in banks and bank overdraft		-5	-23	-42
Net cash flow related to other income/expense, other assets and other liabilities		254	401	878
Settlement of management fee Norges Bank ¹		-2 264	-5 305	-10 481
Net cash inflow/outflow from operating activities		-346 849	149 442	117 005
Financing activities				
Inflow from the Norwegian government ²		355 942	227	78 846
Withdrawal by the Norwegian government ²		-	-146 258	-199 000
Net cash inflow/outflow from financing activities		355 942	-146 031	-120 154
Net change deposits in banks				
Deposits in banks at 1 January		18 450	18 258	18 258
Net increase/decrease of cash in the period		9 094	3 411	-3 149
Net foreign exchange gain/loss on cash		4 591	323	3 341
Deposits in banks at end of period		32 134	21 992	18 450

¹ Management fee shown in the Statement of cash flows for a period reflects the amount withdrawn or deposited to the krone account in connection with settlement of management costs incurred in Norges bank.

² Inflows/withdrawals included here only represent transfers that have been settled in the period. Inflows/withdrawals in the Statement of changes in owner's capital are based on accrued inflows/withdrawals.

Statement of changes in owner's capital

Amounts in NOK million	Inflows from owner	Retained earnings	Total owner's capital
1 January 2021	3 086 570	7 821 887	10 908 457
Profit/loss and total comprehensive income	-	908 430	908 430
Inflow during the period	-	-	-
Withdrawal during the period	-147 000	-	-147 000
30 June 2021	2 939 570	8 730 317	11 669 886
1 July 2021	2 939 570	8 730 317	11 669 886
Profit/loss and total comprehensive income	-	642 198	642 198
Inflow during the period	80 000	-	80 000
Withdrawal during the period	-52 000	-	-52 000
31 December 2021	2 967 570	9 372 515	12 340 085
1 January 2022	2 967 570	9 372 515	12 340 085
Profit/loss and total comprehensive income	-	-1 040 841	-1 040 841
Inflow during the period	358 000	-	358 000
Withdrawal during the period	-	-	-
30 June 2022	3 325 570	8 331 674	11 657 245

Notes

Financial statements

Note 1 General Information

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 renewable energy infrastructure. 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.

Approval of the interim financial statements

The interim financial statements of Norges Bank for the first half of 2022, which only encompass the financial reporting for the GPFG, were approved by the Executive Board on 11 August 2022.

Note 2 Accounting policies

Basis of preparation

The Regulation on the financial reporting of Norges Bank (the Regulation), which has been laid down by the Ministry of Finance, requires that the financial reporting of the GPFG is prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.

The condensed interim financial statements for the first half of 2022 are prepared in accordance with IAS 34 Interim Financial Reporting. The interim financial statements are

presented in Norwegian kroner (NOK), rounded to the nearest million. Rounding differences may occur.

The interim financial statements are prepared using the same accounting policies and calculation methods as applied and disclosed in the annual report for 2021. The condensed interim financial reporting does not include all the information and disclosures required in annual financial statements and should therefore be read in conjunction with the annual report for 2021.

Significant estimates and accounting judgements

The preparation of the interim 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 interim 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.

Note 3 Returns

Table 3.1 Returns

Table 3.1 Returns				
	1H 2022	1H 2021	2021	
Returns measured in the fund's currency basket (percent)				
Return on equity investments	-17.05	13.73	20.76	
Return on fixed-income investments	-9.32	-2.00	-1.94	
Return on unlisted real estate investments	7.12	4.59	13.64	
Return on unlisted infrastructure investments ¹	-13.29	-1.93	4.15	
Return on fund	-14.41	9.42	14.51	
Relative return on fund (percentage points)	1.14	0.28	0.74	
Returns measured in Norwegian kroner (percent)				
Return on equity investments	-11.19	12.70	20.67	
Return on fixed-income investments	-2.91	-2.90	-2.01	
Return on unlisted real estate investments	14.69	3.64	13.55	
Return on unlisted infrastructure investments ¹	-7.16	0.13	7.24	
Return on fund	-8.36	8.42	14.42	

¹ The first investment in unlisted renewable energy infrastructure was completed on 31 May 2021. Therefore, all return figures for the asset class apply from June 2021.

For additional information on the calculation methods used when measuring returns, see note 3 Returns in the annual report for 2021.

Note 4 Income/expense from equities, bonds and financial derivatives

Tables 4.1 to 4.3 specify the income and expense elements for equities, bonds and financial derivatives, where the line Income/expense shows the amount recognised in profit or loss for the respective income statement line.

