



NORGES BANK
INVESTMENT MANAGEMENT

NORGES BANK INVESTMENT MANAGEMENT PERFORMANCE RESULTS

GIPS REPORT

31 DECEMBER 1997 THROUGH 31 DECEMBER 2017

Norges Bank Investment Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Norges Bank Investment Management has been independently verified for the periods 31 December 1997 through 31 December 2017. The verification reports are available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

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General disclosures

Verification

Norges Bank Investment Management has been independently verified for the period 31 December 1997 through 31 December 2017. The third party verifier's report is available on our website www.nbim.no.

The firm

Norges Bank Investment Management, as the firm, is the asset management unit of the Norwegian central bank (Norges Bank). Norges Bank Investment Management manages the Government Pension Fund Global (Pension Fund) and the equity investments of Norges Bank's foreign exchange reserves (Reserves Fund, equity).

Firm assets

Firm assets represent all assets for which Norges Bank Investment Management has management responsibility. As of year-end 2017 this is the sum of the Government Pension Fund Global and the equity investments of Norges Bank's foreign exchange reserves.

The fixed income investments of Norges Bank's long-term portfolio of foreign exchange reserves were transferred to Norges Bank Markets and ICT division on 30 November 2016 and is no longer part of the firm's managed assets.

Minimum asset level

Norges Bank Investment Management does not operate with a minimum asset level for portfolios to be included in a composite. All portfolios are accounted for in at least one composite.

Calculation methodology

Norges Bank Investment Management implements a time-weighted monthly rate of return methodology in the return calculations. The assets' fair values are determined on the day of an external cash flow and interim returns are geometrically linked. Norges Bank Investment Management has not adopted a significant cash flow policy. All composite returns are calculated net of non-reclaimable withholding taxes on dividend, interest and capital gains. Withholding taxes are recognised when incurred. Norges Bank Investment Management uses accrual accounting for interest income and dividends. Securities lending income is included in the portfolio return.

Assets and liabilities are reported on a fair value basis and in Norwegian kroner (NOK). Fair value is the estimated realisable value of an asset or the estimated cost of settling a liability in an arm's length transaction between well-informed and willing parties. The sources of valuation and pricing follow Norges Bank Investment Management's valuation hierarchy, which is aligned with the GIPS standards' recommendations.

For the Pension Fund's composites, investment performance is reported in terms of an international currency basket corresponding to the currency composition of the Pension Fund's benchmark. This measure reflects the

actual performance of the fund in purchasing-power terms, and eliminates the effect of Norwegian kroner fluctuations versus the currencies in which the Pension Fund's benchmark is invested. Currency movements in Norwegian kroner do not affect the international purchasing power of the fund.

The investment performance of the Reserves Fund, equity, composite is reported in Norwegian kroner, in accordance with the reporting requirements from Norges Bank.

Carve-outs

In addition to the Pension Fund in aggregated composites, we present what constitute two types of carve-outs; the traditional composites are carve-outs from the Pension Fund along the conventional investment asset class definitions equity, fixed income and real estate.

Starting with mandate as of January 2017, however, we present a set of composites that represents how NBIM has organised the asset management in three investment areas equity management, fixed income management and real estate management.

For the fixed income management the composite assets are identical to the traditional composite, and we present the composite versus the corresponding benchmarks. For equity and real estate the difference in composite assets is the classification of the listed real estate holdings managed together with the unlisted real estate in the overall real estate strategy.

All assets managed by the firm are represented in one or more composite. Each composite holds its own cash balance.

The unlisted real estate composite is a carve-out of the Pension Fund's real estate composite. In 2017, listed real estate investments were transferred over to the equity asset class, leaving only unlisted real estate investments in the real estate composite. As a consequence, from 2017 the unlisted real estate composite is identical to the Pension Fund's real estate composite. The real estate management composite included both listed and unlisted real estate since November 2014 and represent the overall Pension Fund real estate strategy.

Additional information

A list of composite descriptions and additional information regarding policies for valuing portfolios, calculating performance, and preparing compliant presentations is available upon request.

A large part of the information is available on our website www.nbim.no.

Performance results: Government Pension Fund Global 31 December 1997 – 31 December 2017

NORGES BANK
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PERFORMANCE RESULTS

Report presented as of: 31 December 2017

Reported assets currency: Norwegian kroner

Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Composite Assets ⁵	Firm Assets ⁵
1998	9.26					1	171,832	279,205
1999	12.44					1	222,408	340,855
2000	2.49			5.68		1	386,450	522,544
2001	-2.47			5.89		1	613,686	739,116
2002	-4.74			5.91		1	609,007	743,670
2003	12.59			6.27		1	845,306	1,044,264
2004	8.94			5.33		1	1,016,402	1,236,653
2005	11.09			4.00		1	1,399,050	1,648,874
2006	7.92			3.36		1	1,783,683	2,047,074
2007	4.26			3.60		1	2 018,643	2,261,368
2008	-23.31			9.39		1	2,275,426	2,498,961
2009	25.62			12.27		1	2,640,043	2,851,020
2010	9.62			13.30		1	3 077,420	3,317,700
2011	-2.54			10.52		1	3,311,572	3,539,396
2012	13.42			8.24		1	3,815 769	4,043,153
2013	15.95			7.24		1	5,037,734	5,311,043
2014	7.58			5.72		1	6,430,739	6,778,049
2015	2.74			6.68		1	7,475 153	7,886,255
2016	6.92			6.54		1	7,510 494	7,687,711
2017	13.66	12.96	0.70	6.22		1	8,488,455	8,672,176

Notes:

¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.

² Returns are gross-of-fees and stated in percent. Relative return is supplemental information.

³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns. The measure is not provided for the benchmark, since only 12 months of data are available for it.

⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.

⁵ Assets are stated in millions of Norwegian kroner.

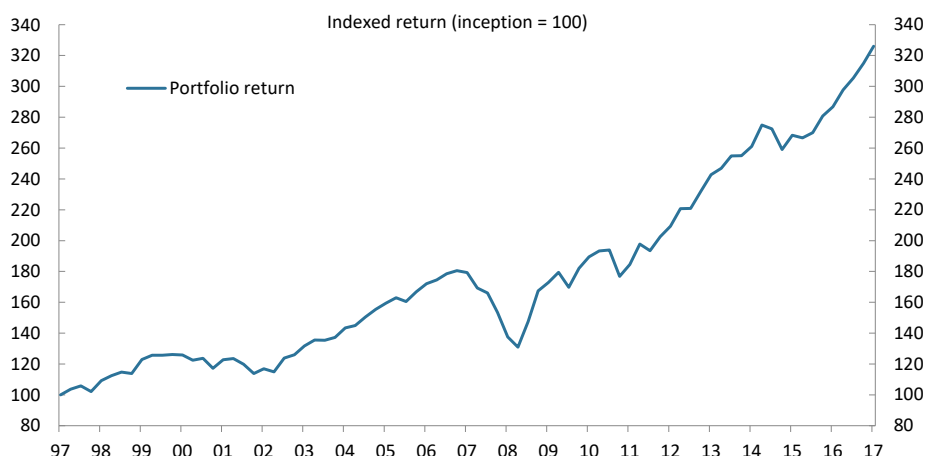
	3 Years	5 Years	10 Years	Since inception
Composite return ¹	7.68	9.26	6.16	6.09
Standard deviation of composite return ²	6.22	5.90	9.02	7.33
Sharpe ratio ³	1.17	1.50	0.68	0.59

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent.

² Ex-post standard deviation in percent using monthly returns.

³ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.



Composite creation date and inception date

The composite inception date and the composite creation date of the Government Pension Fund Global are both 31 December 1997.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global composite contains only this portfolio. The fund is invested in three asset classes: equities, fixed income and real estate. At year-end 2017, the strategic weights for the benchmark assigned by the Ministry of Finance were 62.5 percent equity and 37.5 percent fixed income. It is now at Norges Bank Investment Management's discretion to decide whether and how much to invest in unlisted real estate, within a limit of 7 percent of the fund.

In the period June 2009 to December 2016, the strategic weights were 60 percent equity and 40 percent fixed income, with real estate investments, when introduced in 2011, gradually reducing the fixed income weight according to their market value. Before June 2009, the strategic weights were 40 percent equity and 60 percent fixed income.

Norges Bank Investment Management seeks to achieve the highest possible return after costs measured in the Pension Fund's currency basket and within the applicable management framework. The Ministry of Finance has set limits for how much risk Norges Bank Investment Management may take in its active management of the Pension Fund. The management shall be organised with the aim that the expected annualised standard deviation for the relative return of the Pension Fund and the associated benchmark index (expected tracking error) does not exceed 1.25 percentage points. This level was increased from 1.00 percentage point on 1 February 2016.

The fund is not allowed to invest in companies that Norges Bank has excluded from the investment universe and further not in securities issued by a Norwegian enterprise, securities denominated in Norwegian kroner, real estate located in Norway or real estate companies, real estate funds or similar structures where the primary purpose is to invest in Norway. Accrued

costs and deposits on real estate are included in the composite's assets and firm assets prior to inception of real estate 31 March 2011.

From the second quarter of 2000 and up to the fourth quarter of 2002, a tactical allocation fund was included in the numbers for the Government Pension Fund Global, but not at asset class level. Its mandate was to invest across asset classes using quantitative analysis, and it had average total assets under management of around 4 billion Norwegian kroner during that period.

Derivatives, leverage and short positions

Norges Bank Investment Management's access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Ministry of Finance.

Specifically, financial derivatives that are naturally linked to investments in the equity, bond and real estate portfolios may be used. In accordance with the investment mandate, the Pension Fund may use exchange traded future and option contracts, and over-the-counter (OTC) derivative contracts, e.g. interest-rate swaps, in order to achieve the lowest possible transaction cost and to efficiently rebalance the portfolio. The segmented net fair values and exposure of the financial derivatives for the last two years are shown in the table below.

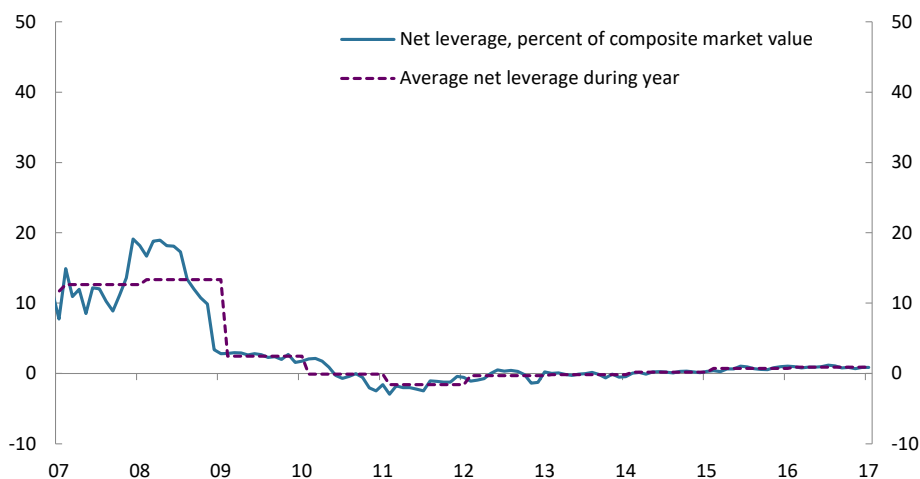
Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Foreign exchange contracts	191,920	-	177,456	-	-1,809	2,591
Exchange traded futures	7,636	11,898	13,795	19,729	-	-
Interest-rate swaps	8,221	26,649	2,814	36,392	73	-1,978
Warrants and rights	332	-	396	-	132	319
Participatory certificates	5,448	-	3,147	-	6,801	3,933
Contracts for difference	22,969	24,591	5,403	846	2	-

Figures in millions of Norwegian kroner.

Foreign exchange contracts consist of foreign currency exchange contracts with normal settlement for future delivery and non-deliverable contracts. Exchange traded futures consist of equity index futures and listed government bonds futures. Interest-rate swaps are agreements where the fund receives or pays a fixed rate of interest in exchange for a floating rate. Warrants and rights are options to buy a stock at an agreed price within a certain timeframe. Participatory certificates are instruments issued to international investors by registered foreign institutional investors to acquire an economic interest in listed shares. Contracts for difference are agreements where two counterparties exchange cash flows based on changes in the value of an underlying equity or index.

Leverage may be used with a view to performing the management task in an effective manner, but not with a view to increasing the investment portfolio's exposure to risky assets in the equity and bond portfolio. More specifically, leveraging the equity and fixed-income portfolio is not permitted beyond what is necessary to minimise transaction costs or is a normal part of investment management, and not in excess of 5 percent of the net asset value of the combined equity and fixed-income portfolios. For the unlisted real estate portfolio, the maximum allowed debt ratio is 35 percent, equating to a net leverage level of 54 percent for that portfolio. The debt ratio of the unlisted real estate portfolio was 7.1 percent of total real estate assets at the end of 2017. Due to the composite's limited asset allocation to unlisted real estate, the debt on the balance sheet currently has an immaterial impact on the leverage of the total fund.

The use of leverage was scaled back in the second half of 2009 due to changes in market conditions and a reorganisation of Norges Bank Investment Management's fixed-income management. Historically, leverage has predominantly been used within the fixed-income composite to exploit differences in rates or credit spreads by combining derivatives, forward contracts and repurchase agreements. Within the equity segment, leverage is mainly used to efficiently handle fund management activities and has historically been insignificant. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.