Table 4.1 Specification Income/expense from equities

Amounts in NOK million	1H 2022	1H 2021	2021
Dividends	114 063	95 665	170 556
Realised gain/loss	151 303	359 173	652 455
Unrealised gain/loss	-1 649 037	580 228	770 608
Income/expense from equities before foreign exchange gain/loss	-1 383 671	1 035 066	1 593 618

Table 4.2 Specification Income/expense from bonds

Amounts in NOK million	1H 2022	1H 2021	2021
Interest	28 019	23 577	47 885
Realised gain/loss	-58 224	-4 139	6
Unrealised gain/loss	-309 698	-70 880	-88 796
Income/expense from bonds before foreign exchange gain/loss	-339 903	-51 442	-40 905

 Table 4.3 Specification Income/expense from financial derivatives

Amounts in NOK million	1H 2022	1H 2021	2021
Interest	5 780	-425	-877
Realised gain/loss	7 703	-231	-2 223
Unrealised gain/loss	7 788	-1 430	-1 738
Income/expense from financial derivatives before foreign exchange gain/loss	21 271	-2 086	-4 839

Note 5 Holdings of equities, bonds and financial derivatives

Table 5.1 Equities

	30.06.20	022	31.12.20)21
Amounts in NOK million	Fair value incl. accrued dividends	Accrued dividends	Fair value incl. accrued dividends	Accrued dividends
Equities	7 952 894	14 953	8 888 419	7 353
Total equities	7 952 894	14 953	8 888 419	7 353
Of which equities lent	575 805		505 117	

Table 5.2 Bonds

		30.06.22			31.12.2021			
Amounts in NOK million	Nominal value	Fair value incl. accrued interest	Accrued interest	Nominal value	Fair value incl. accrued interest	Accrued interest		
Government bonds	1 953 787	1 834 517	7 208	1 855 432	1 914 848	5 585		
Government-related bonds	413 819	381 732	1 438	358 491	367 840	1 204		
Inflation-linked bonds	209 790	218 515	471	160 158	195 879	371		
Corporate bonds	864 711	785 348	6 484	714 041	748 389	5 542		
Securitised bonds	252 059	226 243	589	200 604	191 948	544		
Total bonds	3 694 167	3 446 355	16 190	3 288 727	3 418 903	13 246		
Of which bonds lent		449 622			623 367			

Financial derivatives

Financial derivatives such as foreign exchange derivatives, interest rate derivatives, credit derivatives and futures, are used to adjust the exposure in various portfolios as a cost-efficient alternative to trading in the underlying securities. Foreign exchange derivatives are also used in connection with liquidity management. Equity derivatives with an option component are often a result of corporate

actions, and can be converted into equities or sold. The GPFG also uses equity swaps in combination with purchase and sale of equities. Equity swaps are not recognised in the balance sheet. See the accounting policy in note 13 Secured lending and borrowing in the annual report for 2021 for more information.

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

		30.06.2022			31.12.2021			
		Fair value			Fair value			
Amounts in NOK million	Notional amount	Asset	Liability	Notional amount	Asset	Liability		
Foreign exchange derivatives	602 889	12 016	4 515	791 724	5 920	5 278		
Interest rate derivatives	258 924	14 224	9 860	199 485	1 330	2 870		
Credit derivatives	38 358	36	18	29 563	164	902		
Equity derivatives ¹	-	227	-	-	349	-		
Exchange-traded futures contracts ²	78 929	259	57	57 062	116	5		
Total financial derivatives	979 101	26 760	14 449	1 077 834	7 879	9 055		

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 and fair value is normally zero at the balance sheet date, with the exception of futures contracts in certain markets where there is different timing for setting the market value for recognition in the balance sheet and daily margining.

Note 6 Unlisted real estate

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. 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 2

Accounting policies and note 8 Fair value measurement in the annual report for 2021.

Income/expense, changes in carrying amounts and cash flows related to investments in unlisted real estate are specified in the tables below. See note 6 Unlisted real estate in the annual report for 2021 for further information on the principles applied in the tables.

Table 6.1 Income/expense from unlisted real estate

Amounts in NOK million	1H 2022	1H 2021	2021
Payments of interest and dividend from unlisted real estate	2 969	2 763	6 088
Unrealised gain/loss ¹	18 762	8 545	29 723
Income/expense from unlisted real estate before foreign exchange gain/loss	21 732	11 308	35 811

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	30.06.2022	31.12.2021
Unlisted real estate at 1 January	310 134	272 507
Net cash flow to/from investments in unlisted real estate	-2 148	7 056
Unrealised gain/loss	18 762	29 723
Foreign exchange gain/loss	22 746	849
Unlisted real estate, closing balance for the period	349 495	310 134

Table 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	1H 2022	1H 2021	2021
Interest and dividend from ongoing operations	2 582	2 712	6 037
Repayments of intercompany loans from ongoing operations	652	790	1 692
Cash flow from ongoing operations unlisted real estate	3 234	3 502	7 729
Payments for new investments	-724	-1 626	-13 486
Payments for property development	-415	-462	-866
Net payments external debt	72	892	4 039
Repayments of intercompany loans from sales	2 564	-	1 565
Interest and dividend from sales	388	51	51
Cash flow to/from other activities unlisted real estate	1884	-1 144	-8 697
Net cash flow unlisted real estate ¹	5 118	2 357	-968

¹ Shown in the statement of cash flows as Receipts of interest and dividend from unlisted real estate and Net cash flow to/from investments in unlisted real estate. In the first half of 2022, this amounted to NOK 2 969 million and NOK 2 148 million, respectively (NOK 2 763 million and NOK -406 million in the first half of 2021).

Underlying real estate companies

Real estate subsidiaries have investments in other nonconsolidated, unlisted companies. For further information, see note 16 Interests in other entities in the annual report for 2021.

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	1H 2022	1H 2021	2021
Net rental income	6 044	5 459	11 173
External asset management – fixed fees	-525	-369	-819
External asset management – variable fees	-13	3	-30
Internal asset management – fixed fees¹	-47	-42	-84
Operating costs in wholly-owned subsidiaries ²	-32	-30	-63
Operating costs in joint ventures	-68	-47	-109
Interest expense external debt	-320	-308	-673
Tax expense	-123	-106	-253
Net income from ongoing operations	4 916	4 561	9 141
Realised gain/loss	767	47	424
Unrealised gain/loss³	16 155	6 761	26 387
Realised and unrealised gain/loss	16 922	6 808	26 811
Transaction costs and fees from purchases and sales	-106	-61	-141
Net income underlying real estate companies	21 732	11 308	35 811

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

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 presented in table 6.2.

 Table 6.5
 Assets and liabilities underlying real estate companies

Amounts in NOK million	30.06.2022	31.12.2021
Properties	375 772	336 332
External debt	-22 663	-22 780
Net other assets and liabilities ¹	-3 614	-3 417
Total assets and liabilities underlying real estate companies	349 495	310 134

Net other assets and liabilities comprise cash, tax and operational receivables and liabilities.

² Operating costs in wholly-owned subsidiaries are measured against the upper limit from the Ministry of Finance, see note 11 Management costs for more information.

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.

Agreements for purchases and sales of real estate

Table 6.6 provides an overview of announced agreements for purchases and sales of properties which are not completed at the balance sheet date.

Table 6.6 Announced agreements for purchases and sales of properties¹

Туре	Property address	City	Ownership percent	Currency	Price in stated currency (million) ²	Quarter announced	Expected completion
Purchase	Potsdamer Straße 4	Berlin	50.0	EUR	677	2Q 2022	3Q 2022

¹ Purchases and sales above USD 100 million are announced.

Norges Bank also entered into agreements in 2019 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 2023

and 2024 respectively. The buildings will be purchased and the final purchase price determined upon completed construction.

² The stated price is for the GPFG's share.

Note 7 Unlisted renewable energy infrastructure

Investments in unlisted renewable energy infrastructure (Unlisted infrastructure) are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. Subsidiaries presented as Unlisted infrastructure in the balance sheet are measured at fair value through profit or loss. For principles on recognition and measurement of subsidiaries, see note 2 Accounting policies in the annual report for 2021.

Income/expense, changes in carrying amounts and cash flow related to investments in unlisted infrastructure are specified in the tables below. The first investment in unlisted infrastructure was completed on 31 May 2021. See note 7 Unlisted renewable energy infrastructure in the annual report for 2021 for further information on the principles applied in the tables.

Table 7.1 Income/expense from unlisted infrastructure

Amounts in NOK million	1H 2022	1H 2021	2021
Payments of interest and dividend from unlisted infrastructure	96	-	80
Unrealised gain/loss ¹	-1 257	-	1 118
Income/expense from unlisted infrastructure before foreign exchange gain/loss	-1 162	-	1 198

¹ Accrued interest and dividends which are not cash-settled are included in Unrealised gain/loss.

Table 7.2 Changes in carrying amounts unlisted infrastructure

Amounts in NOK million	30.06.2022	31.12.2021
Unlisted infrastructure at 1 January	14 287	-
Net cash flow to/from investments in unlisted infrastructure	-373	13 375
Unrealised gain/loss	-1 257	1 118
Foreign exchange gain/loss	383	-207
Unlisted infrastructure, closing balance for the period	13 040	14 287

Table 7.3 specifies cash flows between the GPFG and subsidiaries presented as Unlisted infrastructure, related to ongoing operations and other activities.

Table 7.3 Cash flow unlisted infrastructre

Amounts in NOK million	1H 2022	1H 2021	2021
Interest and dividend from ongoing operations	96	-	80
Repayments of intercompany loans from ongoing operations	373	-	648
Cash flow from ongoing operations unlisted infrastructure	structure 469 -		728
Payments for new infrastructure investments	-	-14 023	-14 023
Cash flow to/from other activities unlisted infrastructure	-	-14 023	-14 023
Net cash flow unlisted infrastructure ¹	469	-14 023	-13 295

¹ Shown in the statement of cash flows as Receipts of interest and dividend from unlisted infrastructure and Net cash flow to/from investments in unlisted infrastructure. In the first half of 2021, this amounted to NOK 96 million and NOK 373 million respectively (NOK 0 million and NOK -14 023 million in the first half of 2021).