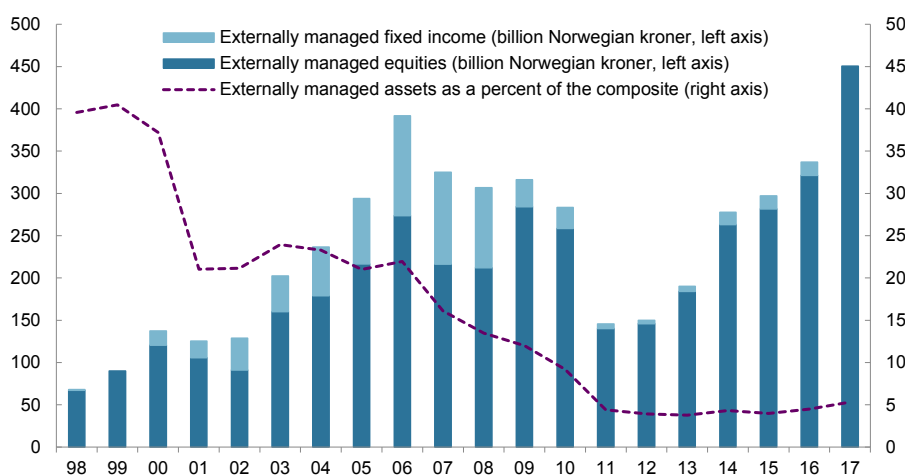


Short positions are permitted in the management of the Pension Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions are laid down as part of the CEO investment mandate issued by Norges Bank's Executive Board. The current use of short positions in the composite's portfolio is immaterial.

Sub-advisors

Norges Bank Investment Management uses external investment managers to handle parts of the portfolio. Norges Bank Investment Management

awards management mandates to organisations with expertise in clearly defined sectors, countries or regions. The fund's externally managed mandates had assets under management worth 451 billion Norwegian kroner at the end of 2017. This is equivalent to approximately 5.3 percent of the composite's total value. There was a total of 92 external mandates, all equity, managed by 81 different investment managers as at year-end 2017. The graph below shows the composition of externally managed assets at year-end since inception as well as a share of the total Pension Fund. The complete list of organisations managing assets on behalf of Norges Bank Investment Management is available on our website www.nbim.no.



Benchmark description

The management mandate issued by the Ministry of Finance was updated effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017. For prior periods, no benchmark returns are presented, as no appropriate benchmark had previously been assigned to the real estate portion of the fund. Any benchmark for the total portfolio would exclude this asset class, therefore none had been deemed appropriate.

The equity part of the strategic benchmark index is composed on the basis of the FTSE Global All Cap Index. The benchmark is market capitalisation weighted with an additional layer of country factors applied to it. The equities in the benchmark index are assigned the following factors based on their country of origin: European developed markets excluding Norway 2.5, USA and Canada 1, other developed markets 1.5 and emerging markets 1.5. The allocation to countries and regions and the distinction between developed and emerging markets are based on the FTSE Global All Cap Index. The benchmark is adjusted for the Norges Bank's tax position on dividends. Securities issued by companies excluded by Norges Bank pursuant to the guidelines for observation and exclusion from the Government Pension Fund Global are not included in the benchmark index for the equity portfolio. At year-end the equity benchmark consisted of 46 countries and more than 7,600 securities.

The fixed-income part of the strategic benchmark index consists of 70 percent government debt (nominal and inflation-linked government bonds, and including bonds issued by supranational organisations) and 30 percent corporate debt (corporate bonds, including covered bonds). The index consists of the Bloomberg Barclays Global Treasury, GDP weighted by country, the Bloomberg Barclays Global Inflation-Linked index (Series L), and the subgroup Supranational (within government related) in the Bloomberg Barclays Global Aggregate bond index for the government sector and all corporate bonds and sub group covered bonds within Bloomberg Barclays Global Aggregate limited to the currencies US dollars, Canadian dollars, euros, British pounds, Swedish kronor, Danish kroner and Swiss francs. The Bloomberg Barclays indices are not adjusted for withholding tax, but are adjusted for excluded companies/issuers. At year-end the benchmark consisted of 22 currencies and more than 13,000 securities.

The actual weights of the benchmark as at 31 December 2017 can be seen below.

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Asset class weights	67.1	32.9
USA (USD)	36.08	44.61
Canada (CAD)	2.25	3.10
Brazil	0.87	
Mexico (MXN)	0.35	1.66
Chile (CLP)	0.15	0.09
Colombia	0.05	
Peru	0.04	
Total Americas	39.79	49.47
Germany	5.57	
France	5.28	
Netherlands	1.98	
Spain	1.88	
Italy	1.60	
Belgium	0.71	
Finland	0.63	
Austria	0.22	
Ireland	0.16	
Portugal	0.12	
Greece	0.05	
<i>Euro-area (EUR)</i>	<i>18.20</i>	<i>26.76</i>
United Kingdom (GBP)	9.97	5.63
Switzerland (CHF)	4.65	1.46
Sweden (SEK)	1.78	1.07
Denmark (DKK)	1.07	0.58
Russia (RUB)	0.39	0.53
Poland (PLN)	0.15	0.72
Turkey	0.14	

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Hungary (HUF)	0.04	0.19
Czech Republic (CZK)	0.01	0.29
Total Europe	36.41	37.22
Japan (JPY)	9.05	7.01
China	3.08	
Australia (AUD)	2.51	1.90
South Korea (KRW)	1.88	2.07
Taiwan	1.63	
Hong Kong (HKD)	1.31	0.12
India	1.26	
Singapore (SGD)	0.50	0.44
Thailand (THB)	0.43	0.60
Malaysia (MYR)	0.32	0.45
Indonesia	0.26	
Philippines	0.17	
New Zealand (NZD)	0.12	0.27
Pakistan	0.03	
Total Asia / Oceania	22.55	12.85
South Africa	0.90	
Israel (ILS)	0.17	0.46
United Arab Emirates	0.10	
Qatar	0.07	
Egypt	0.02	
Total Middle East and Africa	1.25	0.46

Figures in percent.

Benchmark rebalancing

The actual benchmark weights may differ from the strategic benchmark weights due to the price movements in the market. For example, a stronger increase in equity prices will push the equity portion above its strategic weight. As a result, the actual benchmark portfolio may deviate from the strategic long-term benchmark portfolio. Inflows and outflows are determined based on asset class weight in the actual benchmark.

The Ministry of Finance has set rules for full rebalancing back to the strategic weights. These rules specify the maximum permitted deviation between the weights in the actual benchmark portfolio and the strategic benchmark portfolio before the benchmark must be rebalanced back to strategic weights. If the equity share in the actual benchmark index exceeds 74 per cent, or is more than four percentage points lower than the weight in the strategic benchmark index, rebalancing shall take place on the last trading day of the following month. The Ministry sets more detailed provisions on the rebalancing of the actual benchmark index.

Portfolio rebalancing

Inflows and outflows to the portfolio are treated independently of the benchmark. The portfolio is rebalanced independently of the benchmark, but is governed by the tracking error limits.

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. The management expense ratio was 6 basis points for 2017, up from 5 basis points in 2016. The table below shows the different components of the total management costs. Note that this table also covers internal costs (e.g. personnel costs, IT/support systems costs) in relation to real estate investment management, but not direct costs incurred in the real estate holdings structure.

Management costs	2017		2016	
	Amount	Percent	Amount	Percent
Custody and settlement costs	404		379	
Minimum fees to external managers	755		638	
Performance based fees to external managers	924		222	
Internal and other costs	2,646		2,492	
Total management costs	4,728	0.06	3,731	0.05
Total management cost excl. performance based fees	3,804	0.05	3,509	0.05

Amounts stated in millions of Norwegian kroner.

Performance results: Government Pension Fund Global
(ex. real estate until end of 2016)
31 December 1997 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Composite Assets ⁵	Firm Assets ⁵
1998	9.26	9.08	0.18			1	171,832	279,205
1999	12.44	11.21	1.23			1	222,408	340,855
2000	2.49	2.22	0.27	5.68	5.59	1	386,450	522,544
2001	-2.47	-2.62	0.15	5.89	5.72	1	613,686	739,116
2002	-4.74	-5.04	0.30	5.91	5.82	1	609,007	743,670
2003	12.59	12.04	0.55	6.27	6.18	1	845,306	1,044,264
2004	8.94	8.39	0.54	5.33	5.31	1	1,016,402	1,236,653
2005	11.09	10.03	1.06	4.00	3.92	1	1,399,050	1,648,874
2006	7.92	7.78	0.14	3.36	3.18	1	1,783,683	2,047,074
2007	4.26	4.50	-0.24	3.60	3.30	1	2,018,643	2,261,368
2008	-23.31	-19.93	-3.37	9.39	8.41	1	2,275,426	2,498,961
2009	25.62	21.49	4.13	12.27	11.04	1	2,640,043	2,851,020
2010	9.62	8.57	1.06	13.30	12.13	1	3,077,441	3,317,700
2011	-2.55	-2.42	-0.13	10.53	9.96	1	3,300,444	3,539,396
2012	13.45	13.24	0.21	8.25	8.05	1	3,790,646	4,043,153
2013	15.97	14.98	0.99	7.27	7.11	1	4,985,940	5,311,043
2014	7.53	8.30	-0.77	5.76	5.62	1	6,289,870	6,778,049
2015	2.52	2.07	0.45	6.80	6.68	1	7,239,955	7,886,255
2016	7.12	6.97	0.15	6.67	6.55	1	7,268,738	7,687,711
2017	13.66	12.96	0.70	6.33	6.25	1	8,488,455	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	7.67	9.25	6.16	6.09
Benchmark return ¹	7.24	8.96	6.01	5.81
Relative return ¹	0.43	0.29	0.15	0.28
Standard deviation of composite return ²	6.33	6.00	9.05	7.35
Standard deviation of benchmark return ²	6.25	5.89	8.48	6.95
Tracking error ³	0.33	0.38	0.89	0.69
Information ratio ⁴	1.22	0.73	0.22	0.42
Composite Sharpe ratio ⁵	1.15	1.48	0.68	0.59
Benchmark Sharpe ratio ⁵	1.10	1.46	0.70	0.58
Jensen's alpha ⁶	0.32	0.13	-0.19	0.08
Appraisal ratio ⁷	0.98	0.36	-0.27	0.14

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent. Relative return is supplemental information.

² Ex-post standard deviation in percent using monthly returns.

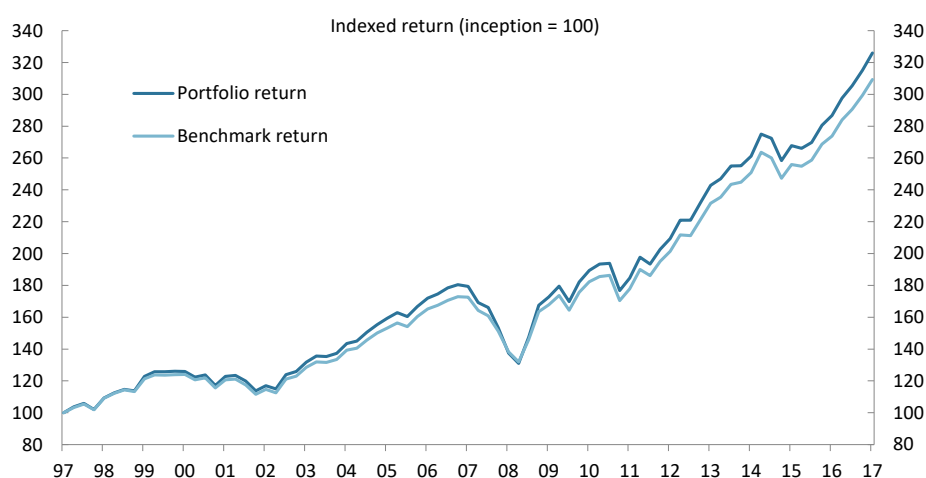
³ Ex-post standard deviation of monthly relative returns.

⁴ Average relative return divided by the tracking error.

⁵ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.

⁶ Average return in excess of the risk-free rate minus beta-adjusted benchmark excess return.

⁷ Jensen's alpha divided by the standard deviation of the residuals of the CAPM regression.



Composite name change

As of 1 January 2017, the Government Pension Fund Global, ex real estate composite has been renamed the Government Pension Fund Global (ex. real estate until end of 2016) composite.

Composite creation date and inception date

The composite inception date and the composite creation date of the Government Pension Fund Global (ex. real estate until end of 2016) are both 31 December 1997.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global (ex. real estate until end of 2016) composite is for 2017 the same as the Government

Pension Fund Global composite. The fund is invested in three asset classes: equities, fixed income and real estate. However, before 2017 it excluded the real estate investments because those investments were not part of the assets that were compared with the benchmark assigned by the Ministry of Finance. Since 1 January 2017, all the fund's investments, including the real estate investments, are measured against the assigned equity and fixed-income benchmark and the strategic weights for the benchmark assigned by the Ministry of Finance were amended to 62.5 percent equity and 37.5 percent fixed income. It is now at Norges Bank Investment Management's discretion to decide whether and how much to invest in unlisted real estate, within a limit of 7 percent of the fund.

In the period June 2009 to December 2016, the strategic weights were 60 percent equity and 40 percent fixed income, with real estate investments, when introduced in 2011, gradually reducing the fixed income weight according to their market value. Before June 2009, the strategic weights were 40 percent equity and 60 percent fixed income.

Norges Bank Investment Management seeks to achieve the highest possible return after costs measured in the Pension Fund's currency basket and within the applicable management framework. The Ministry of Finance has, however, set limits for how much risk Norges Bank Investment Management may take in its active management of the Pension Fund. The management shall be organised with the aim that the expected annualised standard deviation for the relative return between the Pension Fund and the associated benchmark index (expected tracking error) does not exceed 1.25 percentage points. This level was increased from 1.00 percentage point on February 1, 2016.

The fund is not allowed to invest in companies that Norges Bank has excluded from the investment universe and further not in securities issued by a Norwegian enterprise, securities denominated in Norwegian kroner, real estate located in Norway or real estate companies, real estate funds or similar structures where the primary purpose is to invest in Norway.

From the second quarter of 2000 and up to the fourth quarter of 2002, a tactical allocation fund was included in the numbers for the Government Pension Fund Global (ex. real estate until end of 2016) composite, but not at asset class level. Its mandate was to invest across asset classes using quantitative analysis, and it had average total assets under management of around 4 billion Norwegian kroner during that period.

Derivatives, leverage and short positions

Norges Bank Investment Management's access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Ministry of Finance. Specifically, financial derivatives that are naturally linked to investments in the equity and bond portfolio may be used. In accordance with the investment mandate, the Pension Fund may use exchange traded future and option contracts and over-the-counter (OTC) derivative contracts, e.g. interest-rate swaps, in order to achieve the lowest possible transaction cost, and to efficiently rebalance the portfolio. The segmented net fair values and expo-

sure of the financial derivatives for the last two years are shown in the table below.

Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Foreign exchange contracts	191,920	-	177,456	-	-1,809	2,591
Exchange traded futures	7,636	11,898	13,795	19,729	-	-
Interest-rate swaps	8,221	26,649	2,814	36,392	73	-1,978
Warrants and rights	332	-	396	-	132	319
Participatory certificates	5,448	-	3,147	-	6,801	3,933
Contracts for difference	22,969	24,591	5,403	846	2	-

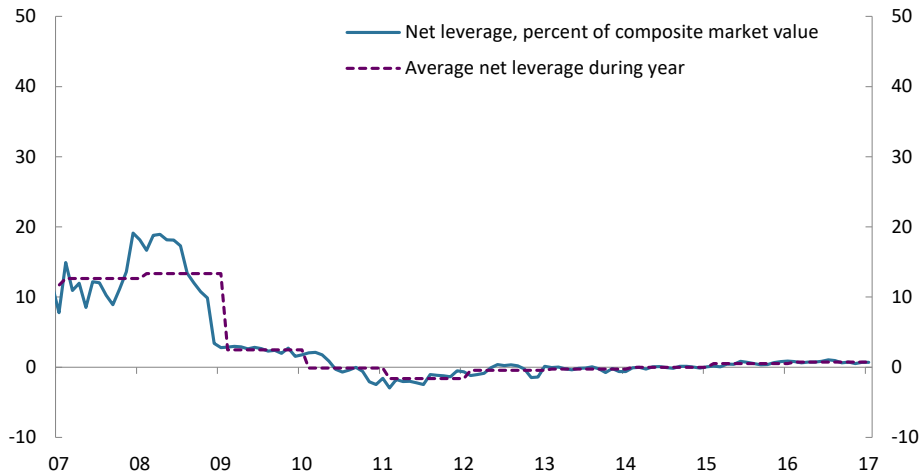
Figures in millions of Norwegian kroner.

Foreign exchange contracts consist of foreign currency exchange contracts with normal settlement for future delivery and non-deliverable contracts. Exchange traded futures consist of equity index futures and listed government bonds futures. Interest-rate swaps are agreements where the fund receives or pays a fixed rate of interest in exchange for a floating rate. Warrants and rights are options to buy a stock at an agreed price within a certain timeframe. Participatory certificates are instruments issued to international investors by registered foreign institutional investors to acquire an economic interest in listed shares. Contracts for difference are agreements where two counterparties exchange cash flows based on changes in the value of an underlying equity or index.

Leverage may be used with a view to performing the management task in an effective manner, but not with a view to increasing the investment portfolio's exposure to risky assets in the equity and bond portfolio. More specifically, leveraging the equity and fixed-income portfolio is not permitted beyond what is necessary to minimise transaction costs or is a normal part of investment management, and not in excess of 5 percent of the net asset value of the combined equity and fixed-income portfolios. For the unlisted real estate portfolio, the maximum allowed debt ratio is 35 percent, equating to a net leverage level of 54 percent for that portfolio. The debt ratio of the unlisted real estate portfolio was 7.1 percent of total real estate assets at the end of 2017. Due to the composite's limited asset allocation to unlisted real estate, the debt on the balance sheet currently has an immaterial impact on the leverage of the total fund.

The use of leverage was scaled back in the second half of 2009 due to changes in market conditions and a reorganisation of Norges Bank Investment Management's fixed-income management. Historically, leverage has predominantly been used within the fixed-income composite to exploit differences in rates or credit spreads by combining derivatives, forward contracts and repurchase agreements. Within the equity segment leverage is mainly used to efficiently handle fund management activities and has histori-

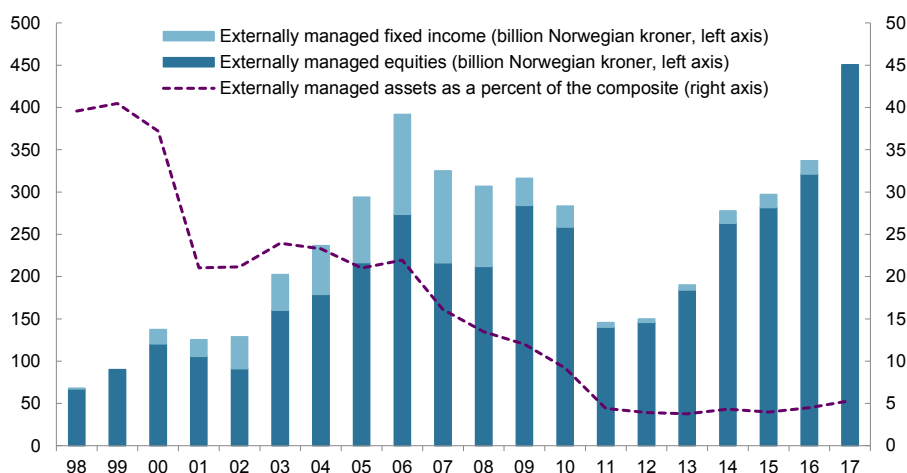
cally been insignificant. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Short positions are permitted in the management of the Pension Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions are laid down as part of the CEO investment mandate issued by Norges Bank's Executive Board. The current use of short positions in the composite's portfolio are immaterial.

Sub-advisors

Norges Bank Investment Management uses external investment managers to handle parts of the portfolio. Norges Bank Investment Management awards management mandates to organisations with expertise in clearly defined sectors, countries and/or regions. The fund's externally managed mandates had assets under management worth 451 billion Norwegian kroner at the end of 2017. This is equivalent to 5.3 percent of the composite's total value. There were a total of 92 external mandates, all equity, managed by 81 different investment managers as at year-end 2017. The graph below shows the composition of externally managed assets at year-end since inception as well as a share of the total Pension Fund. The complete list of organisations managing assets on behalf of Norges Bank Investment Management is available on our website www.nbim.no.



Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017.

The equity part of the strategic benchmark index is composed on the basis of the FTSE Global All Cap Index. The benchmark is market capitalisation weighted with an additional layer of country factors applied to it. The equities in the benchmark index are assigned the following factors based on their country of origin: European developed markets excluding Norway 2.5, USA and Canada 1, other developed markets 1.5 and emerging markets 1.5. The allocation to countries and regions and the distinction between developed and emerging markets are based on the FTSE Global All Cap Index. The benchmark is adjusted for the Norges Bank's tax position on dividends. Securities issued by companies excluded by Norges Bank pursuant to the guidelines for observation and exclusion from the Government Pension Fund Global are not included in the benchmark index for the equity portfolio. At year-end the equity benchmark consisted of 46 countries and more than 7,600 securities.

The fixed-income part of the strategic benchmark index consists of 70 percent government debt (nominal and inflation-linked government bonds, and including bonds issued by supranational organisations) and 30 percent corporate debt (corporate bonds, including covered bonds). The index consists of the Bloomberg Barclays Global Treasury, GDP weighted by country, the Bloomberg Barclays Global Inflation-Linked index (Series L), and the subgroup Supranational (within government related) in the Bloomberg Barclays Global Aggregate bond index for the government sector and all corporate bonds and sub group covered bonds within Bloomberg Barclays Global Aggregate limited to the currencies US dollars, Canadian dollars, euros, British pounds, Swedish kronor, Danish kroner and Swiss francs. The Bloomberg Barclays indices are not adjusted for withholding tax, but are adjusted for excluded companies/issuers. At year-end the benchmark consisted of 22 currencies and more than 13,000 securities.

In the operational management of the fund, to ensure an overall risk management of the fund, the listed and unlisted real estate investments are assigned benchmarks with a combination of bonds and equities from the overall GPFG benchmarks tailor-made to the actual currency composition and characteristics of the real estate investments. The remaining investments are assigned benchmarks where the actual composition of the unlisted and listed real estate benchmark are adjusted from the actual benchmark.

Prior to 2017, the composite Government Pension Fund Global (ex. real estate until end of 2016) was measured versus a strategic benchmark index with weights of 60 percent on equities and 40 percent on fixed income.

The actual weights of the benchmark as at 31 December 2017 is shown below together with historical strategic changes to the benchmark.

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Asset class weights	67.1	32.9
USA (USD)	36.08	44.61
Canada (CAD)	2.25	3.10
Brazil	0.87	
Mexico (MXN)	0.35	1.66
Chile (CLP)	0.15	0.09
Colombia	0.05	
Peru	0.04	
Total Americas	39.79	49.47
Germany	5.57	
France	5.28	
Netherlands	1.98	
Spain	1.88	
Italy	1.60	
Belgium	0.71	
Finland	0.63	
Austria	0.22	
Ireland	0.16	
Portugal	0.12	
Greece	0.05	
<i>Euro-area (EUR)</i>	<i>18.20</i>	<i>26.76</i>
United Kingdom (GBP)	9.97	5.63
Switzerland (CHF)	4.65	1.46
Sweden (SEK)	1.78	1.07
Denmark (DKK)	1.07	0.58
Russia (RUB)	0.39	0.53
Poland (PLN)	0.15	0.72
Turkey	0.14	
Hungary (HUF)	0.04	0.19
Czech Republic (CZK)	0.01	0.29

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Total Europe	36.41	37.22
Japan (JPY)	9.05	7.01
China	3.08	
Australia (AUD)	2.51	1.90
South Korea (KRW)	1.88	2.07
Taiwan	1.63	
Hong Kong (HKD)	1.31	0.12
India	1.26	
Singapore (SGD)	0.50	0.44
Thailand (THB)	0.43	0.60
Malaysia (MYR)	0.32	0.45
Indonesia	0.26	
Philippines	0.17	
New Zealand (NZD)	0.12	0.27
Pakistan	0.03	
Total Asia / Oceania	22.55	12.85
South Africa	0.90	
Israel (ILS)	0.17	0.46
United Arab Emirates	0.10	
Qatar	0.07	
Egypt	0.02	
Total Middle East and Africa	1.25	0.46

Figures in percent.

Strategic benchmark changes	Advice by Norges Bank	Implementation
Capital allocation		
Equity is introduced to the fund and allocation is set at 40%	07.11.1997	June 1998
Equity allocation is increased to 60% and Fixed Income reduced to 40%	10.02.2006	June 2009
Equity allocation was increased to 62.5% and fixed income reduced 37.5% when real estate was included in the composite	26.11.2015	December 2016
Equity		
Inclusion of Emerging Markets		
Brazil, Mexico, Greece, Turkey, Taiwan, Thailand and South Korea	30.08.2000	January 2001
Small-cap included in the benchmark	20.10.2006	March 2008
Benchmark consists of countries in categories "Developed", "Advanced Emerging" and "Secondary Emerging" within FTSE All Cap and specific country list is discontinued	24.06.2008	December 2008
Country market capitalisation factors introduced. Strategic weights on regions removed	02.02.2012	July 2012
Fixed income		
Introduction of corporate and securitised bonds	15.03.2001	December 2003
Asia/Oceania regional fixed income weight reduced by 10% (offset by a 5% increase in the regional weights for America and Europe)	12.12.2001	December 2003
Inflation linked government bonds included in the benchmark	06.09.2004	November 2005
Reduction of 5% in the regional Asia weight met with a corresponding increase in the Europe weight	28.03.2006	September 2006
GDP weighting of government segment and 70%/30% split of government/private segments introduced. Strategic weights on regions removed	18.03.2011	February 2012
Emerging market currencies introduced to benchmark	01.02.2012	July 2012
Weighting factors introduced for selected currencies in the government segment	14.03.2014	April 2014
Real estate		
Combination of bonds and equities as part of the overall GPFM benchmarks tailor-made to the actual currency composition and characteristics of the investments	26.11.2015	December 2016

Benchmark rebalancing

The actual benchmark weights may differ from the strategic benchmark weights due to the price movements in the market. For example, a stronger increase in equity prices will push the equity portion above its strategic

weight. As a result, the actual benchmark portfolio may deviate from the strategic long-term benchmark portfolio. Inflows and outflows are determined based on asset class weight in the actual benchmark.