Underlying infrastructure companies

Infrastructure subsidiaries have investments in other non-consolidated, unlisted companies. For further information, see note 16 Interests in other entities in the annual report for 2021.

Table 7.4 specifies the GPFG's share of net income generated in the underlying infrastructure companies, which is the basis for Income/expense from unlisted infrastructure presented in table 7.1.

 Table 7.4
 Income from underlying infrastructure companies

Amounts in NOK million	1H 2022	1H 2021	2021
Net income from sale of renewable energy	1 143	17	747
Operating costs in wholly-owned subsidiaries ¹	-3	-1	-7
Operating costs in joint ventures	-14	-1	9
Tax expense	-140	-	-160
Net income from ongoing operations	985	15	589
Unrealised gain/loss ²	-2 160	-	639
Transaction costs and fees from purchases and sales	14	-15	-31
Net income underlying infrastructure companies	-1 162	-	1198

¹ Operating costs in wholly-owned subsidiaries are measured against the upper limit from the Ministry of Finance, see note 11 Management costs for more information.

Table 7.5 specifies the GPFG's share of assets and liabilities in the underlying infrastructure companies, which comprises the closing balance for Unlisted infrastructure as presented in table 7.2.

Table 7.5 Assets and liabilities underlying infrastructure companies

Amounts in NOK million	30.06.2022	31.12.2021
Wind farm	12 498	14 290
Net other assets and liabilities ¹	542	-3
Total assets and liabilities underlying infrastructure companies	13 040	14 287

Net other assets and liabilities comprise cash, tax and operational receivables and liabilities.

² Unrealised gain/loss presented in table 7.1 includes net income in the underlying infrastructure companies which is not distributed back to the GPFG, and will therefore not correspond to Unrealised gains/loss presented in table 7.4.

Note 8 Fair value measurement

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. For an overview of valuation models and techniques, as well as definitions and the classification in the three categories in the fair value hierarchy, see note 8 Fair value measurement in the annual report for 2021.

Significant estimate

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

The fair value hierarchy

Table 8.1 Categorisation of the investment portfolio by level in the fair value hierarchy

	Lev	el 1	Leve	el 2	Leve	el 3	То	tal
Amounts in NOK million	30.06.2022	31.12.2021	30.06.2022	31.12.2021	30.06.2022	31.12.2021	30.06.2022	31.12.2021
Equities	7 918 534	8 849 354	29 704	37 716	4 656	1 349	7 952 894	8 888 419
Government bonds	1 549 663	1 494 936	284 854	419 912	-	-	1 834 517	1 914 848
Government-related bonds	293 837	278 345	87 220	89 495	675	-	381 732	367 840
Inflation-linked bonds	198 818	177 457	19 697	18 422	-	-	218 515	195 879
Corporate bonds	715 856	674 632	69 484	73 750	8	7	785 348	748 389
Securitised bonds	194 801	162 737	31 442	29 211	-	-	226 243	191 948
Total bonds	2 952 975	2 788 107	492 697	630 790	683	7	3 446 355	3 418 903
Financial derivatives (assets)	183	246	26 577	7 633	-	-	26 760	7 879
Financial derivatives (liabilities)	-18	-	-14 431	-9 055	-	-	-14 449	-9 055
Total financial derivatives	165	246	12 146	-1 422	-	-	12 311	-1 176
Unlisted real estate	-	-	-	-	349 495	310 134	349 495	310 134
Unlisted infrastructure	-	-	-	-	13 040	14 287	13 040	14 287
Other (assets) ¹	-	-	523 963	340 634	-	-	523 963	340 634
Other (liabilities) ²	-	-	-640 833	-631 651	-	-	-640 833	-631 651
Total	10 871 674	11 637 707	417 677	376 067	367 874	325 777	11 657 224	12 339 549
Total (percent)	93.3	94.3	3.6	3.1	3.1	2.6	100.0	100.0

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

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

The majority of the total portfolio is priced based on observable market prices. At the end of the first half of 2022, 96.9 percent of the portfolio was classified as Level 1 or 2, which is a slight reduction compared to year-end 2021.

Equities

Measured as a share of total value, virtually all equities (99.57 percent) are valued based on official closing prices from stock exchanges and are classified as Level 1. A small share of equities (0.37 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 limited share of securities (0.06 percent) that are not listed, or where trading has been suspended and an adjustment has been applied to the last traded price, 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 (85.68 percent) have observable, executable market quotes in active markets and are classified as Level 1. The share of bonds classified as Level 2 was 14.30 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 share of holdings (0.02 percent) 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 and unlisted renewable energy infrastructure

All investments in unlisted real estate and unlisted renewable energy infrastructure 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 and infrastructure investments are measured at the value determined by external valuers. Exceptions to this policy are newly acquired investments where the purchase price, excluding transaction costs, is normally considered to be the best estimate of fair value, or where there are indications that external valuation reports do not reflect fair value and adjustments to valuations are therefore warranted.