The Ministry of Finance has set rules for full rebalancing back to the strategic weights. These rules specify the maximum permitted deviation between the weights in the actual benchmark portfolio and the strategic benchmark portfolio before the benchmark must be rebalanced back to strategic weights. If the equity share in the actual benchmark index exceeds 74 per cent, or is more than four percentage points lower than the weight in the strategic benchmark index, rebalancing shall take place on the last trading day of the following month. The Ministry sets more detailed provisions on the rebalancing of the actual benchmark index.

Portfolio rebalancing

Inflows and outflows to the portfolio are treated independently of the benchmark. The portfolio is rebalanced independently of the benchmark, but is governed by the tracking error limits.

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. The management expense ratio was 6 basis points for 2017, up from 5 basis points in 2016. The table below shows the different components of the total management costs. Note that this table also covers internal costs (e.g. personnel costs, IT/support systems costs) in relation to real estate investment management, but not direct costs incurred in the real estate holdings structure.

Management costs	2017		2016	
	Amount	Percent	Amount	Percent
Custody and settlement costs	404		379	
Minimum fees to external managers	755		638	
Performance based fees to external managers	924		222	
Internal and other costs	2,646		2,492	
Total management costs	4,728	0.06	3,731	0.05
Total management cost excl. performance based fees	3,804	0.05	3,509	0.05

Amounts stated in millions of Norwegian kroner.

Performance results: Government Pension Fund Global, equity 31 December 1998 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Com- posite Assets ⁵	Firm Assets ⁵
1999	34.81	31.32	3.49			1	93,651	340,855
2000	-5.82	-6.31	0.49			1	152,829	522,544
2001	-14.60	-14.66	0.06	15.24	14.81	1	246,412	739,116
2002	-24.39	-24.47	0.07	16.94	16.74	1	230,993	743,670
2003	22.84	22.33	0.51	18.15	18.02	1	361,165	1,044,264
2004	13.00	12.21	0.79	15.30	15.26	1	416,298	1,236,653
2005	22.49	20.33	2.16	9.71	9.53	1	582,305	1,648,874
2006	17.04	17.13	-0.09	7.66	7.17	1	725,922	2,047,074
2007	6.82	5.67	1.15	8.70	8.25	1	957,895	2,261,368
2008	-40.71	-39.56	-1.15	17.01	16.28	1	1,128,937	2,498,961
2009	34.27	32.41	1.86	20.85	20.19	1	1,644,106	2,851,020
2010	13.34	12.61	0.73	22.20	21.56	1	1,891,250	3,317,700
2011	-8.84	-8.36	-0.48	17.74	17.46	1	1,944,722	3,539,396
2012	18.06	17.54	0.52	14.29	14.03	1	2,335,830	4,043,153
2013	26.28	24.99	1.28	12.39	12.12	1	3,106,944	5,311,043
2014	7.90	8.73	-0.82	9.14	8.95	1	3,939,923	6,778,049
2015	3.83	3.00	0.83	10.24	10.05	1	4,571,808	7,886,255
2016	8.72	8.58	0.15	10.50	10.29	1	4,691,863	7,687,711
2017	19.44	18.68	0.76	9.99	9.80	1	5,653,440	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	10.48	12.94	5.96	6.15
Benchmark return ¹	9.89	12.52	5.76	5.65
Relative return ¹	0.58	0.42	0.20	0.51
Standard deviation of composite return ²	9.99	9.26	15.04	14.26
Standard deviation of benchmark return ²	9.80	9.06	14.66	13.93
Tracking error ³	0.41	0.45	0.67	0.78
Information ratio ⁴	1.33	0.86	0.37	0.68
Composite Sharpe ratio ⁵	1.02	1.34	0.44	0.37
Benchmark Sharpe ratio ⁵	0.98	1.33	0.44	0.34
Jensen's alpha ⁶	0.37	0.14	0.08	0.42
Appraisal ratio ⁷	0.99	0.34	0.15	0.59

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent. Relative return is supplemental information.

² Ex-post standard deviation in percent using monthly returns.

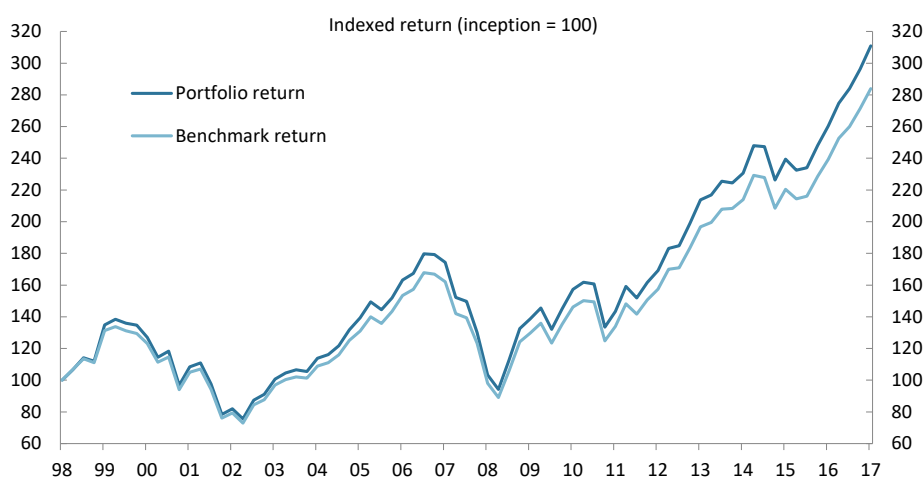
³ Ex-post standard deviation of monthly relative returns.

⁴ Average relative return divided by the tracking error.

⁵ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.

⁶ Average return in excess of the risk-free rate minus beta-adjusted benchmark excess return.

⁷ Jensen's alpha divided by the standard deviation of the residuals of the CAPM regression.



Composite creation date and inception date

The composite inception date and the composite creation date of the Government Pension Fund Global, equity are 31 December 1998.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global, equity composite is a carve-out of the Government Pension Fund Global composite, which only includes the fund's portfolio holdings in, or relating to, the equity asset class. The composite's investment strategies can be grouped into three broad categories: strategies for allocation, security selection and asset management.

Strategies for allocation aims to improve the composite's exposure to broad markets and sources of return, in both the medium and the long term. An internal reference portfolio was established in 2011. Through a series of adjustments of publicly available indices, the internal reference portfolio seeks to improve diversification, gain exposure to systematic factors and ensure cost-efficient implementation of changes to the investment strategy.

Security selection strategies seek to generate excess return over assigned benchmarks. Internally managed equity security selection strategies make concentrated investments based on a thorough understanding of individual companies while external managers are used for security selection strategies in segments and markets where local knowledge is of particular relevance, such as for example in emerging and frontier equity markets.

Asset management strategies aim to implement the targeted market exposure, balancing transaction costs and risk and return considerations. Securities lending is an integrated part of our asset management strategies where counterparty default risk exposure is actively managed.

The listed real estate holdings (REITs), that are otherwise regarded as a part of the real estate management, are included in this equity composite because they are equities. They are not a part of the equity management composite, since they are part of the overall real estate strategy.

During 1998, the equity part of the Pension Fund was established as part of a transition process. In this process, large cash inflows and subsequent large asset purchases took place. No return numbers or assets are reported for 1998. Irrespective of this, the equity portfolio's fair value is included in the total Pension Fund's assets and the firm assets as of 31 December 1998.

Derivatives, leverage and short positions

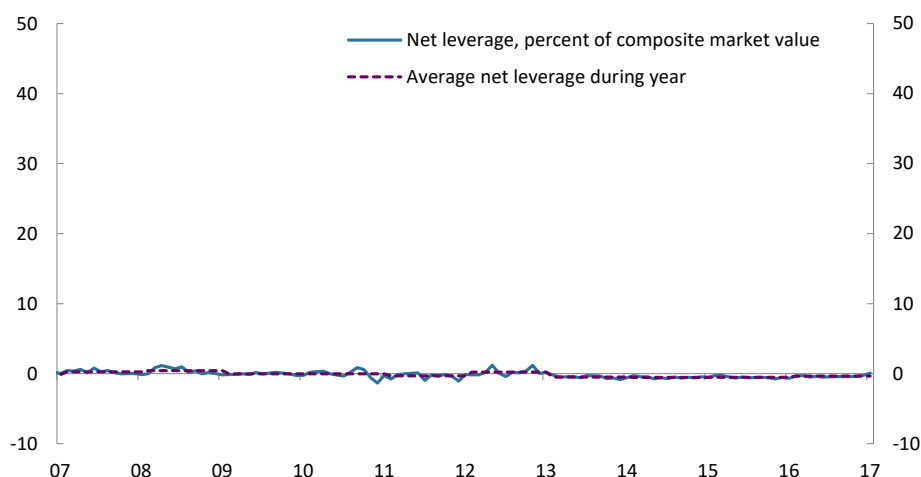
Norges Bank Investment Management's access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Ministry of Finance.

Specifically, financial derivatives that are naturally linked to investments in the equity portfolio may be used. In accordance with this investment mandate, the Pension Fund may use foreign exchange contracts, exchange traded futures, equity warrants, rights and swaps and other related derivatives, in order to achieve the lowest possible transaction cost and to efficiently rebalance the portfolio. Within the equity asset class the use of derivatives has been limited and have been used for efficient portfolio management. Historically, the sizes have not been of any significant size. The segmented net fair values and exposure of the financial derivatives for the last two years are shown in a table below.

Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Foreign exchange contracts	458	-	604	-	-3	1
Exchange traded futures	3,053	3,349	4,760	3,140	-	-
Warrants and rights	332	-	396	-	132	319
Participatory certificates	5,448	-	3,147	-	6,801	3,933
Contracts for difference	22,969	24,591	5,403	846	2	-

Figures in millions of Norwegian kroner.

Leverage may be used with a view to performing the management task in an effective manner, but not with a view to increasing the investment portfolio's exposure to risky assets in the equity portfolio. More specifically, leveraging the portfolio is not permitted beyond what is necessary to minimise transaction costs or is a normal part of investment management, and not in excess of 5 percent of the net asset value of the combined equity and fixed-income portfolios. Within the equity segment leverage is mainly used to efficiently handle fund management activities and has historically not been material. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Short positions are permitted in the management of the Pension Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions are laid down as part of the CEO investment mandate issued by Norges Bank's Executive Board. The current use of short positions in the composite's portfolio is immaterial.

Sub-advisors

Norges Bank Investment Management uses external investment managers to handle parts of the portfolio. Norges Bank Investment Management awards management mandates to organisations with expertise in clearly defined sectors and/or regions. The fund's externally managed equity mandates had assets under management worth 451 billion Norwegian kroner at the end of 2017. This is equivalent to around 8 percent of the composite's total value. There were a total of 92 external equity mandates managed by 81 different investment managers as at year-end 2017. The complete list of organisations managing equity assets on behalf of Norges Bank Investment Management is available on our website www.nbim.no.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017.

The equity part of the strategic benchmark index is composed on the basis of the FTSE Global All Cap Index. The benchmark is market capitalisation weighted with an additional layer of country factors applied to it. The equities in the benchmark index are assigned the following factors based on their country of origin: European developed markets excluding Norway 2.5, USA and Canada 1, other developed markets 1.5 and emerging markets 1.5. The allocation to countries and regions and the distinction between developed and emerging markets are based on the FTSE Global All Cap Index. The benchmark is adjusted for the Norges Bank's tax position on dividends. Securities issued by companies excluded by Norges Bank pursuant to the guidelines for observation and exclusion from the Government Pension Fund Global are not included in the benchmark index for the equity portfolio. At year-end the equity benchmark consisted of 46 countries and more than 7,600 securities.

The actual weights of the benchmark as at 31 December 2017 can be seen below. Strategic changes to the equity benchmark through time are also detailed below.

Country for equity benchmark	Actual benchmark indices
Total	100.0
USA	36.08
Canada	2.25
Brazil	0.87
Mexico	0.35
Chile	0.15
Colombia	0.05
Peru	0.04
Total Americas	39.79
Germany	5.57
France	5.28
Netherlands	1.98
Spain	1.88
Italy	1.60
Belgium	0.71
Finland	0.63
Austria	0.22
Ireland	0.16
Portugal	0.12
Greece	0.05
<i>Euro-area</i>	<i>18.20</i>
United Kingdom	9.97
Switzerland	4.65
Sweden	1.78
Denmark	1.07
Russia	0.39
Poland	0.15
Turkey	0.14
Hungary	0.04
Czech Republic	0.01
Total Europe	36.41
Japan	9.05
China	3.08
Australia	2.51
South Korea	1.88
Taiwan	1.63
Hong Kong	1.31
India	1.26
Singapore	0.50
Thailand	0.43
Malaysia	0.32
Indonesia	0.26
Philippines	0.17
New Zealand	0.12
Pakistan	0.03
Total Asia / Oceania	22.55
South Africa	0.90
Israel	0.17
United Arab Emirates	0.10
Qatar	0.07
Egypt	0.02
Total Middle East and Africa	1.25

Figures in percent.

Strategic benchmark changes	Advice by Norges Bank	Implementation
Inclusion of Emerging Markets: Brazil, Mexico, Greece, Turkey, Taiwan, Thailand and South Korea	30.08.2000	January 2001
Small-cap included in the benchmark	20.10.2006	March 2008
Benchmark consists of countries in categories "Developed", "Advanced Emerging" and "Secondary Emerging" within FTSE All Cap and specific country list is discontinued	24.06.2008	December 2008
Country market capitalisation factors introduced. Strategic weights on regions removed	02.02.2012	July 2012

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017, up from 5 basis points in 2016.

Performance results: Government Pension Fund Global, equity management 31 December 1998 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Com- posite Assets ⁵	Firm Assets ⁵
1999	34.81	31.32	3.49			1	93,651	340,855
2000	-5.82	-6.31	0.49			1	152,829	522,544
2001	-14.60	-14.66	0.06	15.24	14.81	1	246,412	739,116
2002	-24.39	-24.47	0.07	16.94	16.74	1	230,993	743,670
2003	22.84	22.33	0.51	18.15	18.02	1	361,165	1,044,264
2004	13.00	12.21	0.79	15.30	15.26	1	416,298	1,236,653
2005	22.49	20.33	2.16	9.71	9.53	1	582,305	1,648,874
2006	17.04	17.13	-0.09	7.66	7.17	1	725,922	2,047,074
2007	6.82	5.67	1.15	8.70	8.25	1	957,895	2,261,368
2008	-40.71	-39.56	-1.15	17.01	16.28	1	1,128,937	2,498,961
2009	34.27	32.41	1.86	20.85	20.19	1	1,644,106	2,851,020
2010	13.34	12.61	0.73	22.20	21.56	1	1,891,250	3,317,700
2011	-8.84	-8.36	-0.48	17.74	17.46	1	1,944,722	3,539,396
2012	18.06	17.54	0.52	14.29	14.03	1	2,335,830	4,043,153
2013	26.28	24.99	1.28	12.39	12.12	1	3,106,944	5,311,043
2014	7.90	8.73	-0.82	9.14	8.95	1	3,939,923	6,778,049
2015	3.83	3.00	0.83	10.24	10.05	1	4,571,808	7,886,255
2016	8.72	8.58	0.15	10.50	10.29	1	4,691,863	7,687,711
2017	19.50	18.70	0.79	9.99	9.80	1	5,580,827	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	10.49	12.95	5.96	6.15
Benchmark return ¹	9.90	12.52	5.76	5.65
Relative return ¹	0.59	0.42	0.20	0.51
Standard deviation of composite return ²	9.99	9.26	15.04	14.26
Standard deviation of benchmark return ²	9.80	9.06	14.66	13.93
Tracking error ³	0.41	0.45	0.67	0.78
Information ratio ⁴	1.36	0.88	0.37	0.68
Composite Sharpe ratio ⁵	1.02	1.35	0.44	0.37
Benchmark Sharpe ratio ⁵	0.98	1.33	0.44	0.34
Jensen's alpha ⁶	0.38	0.14	0.09	0.42
Appraisal ratio ⁷	1.02	0.35	0.15	0.59

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent. Relative return is supplemental information.

² Ex-post standard deviation in percent using monthly returns.

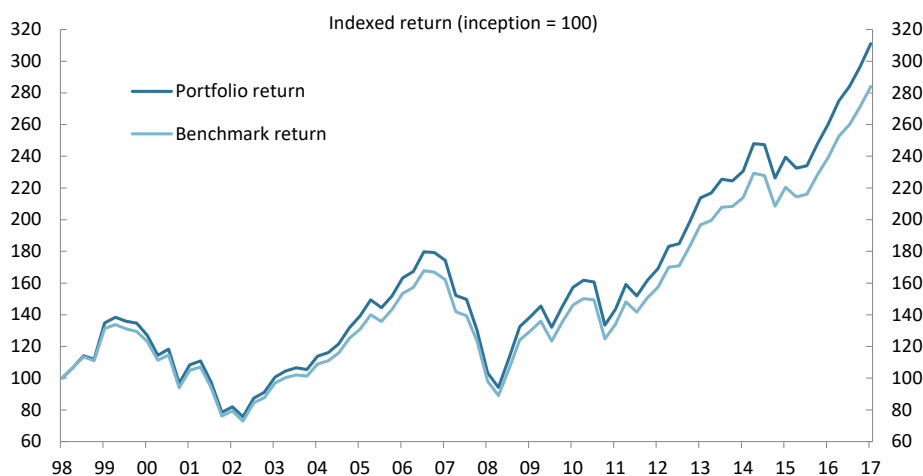
³ Ex-post standard deviation of monthly relative returns.

⁴ Average relative return divided by the tracking error.

⁵ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.

⁶ Average return in excess of the risk-free rate minus beta-adjusted benchmark excess return.

⁷ Jensen's alpha divided by the standard deviation of the residuals of the CAPM regression.



Composite creation date and inception date

The inception date of the Government Pension Fund Global, equity management composite is 31 December 1998. The composite creation date is 31 December 2017.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global, equity management composite is a carve-out of the Government Pension Fund Global composite, which only includes the fund's portfolio holdings in, or relating to, the equity asset class and excluding the listed real estate holdings that are managed as part of the real estate strategy. The composite's investment strategies can be grouped into three broad categories: strategies for allocation, security selection and asset management.

Strategies for allocation aims to improve the composite's exposure to broad markets and sources of return, in both the medium and the long term. An internal reference portfolio was established in 2011. Through a series of adjustments of publicly available indices, the internal reference portfolio seeks to improve diversification, gain exposure to systematic factors and ensure cost-efficient implementation of changes to the investment strategy.

Security selection strategies seek to generate excess return over assigned benchmarks. Internally managed equity security selection strategies make concentrated investments based on a thorough understanding of individual companies while external managers are used for security selection strategies in segments and markets where local knowledge is of particular relevance, such as for example in emerging and frontier equity markets.

Asset management strategies aim to implement the targeted market exposure, balancing transaction costs and risk and return considerations. Securities lending is an integrated part of our asset management strategies where counterparty default risk exposure is actively managed.

During 1998, the equity part of the Pension Fund was established as part of a transition process. In this process, large cash inflows and subsequent large asset purchases took place. No return numbers or assets are reported for 1998. Irrespective of this, the equity portfolio's fair value is included in the total Pension Fund's assets and the firm assets as of 31 December 1998.

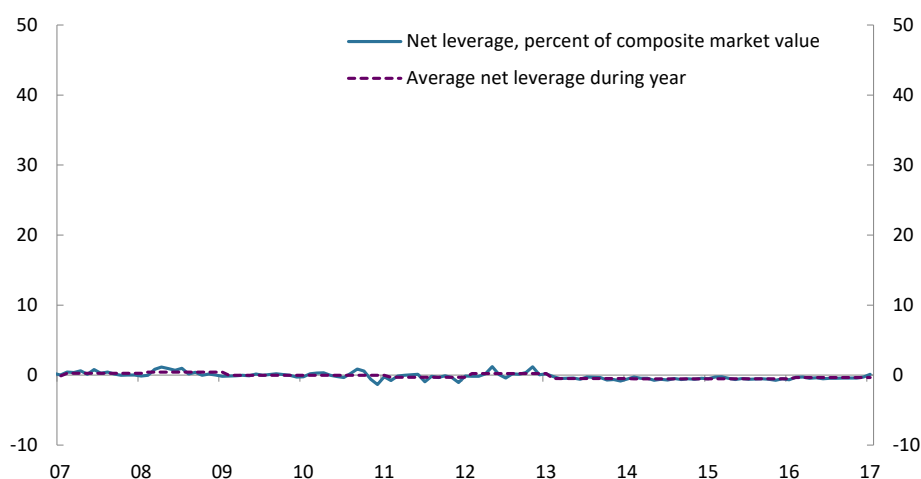
Derivatives, leverage and short positions

Norges Bank Investment Management's access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Ministry of Finance. Specifically, financial derivatives that are naturally linked to investments in the equity portfolio may be used. In accordance with this investment mandate, the Pension Fund may use foreign exchange contracts, exchange traded futures, equity warrants, rights and swaps and other related derivatives, in order to achieve the lowest possible transaction cost and to efficiently rebalance the portfolio. Within the equity management the use of derivatives has been limited and have been used for efficient portfolio management. Historically, the sizes have not been of any significant size. The segmented net fair values and exposure of the financial derivatives for the last two years are shown in a table below.

Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Foreign exchange contracts	458	-	604	-	-3	1
Exchange traded futures	3,053	3,349	4,760	3,140	-	-
Warrants and rights	332	-	396	-	132	319
Participatory certificates	5,448	-	3,147	-	6,801	3,933
Contracts for difference	22,969	24,591	5,403	846	2	-

Figures in millions of Norwegian kroner.

Leverage may be used with a view to performing the management task in an effective manner, but not with a view to increasing the investment portfolio's exposure to risky assets in the equity portfolio. More specifically, leveraging the portfolio is not permitted beyond what is necessary to minimise transaction costs or is a normal part of investment management, and not in excess of 5 percent of the net asset value of the combined equity and fixed-income portfolios. Within the equity segment leverage is mainly used to efficiently handle fund management activities and has historically not been material. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Short positions are permitted in the management of the Pension Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions are laid down as part of the CEO investment mandate issued by Norges Bank's Executive Board. The current use of short positions in the composite's portfolio is immaterial.

Sub-advisors

Norges Bank Investment Management uses external investment managers to handle parts of the portfolio. Norges Bank Investment Management awards management mandates to organisations with expertise in clearly defined sectors and/or regions. The fund's externally managed equity mandates had assets under management worth 451 billion Norwegian kroner at the end of 2017. This is equivalent to around 8 percent of the composite's total value. There were a total of 92 external equity mandates managed by 81 different investment managers as at year-end 2017. The complete list of organisations managing equity assets on behalf of Norges Bank Investment Management is available on our website www.nbim.no.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017.

The equity part of the strategic benchmark index is composed on the basis of the FTSE Global All Cap Index. The benchmark is market capitalisation weighted with an additional layer of country factors applied to it. The equities in the benchmark index are assigned the following factors based on their country of origin: European developed markets excluding Norway 2.5, USA and Canada 1, other developed markets 1.5 and emerging markets 1.5. The allocation to countries and regions and the distinction between developed and emerging markets are based on the FTSE Global All Cap Index. The benchmark is adjusted for the Norges Bank's tax position on dividends. Securities issued by companies excluded by Norges Bank pursuant to the guidelines for observation and exclusion from the Government Pension Fund Global are not included in the benchmark index for the equity portfolio. At year-end the equity benchmark consisted of 46 countries and more than 7,600 securities.

The fund is invested in equities, fixed income and listed and unlisted real estate. The real estate investments are assigned a benchmark with combination of bonds and equities from the overall GPFG benchmarks tailor-made to the actual currency composition and characteristics of the real estate investments. The equity management composite is assigned a benchmark where the actual composition of the equity part of the unlisted and listed real estate benchmark are taken out from the equity part of the strategic benchmark.

The actual weights of the benchmark as at 31 December 2017 can be seen below. Strategic changes to the equity management benchmark through time are also detailed below.

Country for equity benchmark	Actual benchmark indices
Total	100.0
USA	35.84
Canada	2.29
Brazil	0.89
Mexico	0.36
Chile	0.15
Colombia	0.05
Peru	0.04
Total Americas	39.62
Germany	5.47
France	5.20
Netherlands	1.98
Spain	1.88
Italy	1.60
Belgium	0.71
Finland	0.63
Austria	0.22
Ireland	0.16
Portugal	0.12
Greece	0.05
<i>Euro-area</i>	<i>18.01</i>
United Kingdom	9.75
Switzerland	4.71
Sweden	1.79
Denmark	1.09
Russia	0.40
Poland	0.16
Turkey	0.14
Hungary	0.04
Czech Republic	0.01
Total Europe	36.10
Japan	9.22
China	3.15
Australia	2.56
South Korea	1.92
Taiwan	1.67
Hong Kong	1.34
India	1.29
Singapore	0.51
Thailand	0.44
Malaysia	0.32
Indonesia	0.27
Philippines	0.18
New Zealand	0.12
Pakistan	0.03
Total Asia / Oceania	23.00
South Africa	0.92
Israel	0.17
United Arab Emirates	0.10
Qatar	0.07
Egypt	0.02
Total Middle East and Africa	1.28

Figures in percent.

Strategic benchmark changes	Advice by Norges Bank	Implementation
Inclusion of Emerging Markets: Brazil, Mexico, Greece, Turkey, Taiwan, Thailand and South Korea	30.08.2000	January 2001
Small-cap included in the benchmark	20.10.2006	March 2008
Benchmark consists of countries in categories "Developed", "Advanced Emerging" and "Secondary Emerging" within FTSE All Cap and specific country list is discontinued	24.06.2008	December 2008
Country market capitalisation factors introduced. Strategic weights on regions removed	02.02.2012	July 2012
The actual composition of stocks in the listed and unlisted real estate benchmark is eliminated from the equity benchmark	26.11.2015	December 2016

Figures in percent.

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017, up from 5 basis points in 2016.