Financial derivatives

Some equity derivatives (rights and warrants) and credit derivatives (CDS indices) that are actively traded, are classified as Level 1. The majority of derivatives are classified as Level 2, since the valuation of these is based on standard models using observable market inputs.

Other assets and liabilities are classified as Level 2.

Movements between the levels in the hierarchy Reclassifications between Level 1 and Level 2

The share of equity holdings classified as Level 1 increased marginally by 0.01 percentage point compared to year-end 2021. There were no significant reclassifications between Level 1 and Level 2 for equity holdings during the first half. The share of bond holdings classified as Level 1 increased by 4.13 percentage points compared to year-end 2021, with a corresponding decrease in the share of Level 2 holdings. The primary driver of this increase was the purchase of government bonds classified as Level 1 during the first half. There was also a net reclassification from Level 2 to Level 1 of NOK 9 billion in the first half, primarily due to improved liquidity for corporate bonds and government bonds.

Reclassifications between Level 1 and Level 3

Extensive sanctions were introduced on trading in Russian securities during the first half. As a result, there was limited price observability and equity securities were either suspended from trading or trading with restrictions. In order to estimate the price that would be received for the sale of the shares under current market conditions, a downward adjustment was applied to the last-traded price of these securities at the end of the first half. The adjustment reflects the estimated discount that market participants would demand to reflect the risk associated with the uncertainty inherent in the cash flows of the shareholdings, as well as the inability to access a public market to trade the shares. The adjustment to the last traded price is based on unobservable inputs and is considered to be significant to the fair value measurement. All equity holdings where an adjustment has been applied to the last traded price have therefore been reclassified to Level 3. At the end of the first half, these equity securities had a value of NOK 4 billion, compared to NOK 30 billion at year-end 2021.

Table 8.2 Changes in Level 3 holdings

Amounts in NOK million	01.01.2022	Purchases	Sales	Settlements	Net gain/loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	30.06.2022
Equities	1 349	60	-905	-32	-36 885	30 465	-109	10 711	4 656
Bonds	7	675	-	-	-	-	-	1	683
Unlisted real estate ¹	310 134	-2 148	-	-	18 762	-	-	22 746	349 495
Unlisted infrastructure ¹	14 287	-373	-	-	-1 257	-	-	383	13 040
Total	325 777	-1 786	-905	-32	-19 380	30 465	-109	33 841	367 874

Amounts in NOK million	01.01.2021	Purchases	Sales	Settlements	Net gain/loss	Transferred into Level 3	Transferred out of Level 3	Foreign exchange gain/loss	31.12.2021
Equities	597	908	-16	-	-327	242	-68	13	1 349
Bonds	28	-	_	-	-22	-	-	1	7
Financial derivatives (assets)	4	-	-	-	-	-	-4	-	-
Unlisted real estate ¹	272 507	7 056	-	-	29 723	-	-	849	310 134
Unlisted infrastructure ¹	-	13 375	-	-	1 118	-	-	-207	14 287
Total	273 136	21 339	-16	-	30 492	242	-72	656	325 777

¹ Purchases represent the net cash flow to investments in unlisted real estate and unlisted infrastructure, as presented in the Statement of cash flows.

The relative share of holdings classified as Level 3 was 3.1 percent at the end of the first half, which is a slight increase compared to year-end 2021. The GPFG's aggregate holdings in Level 3 were NOK 367 874 million at the end of the first half, an increase of NOK 42 097 million compared to year-end. The increase is mainly due to investments in unlisted real estate, which are all classified as Level 3.

For both equities and bonds, the relative share classified as Level 3 has increased slightly compared to year-end. In absolute value, bonds classified as Level 3 have increased due to the purchase of one government-related bond classified as Level 3 during the first half. For equities, the increase in absolute value of Level 3 holdings is due to the reclassification of Russian equities from Level 1 to Level 3 during the first half.

Sensitivity analysis for Level 3 holdings

The valuation of Level 3 holdings involves the use of judgement when determining the assumptions that market participants would use when observable market data is not available.

Unlisted real estate investments constitute the vast majority of holdings classified as Level 3. The effect of using reasonable alternative assumptions for unlisted real estate investments is shown in the sensitivity analysis in table 8.3. For holdings of equities, bonds and unlisted infrastructure classified as Level 3, there are no significant changes to sensitivities compared to year-end 2021.