Performance results: Government Pension Fund Global, fixed income

31 December 1997 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Benchmark Return ²		Relative Return ²		Com- posite Dev ³	Benchmark 3-Yr St Dev ³		Num- ber of Port- folios ⁴	Com- posite Assets ⁵	Firm Assets ⁵
		Asset class	Mngt.	Asset class	Mngt.		Asset class	Mngt.			
1998	9.31	9.10	9.10	0.21	0.21				1	102,300	279,205
1999	-0.99	-1.00	-1.00	0.01	0.01				1	128,751	340,855
2000	8.41	8.34	8.34	0.07	0.07	2.67	2.69	2.69	1	227,323	522,544
2001	5.04	4.96	4.96	0.08	0.08	2.95	2.93	2.93	1	362,945	739,116
2002	9.90	9.41	9.41	0.49	0.49	3.11	3.08	3.08	1	378,014	743,670
2003	5.26	4.77	4.77	0.48	0.48	3.93	3.90	3.90	1	484,141	1,044,264
2004	6.10	5.73	5.73	0.37	0.37	3.70	3.70	3.70	1	600,104	1,236,653
2005	3.82	3.46	3.46	0.36	0.36	3.39	3.40	3.40	1	816,746	1,648,874
2006	1.93	1.68	1.68	0.25	0.25	2.63	2.67	2.67	1	1,057,761	2,047,074
2007	2.96	4.26	4.26	-1.29	-1.29	2.45	2.59	2.59	1	1,060,749	2,261,368
2008	-0.54	6.06	6.06	-6.60	-6.60	4.19	3.90	3.90	1	1,146,489	2,498,961
2009	12.49	5.13	5.13	7.36	7.36	5.02	4.06	4.06	1	995,937	2,851,020
2010	4.11	2.58	2.58	1.53	1.53	5.20	4.22	4.22	1	1,186,191	3,317,700
2011	7.03	6.51	6.51	0.52	0.52	3.79	3.17	3.17	1	1,355,722	3,539,396
2012	6.68	6.97	6.97	-0.29	-0.29	2.72	2.81	2.81	1	1,454,816	4,043,153
2013	0.10	-0.15	-0.15	0.25	0.25	2.67	2.89	2.89	1	1,878,996	5,311,043
2014	6.88	7.59	7.59	-0.70	-0.70	2.40	2.63	2.63	1	2,349,948	6,778,049
2015	0.33	0.57	0.57	-0.24	-0.24	2.64	2.92	2.92	1	2,668,147	7,886,255
2016	4.32	4.16	4.16	0.16	0.16	2.85	3.10	3.10	1	2,576,875	7,687,711
2017	3.31	2.88	2.92	0.43	0.39	2.80	3.00	3.00	1	2,616,372	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.

Asset class

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	2.64	2.96	4.40	4.76
Benchmark return ¹	2.52	2.97	4.20	4.61
Relative return ¹	0.11	-0.02	0.21	0.15
Standard deviation of composite return ²	2.80	2.67	3.57	3.32
Standard deviation of benchmark return ²	3.00	2.92	3.29	3.18
Tracking error ³	0.40	0.47	1.42	1.03
Information ratio ⁴	0.27	-0.05	0.15	0.15
Composite Sharpe ratio ⁵	0.83	1.03	1.15	0.85
Benchmark Sharpe ratio ⁵	0.73	0.95	1.18	0.84
Jensen's alpha ⁶	0.27	0.24	0.21	0.16
Appraisal ratio ⁷	0.81	0.61	0.15	0.16

Asset Management

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	2.64	2.96	4.40	4.76
Benchmark return ¹	2.54	2.98	4.20	4.61
Relative return ¹	0.10	-0.02	0.20	0.15
Standard deviation of composite return ²	2.80	2.67	3.57	3.32
Standard deviation of benchmark return ²	3.00	2.92	3.29	3.18
Tracking error ³	0.39	0.47	1.42	1.03
Information ratio ⁴	0.24	-0.06	0.14	0.15
Composite Sharpe ratio ⁵	0.83	1.03	1.15	0.85
Benchmark Sharpe ratio ⁵	0.74	0.95	1.18	0.84
Jensen's alpha ⁶	0.26	0.23	0.20	0.16
Appraisal ratio ⁷	0.79	0.59	0.14	0.15

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent. Relative return is supplemental information.

² Ex-post standard deviation in percent using monthly returns.

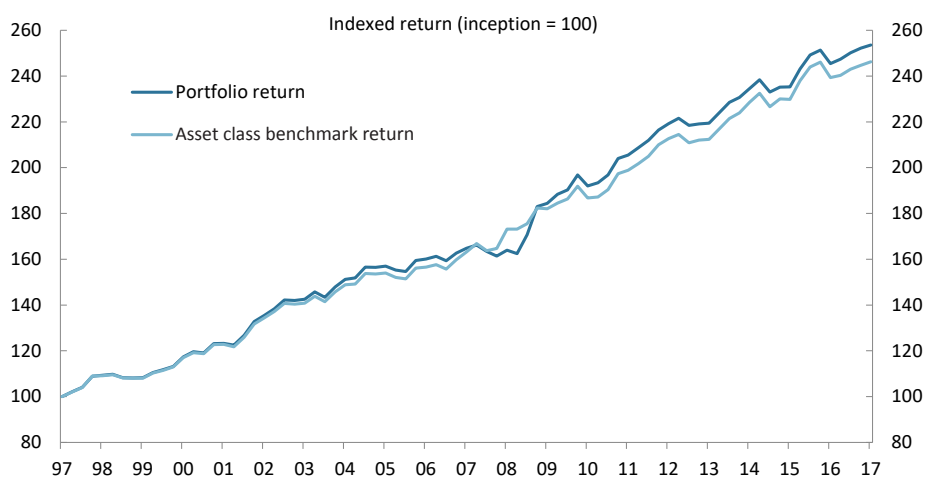
³ Ex-post standard deviation of monthly relative returns.

⁴ Average relative return divided by the tracking error.

⁵ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.

⁶ Average return in excess of the risk-free rate minus beta-adjusted benchmark excess return.

⁷ Jensen's alpha divided by the standard deviation of the residuals of the CAPM regression.



Composite creation date and inception date

The composite inception date and the composite creation date of the Government Pension Fund Global, fixed income are both 31 December 1997.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global, fixed income composite is a carve-out of the Government Pension Fund Global composite, which only includes the fund's portfolio holdings in, or relating to, the fixed-income asset class. The composite's investment strategies can be grouped into three broad categories: strategies for allocation, security selection and asset management.

Strategies for allocation aims to improve the composite's exposure to broad markets and sources of return, in both the medium and the long term. An internal reference portfolio was established in 2011. Through a series of adjustments of publicly available indices, the internal reference portfolio seeks to improve diversification, gain exposure to systematic factors and ensure cost-efficient implementation of changes to the investment strategy.

Security selection strategies seek to generate excess return over specialised benchmarks. Internally managed fixed-income security selection strategies focus on fundamental analysis and concentrated holdings.

Asset management strategies aim to implement the targeted market exposure, balancing transaction costs and risk and return considerations. Securities lending is an integrated part of our asset management strategies where counterparty default risk exposure is actively managed.

Derivatives, leverage and short positions

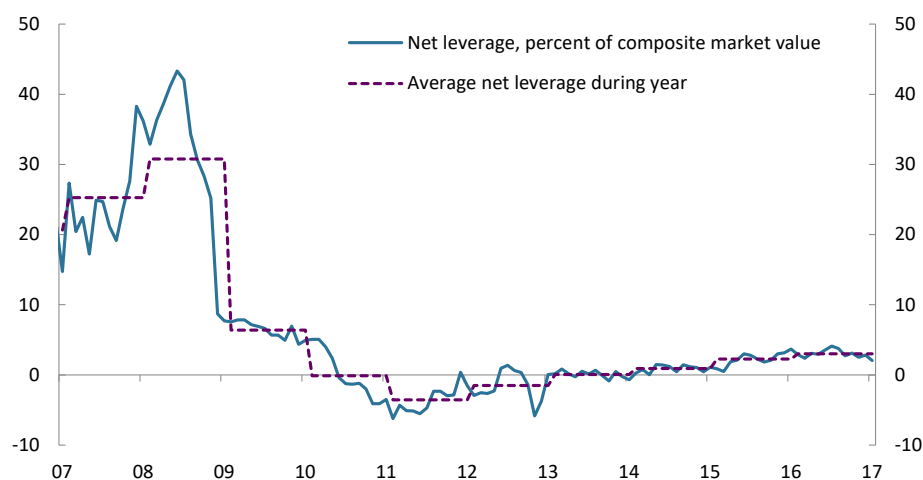
Norges Bank Investment Management's access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Norwegian Ministry of Finance and available on their website. Specifically, financial derivatives that are naturally linked to investments in the fixed-income portfolio may be used. In accordance with this investment mandate, the Pension Fund may use exchange traded futures, interest-rate swaps, foreign exchange contracts and

other related derivatives in order to achieve the lowest possible transaction cost, and to efficiently rebalance the portfolio. The segmented net fair values and average exposure of the financial derivatives in the composite for the last two years are shown in a table below.

Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Foreign exchange contracts	191,833	-	178,041	-	-1,806	2,590
Exchange traded futures	4,583	8,549	9,036	16,589	-	-
Interest-rate swaps	8,221	26,649	2,814	36,392	73	-1,978

Figures in millions of Norwegian kroner.

Leverage may be used with a view to performing the management task in an effective manner, but not with a view to increasing the investment portfolio's exposure to risky assets in the bond portfolio. More specifically, leveraging the fixed-income portfolio is not permitted beyond what is necessary to minimise transaction costs or is a normal part of investment management, and not in excess of 5 percent of the net asset value of the combined equity and fixed-income portfolios. The use of leverage was scaled back in the second half of 2009 due to changes in market conditions and a reorganisation of Norges Bank Investment Management's fixed-income management. Historically, leverage has predominantly been used within the fixed-income composite to exploit differences in rates or credit spreads by combining derivatives, forward contracts and repurchase agreements. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Short positions are permitted in the management of the Pension Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions are laid down as part of the CEO investment mandate issued by Norges Bank's

Executive Board. The current use of short positions in the composite's portfolio is immaterial.

Sub-advisors

Norges Bank Investment Management terminated the four last remaining external fixed-income mandates during 2017 and had no assets managed by external investment managers as at the end of 2017.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017.

The fixed-income part of the strategic benchmark index consists of 70 percent government debt (nominal and inflation-linked government bonds, and including bonds issued by supranational organisations) and 30 percent corporate debt (corporate bonds, including covered bonds). The index consists of the Bloomberg Barclays Global Treasury, GDP weighted by country, the Bloomberg Barclays Global Inflation-Linked index (Series L), and the subgroup Supranational (within government related) in the Bloomberg Barclays Global Aggregate bond index for the government sector and all corporate bonds and sub group covered bonds within Bloomberg Barclays Global Aggregate limited to the currencies US dollars, Canadian dollars, euros, British pounds, Swedish kronor, Danish kroner and Swiss francs. The Bloomberg Barclays indices are not adjusted for withholding tax, but are adjusted for excluded companies/issuers. At year-end the benchmark consisted of 22 currencies and more than 13,000 securities.

In the operational management of the fund, to ensure an overall risk management of the fund, the listed and unlisted real estate investments are assigned benchmarks with a combination of bonds and equities from the overall GPFG benchmarks tailor-made to the actual currency composition and characteristics of the real estate investments. The remaining investments are assigned benchmarks where the actual composition of the unlisted and listed real estate benchmark are adjusted from the actual benchmark.

The fixed-income composite is assigned both the fixed-income component of the strategic asset class benchmark as well as the operational management benchmark where the benchmark constituents in the real estate benchmarks are adjusted out from the fixed-income benchmark. The composite is presented versus both benchmarks, with the strategic asset class benchmark indicated as type *Asset class* and the operational management benchmark indicated as type *Management* or *Mngt*.

Currency for fixed-income benchmark	Actual benchmark indices	Currency for fixed-income Management benchmark	Actual benchmark indices
Total	100.0	Total	100.0
USA (USD)	44.61	USA (USD)	44.68
Canada (CAD)	3.10	Canada (CAD)	3.31
Mexico (MXN)	1.66	Mexico (MXN)	1.77
Chile (CLP)	0.09	Chile (CLP)	0.10
Total Americas	49.47	Total Americas	49.86
Euro-area (EUR)	26.76	Euro-area (EUR)	26.51
United Kingdom (GBP)	5.63	United Kingdom (GBP)	4.68
Switzerland (CHF)	1.46	Switzerland (CHF)	1.30
Sweden (SEK)	1.07	Sweden (SEK)	1.08
Poland (PLN)	0.72	Poland (PLN)	0.76
Denmark (DKK)	0.58	Denmark (DKK)	0.62
Russia (RUB)	0.53	Russia (RUB)	0.57
Hungary (HUF)	0.19	Hungary (HUF)	0.20
Czech Republic (CZK)	0.29	Czech Republic (CZK)	0.31
Total Europe	37.22	Total Europe	36.04
Japan (JPY)	7.01	Japan (JPY)	7.38
South Korea (KRW)	2.07	South Korea (KRW)	2.21
Australia (AUD)	1.90	Australia (AUD)	2.02
Thailand (THB)	0.60	Thailand (THB)	0.64
Malaysia (MYR)	0.45	Malaysia (MYR)	0.48
Singapore (SGD)	0.44	Singapore (SGD)	0.47
New Zealand (NZD)	0.27	New Zealand (NZD)	0.29
Hong Kong (HKD)	0.12	Hong Kong (HKD)	0.12
Total Asia / Oceania	12.85	Total Asia / Oceania	13.61
Israel (ILS)	0.46	Israel (ILS)	0.49
Total Middle East and Africa	0.46	Total Middle East and Africa	0.49

Figures in percent.