 Table 8.3
 Additional specification Level 3 and sensitivities - Unlisted real estate

			Specifi- cation of Level 3 holdings 30.06.2022	Sensitivities 30.06.2022		Specifi- cation of	Sensitivities 31.12.2021	
Amounts in NOK million	Key assumptions	Change in key assumptions		Unfavour- able changes	Favour- able changes	Level 3 holdings	Unfavour- able changes	Favour- able changes
	Yield	0.2 percentage point		-17 150	19 213		-15 219	17 050
	Market rent	2.0 percent		-5 920	5 920		-5 253	5 253
Unlisted real estate			349 495	-23 070	25 133	310 134	-20 472	22 302

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 rents are the assumptions that have the largest impact when estimating property values. This is illustrated in the sensitivity analysis by using other reasonable assumptions for yields and market rents. 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 23 070 million or 6.6 percent (6.6 percent at year-end

2021). In a favourable outcome, a reduction in the yield of 0.2 percentage point and an increase in market rents of 2 percent would result in an increase in value of the unlisted real estate portfolio of approximately NOK 25 133 million or 7.2 percent (7.2 percent at year-end 2021). 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 8.3.

Note 9 Investment risk

Investment risk comprises market risk, credit risk and counterparty risk. For further information on the framework for investment risk, including the main dimensions and measurement methods used to manage investment risk, see note 9 Investment risk in the annual report for 2021.

Market risk

Market risk is 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 in the unlisted real estate and unlisted infrastructure markets. Norges Bank Investment Management measures market risk both in absolute terms and relative to the benchmark.

Asset class by country and currency

The portfolio is invested across several asset classes, countries and currencies as shown in table 9.1.

Table 9.1 Allocation by asset class, country and currency

	Market	value in percent	by country and currer	ncy ¹	Market valu by asse			minus excluding ment fee
Asset class	Market	30.06.2022	Market	31.12.2021	30.06.2022	31.12.2021	30.06.2022	31.12.2021
Equities	Developed	88.7	Developed	89.5				
	US	44.6	US	44.9				
	UK	7.3	Japan	7.0				
	Japan	7.2	UK	7.0				
	Switzerland	4.7	France	4.9				
	France	4.5	Switzerland	4.7				
	Total other	20.4	Total other	20.9				
	Emerging	11.3	Emerging	10.5				
	China	4.3	China	3.8				
	Taiwan	2.2	Taiwan	2.3				
	India	1.8	India	1.6				
	Brazil	0.6	Brazil	0.5				
	South Africa	0.4	South Africa	0.4				
	Total other	2.1	Total other	2.0				
Total equities					68.51	71.95	7 986 210	8 878 464
Fixed income	Developed	99.8	Developed	99.6				
	US dollar	52.6	US dollar	50.3				
	Euro	26.4	Euro	27.6				
	Japanese yen	7.6	Japanese yen	7.9				
	British pound	4.1	British pound	4.9				
	Canadian dollar	3.9	Canadian dollar	3.8				
	Total other	5.2	Total other	5.0				
	Emerging ²	0.2	Emerging	0.4				
Total fixed incor	me				28.34	25.41	3 304 058	3 135 259
Unlisted								
real estate	US	52.5	US	50.1				
	UK	16.3	UK	17.8				
	France	16.0	France	17.1				
	Germany	3.8	Germany	3.9				
	Switzerland	3.5	Switzerland	3.6				
	Total other	7.9	Total other	7.4				
Total unlisted re	eal estate				3.04	2.52	353 895	311 538
Total unlisted in	frastructure				0.11	0.12	13 061	14 288

 $^{^{\}mbox{\scriptsize 1}}$ Market value in percent per country and currency includes derivatives and cash.

 $^{^{\,2}\,}$ The share of individual emerging market currencies in the fixed income portfolio is insignificant.

At the end of the first half, the equity portfolio's share of the fund was 68.5 percent, compared to 72.0 percent at year-end 2021. The bond portfolio's share of the fund was 28.3 percent, compared to 25.4 percent at year-end. The unlisted real estate portfolio's share of the fund was 3.0 percent, compared to 2.5 percent at year-end. The share of unlisted infrastructure in the fund was 0.1 percent, the same as at year-end.

Volatility

Risk models are used to quantify the risk of value changes associated with all or parts of the portfolio. One of the risk

measures is expected volatility. Volatility is a standard risk measure based on the statistical concept of standard deviation. Tables 9.2 and 9.3 present risk both in terms of the portfolio's absolute risk and the relative risk. All the fund's investments are included in the calculations of expected relative volatility, and are measured against the fund's benchmark index consisting of global equity and bond indices. The fund's management mandate specifies that expected relative volatility shall not exceed 1.25 percentage points.

Table 9.2 Portfolio risk, expected volatility, percent

		Expected volatility, actual portfolio								
	30.06.2022	Min 2022	Max 2022	Average 2022	31.12.2021	Min 2021	Max 2021	Average 2021		
Portfolio	9.6	9.6	10.4	10.1	10.3	10.1	10.7	10.5		
Equities	13.8	13.8	14.4	14.2	14.1	14.0	14.7	14.4		
Fixed income	10.8	10.0	10.9	10.3	10.1	9.7	10.1	9.8		
Unlisted real estate	11.9	11.7	12.4	12.0	11.7	10.5	11.7	10.8		
Unlisted infrastructure	10.0	10.0	13.2	12.7	13.1	9.7	13.1	11.2		

Table 9.3 Relative risk measured against the fund's benchmark index, expected relative volatility, basis points

		Expected relative volatility						
	30.06.2022	Min 2022	Max 2022	Average 2022	31.12.2021	Min 2021	Max 2021	Average 2021
Portfolio	43	42	53	48	50	42	56	47

Risk measured as expected volatility indicates an expected annual fluctuation in the value of the fund of 9.6 percent, or approximately NOK 1 120 billion at the end of the first half, compared to 10.3 percent at year-end 2021. Expected volatility for the equity portfolio was 13.8 percent at the end of the first half, down from 14.1 percent at year-end, while expected volatility for the bond portfolio was 10.8 percent, compared to 10.1 percent at year-end.

The fund's expected relative volatility was 43 basis points at the end of the first half, compared to 50 basis points at year-end 2021. The decrease in the first half is primarily due to changes in exposures.

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. At the end of the first half, expected shortfall was 1.37 percentage points, compared to 1.52 percentage points at year-end 2021.

Credit risk

Credit risk is the risk of losses resulting from issuers of bonds defaulting on their payment obligations. Credit risk for the bond portfolio is monitored, among other things, through the use of credit ratings. Fixed-income instruments in the portfolio's benchmark index are all rated investment grade by one of the major credit rating agencies.

Table 9.4 Bond portfolio specified by credit rating

Amounts in NOK million, 30.06.2022	AAA	AA	А	BBB	Lower rating	Total
Government bonds	1 187 312	163 279	394 314	65 238	24 375	1 834 517
Government-related bonds	166 983	140 900	55 032	16 631	2 186	381 732
Inflation-linked bonds	144 257	51 714	7 839	14 705	-	218 515
Corporate bonds	7 231	53 774	338 490	372 596	13 258	785 348
Securitised bonds	191 601	32 665	1 769	208	_	226 243
Total bonds	1 697 382	442 332	797 443	469 379	39 820	3 446 355

Amounts in NOK million, 31.12.2021	AAA	AA	А	BBB	Lower rating	Total
Government bonds	1 186 701	183 432	443 812	78 790	22 113	1 914 848
Government-related bonds	163 648	131 307	57 669	13 485	1 731	367 840
Inflation-linked bonds	132 701	45 525	6 321	11 027	305	195 879
Corporate bonds	6 433	52 623	303 970	372 433	12 930	748 389
Securitised bonds	162 060	27 641	1 585	661	-	191 948
Total bonds	1 651 543	440 528	813 357	476 397	37 078	3 418 903

The share of bond holdings with credit rating AAA increased to 49.3 percent at the end of the first half, from 48.3 percent at year-end 2021. The increase in the AAA category is primarily due to increased holdings of securitised bonds. At the same time, the share of bond holdings with credit rating A fell to 23.1 percent at the end of the first half, from 23.8 percent at year-end. This is mainly due to reduced holdings of government bonds. The share of bond holdings in the Lower rating category increased to 1.2 percent at the end of

the first half, from 1.1 percent at year-end. This is mainly due to a small increase in holdings of government bonds in this category. Overall, the credit quality of the bond portfolio has improved slightly since year-end.

Counterparty risk

Counterparty risk is the risk of loss due to counterparty bankruptcy or other events leading to counterparties defaulting.

 Table 9.5
 Counterparty risk by type of position

	Risk ex	posure
Amounts in NOK million	30.06.2022	31.12.2021
Securities lending	69 991	68 494
Derivatives including foreign exchange contracts	56 647	61 144
Unsecured bank deposits ¹ and securities	32 910	18 072
Repurchase and reverse repurchase agreements	5 747	7 459
Settlement risk towards brokers and long-settlement transactions	10 213	93
Total	175 509	155 262

¹ Includes bank deposits in non-consolidated subsidiaries.

Total counterparty risk exposure increased to NOK 175.5 billion at the end of the first half, from NOK 155.3 billion at year-end 2021. The increase in risk exposure is mainly due to higher unsecured bank deposits as well as higher risk exposure from settlement risk related to foreign exchange

transactions. Counterparty risk exposure from securities lending accounted for 40 percent of the fund's total counterparty risk exposure at the end of the first half. Both shares and bonds are lent out through the securities lending programme.

Note 10 Foreign exchange gains and losses

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 an estimate. Different methods may result in different allocations. For further information on the method used, see note 11 Foreign exchange gains and losses in the annual report for 2021.