Benchmark changes	Advice by Norges Bank	Implementation
Introduction of corporate and securitised bonds	15.03.2001	December 2003
Asia/Oceania regional fixed income weight reduced by 10% (offset by a 5% increase in the regional weights for America and Europe)	12.12.2001	December 2003
Inflation linked government bonds included in the benchmark	06.09.2004	November 2005
Reduction of 5% in the regional Asia weight met with a corresponding increase in the Europe weight	28.03.2006	September 2006
GDP weighting of government segment and 70%/30% split of government/private segments introduced. Strategic weights on regions removed	18.03.2011	February 2012
Emerging market currencies introduced to benchmark	01.02.2012	July 2012
Weighting factors introduced for selected currencies in the government segment	14.03.2014	April 2014
The actual composition of bonds in the real estate benchmark is eliminated from the fixed-income management benchmark. The strategic fixed income benchmark is not affected by this change.	26.11.2015	December 2016

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017, up from 5 basis points in 2016.

Performance results: Government Pension Fund Global, real estate 31 March 2011 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Com- posite Assets ⁵	External Valua- tion ⁶	Firm Assets ⁵
2011 ⁷	-4.37					1	11,129	100	3 539 396
2012	5.77					1	25,123	100	4,043,153
2013	11.79					1	51,794	100	5,311,043
2014	10.42			4.24		1	140,868	100	6,778,049
2015	9.99			3.72		1	235,199	100	7,886,255
2016	0.78			4.30		1	241,756	100	7,687,711
2017	7.52	6.77	0.75	4.09		1	218,643	100	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. A benchmark was not assigned to the composite until 1 January 2017. Hence, benchmark and relative returns are not available for the years 2011 to 2016. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns. The measure is not provided for 2011, 2012 and 2013, since the inception date is 31 March 2011 and a full 36 months history is not available. The measure is also not provided for the benchmark, since only 12 months data history is currently available for it.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.
- ⁶ Percentage of composite assets valued using an external valuation.
- ⁷ Partial year; from inception date 31 March 2011.

Real Estate Component Returns

Year	Composite Return	Unlisted Real Estate Return	Unlisted Real Estate Income Return	Unlisted Real Estate Capital Return	Listed Real Estate Return
2011	-4.37	-4.37	2.11	-6.35	
2012	5.77	5.77	4.23	1.53	
2013	11.79	11.79	4.52	6.98	
2014	10.42	9.65	4.23	5.26	5.97
2015	9.99	10.79	4.03	6.55	7.77
2016	0.78	1.70	3.72	-2.00	-2.34
2017	7.52	7.52	3.69	3.75	

Notes:

Returns are in the fund's currency basket and stated in percent.
Listed real estate returns are not presented for the years 2011, 2012, 2013 and 2017, as listed real estate investments were only a part of the Pension Fund's real estate composite in the period 1 November 2014 to the end of 2016.

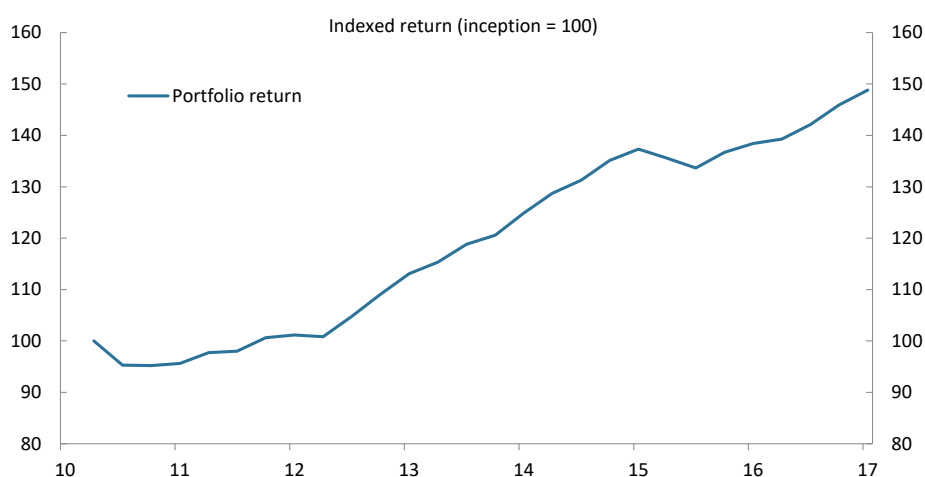
	3 Years	5 Years	Since inception
Composite return ¹	6.03	8.03	6.07
Standard deviation of composite return ²	4.09	4.11	4.57
Sharpe ratio ³	1.37	1.86	1.28

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent.

² Ex-post standard deviation in percent using monthly returns.

³ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.



Composite creation date and inception date

The composite inception date and the composite creation date of the Government Pension Fund Global, real estate are 31 March 2011.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global, real estate composite is a carve-out of the Government Pension Fund Global composite, which only includes the fund's portfolio holdings in, the real estate asset class.

In March 2010, the fund was given a mandate to invest up to 5 percent of its assets in real estate, while correspondingly reducing the share of fixed-income investments. Real estate investments will take place over time and be spread over different types of sectors and countries. The real estate portfolio mainly invests in commercial property types located within well-developed markets. The Fund's unlisted property investments are made through corporate structures. The companies are directly or indirectly wholly owned by Norges Bank or jointly owned with co-investors, and ownership control is exercised at several levels. The legal entities have their own boards where we usually appoint or nominate directors. In addition to the unlisted real estate investments, the composite also held listed real estate investments limited to around 25 percent of the asset class net asset value in the period 1 November 2014 to the end of 2016.

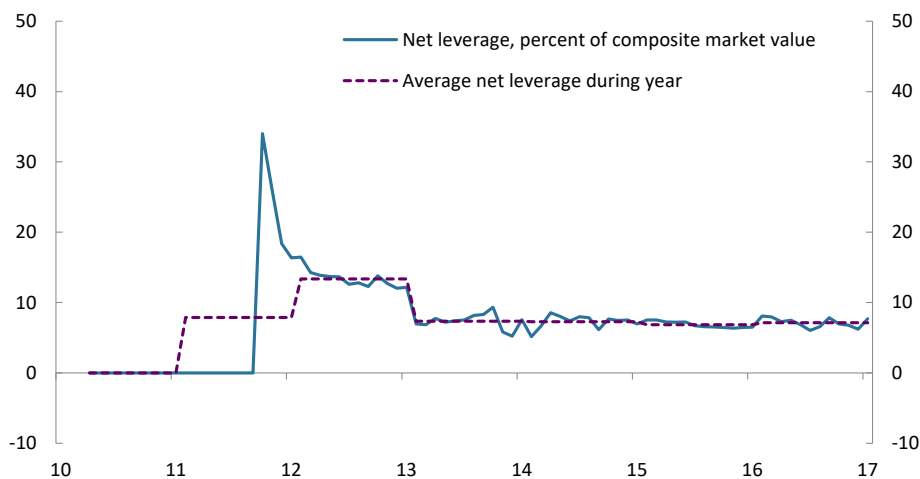
The management mandate issued by the Ministry of Finance on 1 January 2017 opened for investments in unlisted real estate which may constitute up to 7 percent of the Pension Fund. The real estate composite may be invested

in real estate or in equity and interest-bearing instruments issued by non-listed companies, fund structures and other legal entities whose primary business is the acquisition, development, management or financing of real estate. These investments may be made through Norwegian or other legal entities, but not in real estate located in Norway. Real estate is defined as rights to land and any buildings thereon. Norges Bank's Executive Board has further set specific limits on real estate management.

Derivatives and leverage

The access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Norwegian Ministry of Finance and available on their website. The composite, through its property managing real estate subsidiaries, may include derivative instruments in the normal course of investment management. At 2017 year-end the portfolio includes minor derivatives positions in the real estate subsidiaries in the United Kingdom. Derivatives have not been used to manage risk at portfolio level during 2017.

The Norges Bank's Executive Board has specified that the maximum allowed debt ratio of the unlisted real estate portfolio is 35 percent. The debt ratio is calculated as the ratio of debt on gross asset property value. As at year-end 2017 the debt ratio of the unlisted real estate portfolio was 7.1. Net leverage is the ratio of net exposure and actual market value. Through 2017, the average net leverage was 7.2 percent. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Description of discretion

Within the mandate, Norges Bank Investment Management has discretion in its investment selection activities. Regarding rights to dispose of the assets, there exist general lock-up provisions on the current portfolio of investments as set forth in the agreements with Norges Bank Investment Management's counterparts.

Valuation

Real estate investments are measured at fair value on the basis of International Financial Reporting Standards (IFRS) accounting. At each calendar quarter, real estate investments are adjusted to reflect their fair values as

estimated by external independent valuation specialists using the discounted cash flow method (DCF) or the equivalent yield method, as appropriate, unless it is deemed that the acquisition price is a better estimate of fair value. At each calendar quarter-end independent external valuations of properties and debt are obtained. Within quarter-ends all other balance sheet items are updated on a daily basis.

Calculation methodology – unlisted real estate

In addition to the general disclosures on calculation methodology, this section describes specific methodology related to real estate. Composite total returns are calculated monthly and income and capital component returns are calculated daily both on a time-weighted basis and geometrically linked across months. Returns include cash and cash equivalents. The linking of component returns across months results in a residual when comparing annual total returns and the sum of annual component returns. This is a result of compounding, and no adjustments are made to counter this effect. Returns are gross-of-fees. Returns are presented after transaction costs and after expensed operating costs relating to the operations of the real estate investment structure. Operating costs include bank charges, consulting and legal fees and administration expenses. Transaction costs are included in the capital return component and operating costs are included in the income return component. Returns are presented before Norges Bank Investment Management's internal costs related to real estate such as salaries to the real estate investment team. Returns are measured in the currency basket corresponding to the currencies in the Pension Fund's equity and fixed-income benchmark.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017. Prior to this, the investment mandate from the Ministry of Finance did not specify a benchmark for the real estate asset class. As the real estate portfolio was still considered under development, Norges Bank Investment Management concluded that given the development state of the portfolio, comparing the return against available benchmarks could be misleading. Hence, no benchmark returns were presented.

Real estate is assigned a benchmark with combination of bonds and equities from the overall GPF benchmarks tailor-made to the actual currency composition and characteristics of the real estate investments.

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Asset class weights	35.0	65.0
USA (USD)	46.85	46.17
Total Americas	46.85	46.17
Germany	9.05	
France	8.59	
Netherlands	3.22	
Spain	3.06	
Italy	2.61	
Belgium	1.16	
Finland	1.02	
Austria	0.36	
Ireland	0.25	
Portugal	0.19	
<i>Euro-area (EUR)</i>	<i>29.51</i>	<i>26.37</i>
United Kingdom (GBP)	19.57	20.97
Switzerland (CHF)	2.65	4.64
Total Europe	51.74	51.98
Japan (JPY)	1.41	1.85
Total Asia / Oceania	1.41	1.85

Figures in percent.

Fee schedule

Performance numbers are gross of investment management fees in relation to real estate investment management. However, all costs occurring in the unlisted real estate holding structures, all trading expenses (transaction costs, including stamp duty), taxes, and fixed and variable asset management fees, are included. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017. The reimbursable investment management fees in relation to the real estate investment management of the composite totalled 23 basis points in 2017.

Performance results: Government Pension Fund Global, real estate management

31 March 2011 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Com- posite Assets ⁵	External Valua- tion ⁶	Firm Assets ⁵
2011 ⁷	-4.37					1	11,129	100	3,539,396
2012	5.77					1	25,123	100	4,043,153
2013	11.79					1	51,794	100	5,311,043
2014	10.42			4.24		1	140,868	100	6,778,049
2015	9.99			3.72		1	235,199	100	7,886,255
2016	0.78			4.30		1	241,756	100	7,687,711
2017	9.03	8.32	0.70	4.11		1	291,256	100	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. A benchmark was not assigned to the composite until 1 January 2017. Hence, benchmark and relative returns are not available for the years 2011 to 2016. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns. The measure is not provided for 2011, 2012 and 2013, since the inception date is 31 March 2011 and a full 36 months history is not available. The measure is also not provided for the benchmark, since only 12 months data history is currently available for it.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.
- ⁶ Percentage of composite assets valued using an external valuation.
- ⁷ Partial year; from inception date 31 March 2011.

Real Estate Component Returns

Year	Composite Return	Unlisted Real Estate Return	Unlisted Real Estate Income Return	Unlisted Real Estate Capital Return	Listed Real Estate Return
2011	-4.37	-4.37	2.11	-6.35	
2012	5.77	5.77	4.23	1.53	
2013	11.79	11.79	4.52	6.98	
2014	10.42	9.65	4.23	5.26	5.97
2015	9.99	10.79	4.03	6.55	7.77
2016	0.78	1.70	3.72	-2.00	-2.34
2017	9.03	7.52	3.69	3.75	14.15

Notes:

Returns are in the fund's currency basket and stated in percent.
Listed real estate returns are not presented for the years 2011, 2012 and 2013, as listed real estate investments were included in the Pension Fund's real estate management composite from November 2014.