The market value of the fund in Norwegian kroner is impacted by changes in foreign exchange rates. See table 9.1 in note 9 Investment risk for an overview of the allocation of the GPFG's investments per asset class, country and currency. 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	1H 2022	1H 2021	2021
Foreign exchange gain/loss – USD/NOK	474 222	20 021	104 202
Foreign exchange gain/loss – EUR/NOK	60 803	-45 439	-77 636
Foreign exchange gain/loss – JPY/NOK	-34 894	-46 279	-55 115
Foreign exchange gain/loss – GBP/NOK	2 140	10 080	13 272
Foreign exchange gain/loss – CHF/NOK	18 980	-10 777	-643
Foreign exchange gain/loss – other	121 087	-6 311	-8 668
Foreign exchange gain/loss	642 339	-78 706	-24 589

Note 11 Management costs

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, exclusively established as part of the management of the GPFG's investments in unlisted real estate and unlisted renewable energy infrastructure.

Management costs in Norges Bank

The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the GPFG, in the form of a management fee. The management fee is equivalent to the actual costs incurred by Norges Bank, including performance-based fees to external managers, and is expensed in the income statement line Management fee. Costs included in the management fee are specified in table 11.1.

Table 11.1 Management fee

	1H 2022		1H 2021		2021	
Amounts in NOK million		Basis points		Basis points		Basis points
Salary, social security and other personnel-related costs ¹	770		672		1 102	
Custody costs	242		251		468	
IT services, systems, data and information	311		291		591	
Research, consulting and legal fees	137		97		210	
Other costs	117		125		232	
Allocated costs Norges Bank	153		152		301	
Base fees to external managers	567		525		896	
Management fee excluding performance-based fees	2 297	3.7	2 113	3.7	3 801	3.3
Performance-based fees to external managers	483		554		840	
Management fee	2 780	4.8	2 668	4.6	4 640	4.0

^{1 2021} costs are reduced by NOK 265 million, due to a one-off accounting adjustment following a change in the method for accruing performance-based pay.

Management costs in subsidiaries

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

Management costs incurred in non-consolidated subsidiaries are presented in the income statement lines Income/expense from unlisted real estate and Income/expense from unlisted infrastructure. Management costs incurred in consolidated subsidiaries are presented in the income statement line Other income/expense. These costs are specified in table 11.2.

Table 11.2 Management costs subsidiaries

	1 H 2022		1 H 2021		2021	
Amounts in NOK million		Basis points		Basis points		Basis points
Salary, social security and other personnel-related costs	15		15		29	
IT services, systems, data and information	2		2		5	
Research, consulting and legal fees	15		16		38	
Other costs	23		19		41	
Total management costs subsidiaries	55	0.1	52	0.1	113	0.1
Of which management costs non-consolidated subsidiaries	35		31		69	
Of which management costs consolidated subsidiaries	19		22		43	

Upper limit for reimbursement of management costs

Every year the Ministry of Finance establishes an upper limit for the reimbursement of management costs. Norges Bank is only reimbursed for costs incurred within this limit. Norges Bank is also reimbursed for performance-based fees to external managers. These fees are not measured against the upper limit.

For 2022, total management costs incurred in Norges Bank and its subsidiaries, excluding performance-based fees to external managers, are limited to NOK 5 600 million.

At the end of the first half, management costs measured against the upper limit amounted to NOK 2 352 million. This consists of management costs in Norges Bank, excluding performance-based fees to external managers, of NOK 2 297 million and management costs in subsidiaries of NOK 55 million. Management costs including performance-based fees to external managers amounted to NOK 2 835 million.

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.

Management costs incurred in Norges Bank and its subsidiaries in the first half, excluding performance-based fees to external managers, corresponded to 3.8 basis points of assets under management. Management costs including performance-based fees to external managers corresponded to 4.9 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 the investments. These are not costs related to investing in real estate or renewable energy infrastructure but are costs of operating the underlying investments once they are acquired. Therefore, they are not defined as management costs. Other operating costs are expensed directly in the portfolio result and are not part of the management fee. They are also not included in the costs measured against the upper limit.

Other operating costs incurred in non-consolidated subsidiaries are presented in the income statement lines Income/expense from unlisted real estate and Income/expense from unlisted infrastructure. See table 6.4 in note 6 Unlisted real estate and table 7.4 in note 7 Unlisted renewable energy infrastructure for further information. Other operating costs incurred in consolidated subsidiaries are presented in the income statement line Other income/expense.

Auditor's report

To the Supervisory Council of Norges Bank

Report on review of interim financial information

Introduction

We have reviewed the balance sheet of the Government Pension Fund Global as of 30 June 2022 and the related income statement, statement of changes in owner's capital and statement of cash flows for the six-month period then ended. The Executive Board and management are responsible for the preparation and presentation of this interim financial information in accordance with IAS 34 Interim Financial Reporting. Our responsibility is to express a conclusion on this interim financial information based on our review.

Scope of review

We conducted our review in accordance with the international standard on review engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity". A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial information is not prepared, in all material respects, in accordance with IAS 34 Interim Financial Reporting.

Oslo, 11 August 2022 Ernst & Young AS

Kjetil Rimstad

State Authorised Public Accountant (Norway)

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