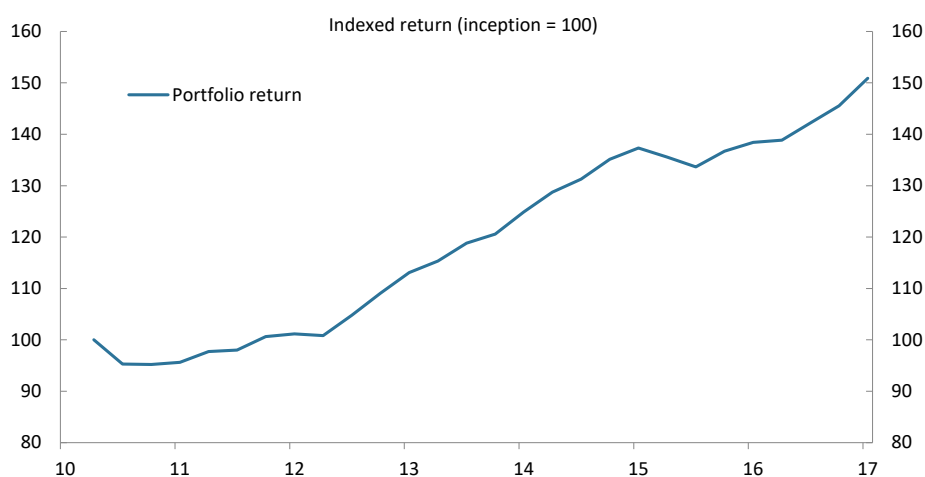
	3 Years	5 Years	Since inception
Composite return ¹	6.52	8.33	6.28
Standard deviation of composite return ²	4.11	4.11	4.58
Sharpe ratio ³	1.48	1.92	1.32

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent.

² Ex-post standard deviation in percent using monthly returns.

³ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.



Composite creation date and inception date

The inception date of the Government Pension Fund Global, real estate management composite is 31 March 2011. The composite creation date is 31 December 2017.

Composite description

Norges Bank Investment Management manages the Pension Fund on behalf of the Ministry of Finance. The Government Pension Fund Global, real estate management composite is a carve-out of the Government Pension Fund Global composite, which only includes the fund's portfolio holdings in the real estate asset class in addition to the listed real estate holdings managed together with the unlisted real estate in the overall real estate strategy.

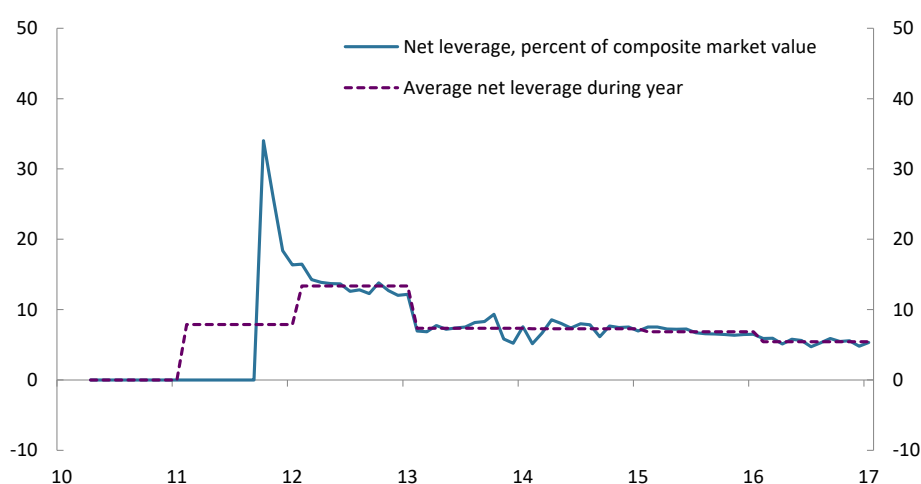
In March 2010, the fund was given a mandate to invest up to 5 percent of its assets in real estate, while correspondingly reducing the share of fixed-income investments. Real estate investments will take place over time and be spread over different types of sectors and countries. The real estate portfolio mainly invests in commercial property types located within well-developed markets. The Fund's unlisted property investments are made through corporate structures. The companies are directly or indirectly wholly owned by Norges Bank or jointly owned with co-investors, and ownership control is exercised at several levels. The legal entities have their own boards where we usually appoint or nominate directors. In addition to the unlisted real estate investments, the composite also held listed real estate investments limited to around 25 percent of the asset class net asset value from 1 November 2014.

The management mandate issued by the Ministry of Finance on 1 January 2017 opens for investments in unlisted real estate which may constitute up to 7 percent of the Pension Fund. The real estate management composite may be invested in real estate or in equity and interest-bearing instruments issued by non-listed companies, fund structures and other legal entities whose primary business is the acquisition, development, management or financing of real estate. These investments may be made through Norwegian or other legal entities, but not in real estate located in Norway. Real estate is defined as rights to land and any buildings thereon. Norges Bank's Executive Board has further set specific limits on real estate management.

Derivatives and leverage

The access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global laid down by the Norwegian Ministry of Finance and available on their website. The composite, through its property managing real estate subsidiaries, may include derivative instruments in the normal course of investment management. At 2017 year-end the portfolio includes minor derivatives positions in the real estate subsidiaries in the United Kingdom. Derivatives have not been used to manage risk at portfolio level during 2017.

The Norges Bank's Executive Board has specified that the maximum allowed debt ratio of the unlisted real estate portfolio is 35 percent. The debt ratio is calculated as the ratio of debt on gross asset property value. As at year-end 2017 the debt ratio of the unlisted real estate portfolio was 7.1. Net leverage is the ratio of net exposure and actual market value. Through 2017, the average net leverage was 5.5 percent. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Description of discretion

Within the mandate, Norges Bank Investment Management has discretion in its investment selection activities. Regarding rights to dispose of the assets, there exist general lock-up provisions on the current portfolio of investments as set forth in the agreements with Norges Bank Investment Management's counterparts.

Valuation

Real estate investments are measured at fair value on the basis of International Financial Reporting Standards (IFRS) accounting. At each calendar quarter, real estate investments are adjusted to reflect their fair values as estimated by external independent valuation specialists using the discounted cash flow method (DCF) or the equivalent yield method, as appropriate, unless it is deemed that the acquisition price is a better estimate of fair value. At each calendar quarter-end independent external valuations of properties and debt are obtained. Within quarter-ends all other balance sheet items are updated on a daily basis.

Calculation methodology – unlisted real estate

In addition to the general disclosures on calculation methodology, this section describes specific methodology related to unlisted real estate. Composite total returns are calculated monthly and income and capital component returns are calculated daily both on a time-weighted basis and geometrically linked across months. Returns include cash and cash equivalents. The linking of component returns across months results in a residual when comparing annual total returns and the sum of annual component returns. This is a result of compounding, and no adjustments are made to counter this effect. Returns are gross-of-fees. Returns are presented after transaction costs and after expensed operating costs relating to the operations of the real estate investment structure. Operating costs include bank charges, consulting and legal fees and administration expenses. Transaction costs are included in the capital return component and operating costs are included in the income return component. Returns are presented before Norges Bank Investment Management's internal costs related to real estate such as salaries to the real estate investment team. Returns are measured in the currency basket corresponding to the currencies in the Pension Fund's equity and fixed-income benchmark.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017. Prior to this, the investment mandate from the Ministry of Finance did not specify a benchmark for the real estate asset class. As the real estate portfolio was still considered under development Norges Bank Investment Management concluded that given the development state of the portfolio, comparing the return against available benchmarks could be misleading. Hence, no benchmark returns were presented.

Real estate is assigned a benchmark with combination of bonds and equities from the overall GPFG benchmarks tailor-made to the actual currency composition and characteristics of the real estate management.

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Asset class weights	39.8	60.2
USA (USD)	47.79	43.56
Total Americas	47.79	43.56
Germany	10.24	
France	9.41	
Netherlands	2.12	
Spain	2.02	
Italy	1.72	
Belgium	0.77	
Finland	0.67	
Austria	0.23	
Ireland	0.17	
Portugal	0.13	
<i>Euro-area (EUR)</i>	<i>27.46</i>	<i>30.45</i>
United Kingdom (GBP)	20.62	19.74
Switzerland (CHF)	1.75	3.77
Sweden (SEK)	1.45	0.97
Total Europe	51.28	54.94
Japan (JPY)	0.93	1.50
Total Asia / Oceania	0.93	1.50

Figures in percent.

Fee schedule

Performance numbers are gross of investment management fees in relation to real estate investment management. However, all costs occurring in the unlisted real estate holding structures, all trading expenses (transaction costs, including stamp duty), taxes, and fixed and variable asset management fees, are included. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017. The reimbursable investment management fees in relation to the real estate investment management of the composite totalled 23 basis points in 2017.

Performance results: Government Pension Fund Global, unlisted real estate 31 March 2011 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017
Reported assets currency: Norwegian kroner
Reported returns currency: Currency basket¹

Year	Com- posite Return ²	Bench- mark Return ²	Relative Return ²	Com- posite 3-Yr St Dev ³	Bench- mark 3-Yr St Dev ³	Number of Port- folios ⁴	Com- posite Assets ⁵	External Valua- tion ⁶	Firm Assets ⁵
2011 ⁷	-4.37					1	11,129	100	3,539,396
2012	5.77					1	25,123	100	4,043,153
2013	11.79					1	51,794	100	5,311,043
2014	9.65			4.25		1	107,637	100	6,778,049
2015	10.79			3.96		1	181,141	100	7,886,255
2016	1.70			4.02		1	190,670	100	7,687,711
2017	7.52	6.77	0.75	3.80		1	218,643	100	8,672,176

Notes:

- ¹ The currency basket corresponds to the currency composition in the fund's benchmark portfolio. The basket consisted of 34 international currencies at the end of 2017. The use of the currency basket is mandated by the Ministry of Finance.
- ² Returns are gross-of-fees and stated in percent. A benchmark was not assigned to the composite until 1 January 2017. Hence, benchmark and relative returns are not available for the years 2011 to 2016. Relative return is supplemental information.
- ³ Three-year annualised ex-post standard deviation in percent using 36 monthly returns. The measure is not provided for 2011, 2012 and 2013, since the inception date is 31 March 2011 and a full 36 months history is not available. The measure is also not provided for the benchmark, since only 12 months data history is currently available for it.
- ⁴ A measure of internal dispersion is not provided since the composite contains only one portfolio.
- ⁵ Assets are stated in millions of Norwegian kroner.
- ⁶ Percentage of composite assets valued using an external valuation.
- ⁷ Partial year; from inception date 31 March 2011.

Unlisted Real Estate Component Returns

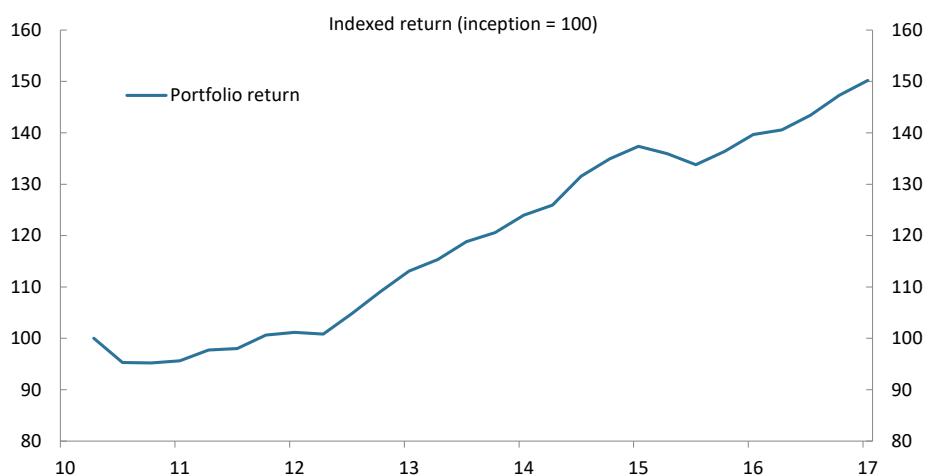
Year	Composite return	Income return	Capital return
2011	-4.37	2.11	-6.35
2012	5.77	4.23	1.53
2013	11.79	4.52	6.98
2014	9.65	4.23	5.26
2015	10.79	4.03	6.55
2016	1.70	3.72	-2.00
2017	7.52	3.69	3.75

Note: Returns are in the fund's currency basket and stated in percent.

	3 Years	5 Years	Since inception
Composite return ¹	6.60	8.23	6.21
Standard deviation of composite return ²	3.80	3.93	4.46
Sharpe ratio ³	1.62	1.98	1.34

Notes: All figures are annualised.

- ¹ Gross-of-fees returns stated in percent.
- ² Ex-post standard deviation in percent using monthly returns.
- ³ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.



Composite creation date and inception date

The composite inception date of the Government Pension Fund Global, unlisted real estate is 31 March 2011. The composite's creation date is 31 December 2015.

Composite description

The Government Pension Fund Global, unlisted real estate is the unlisted real estate composite of the Government Pension Fund Global, real estate. Unlisted real estate investments will take place over time and be spread over different types of sectors and countries. The real estate portfolio mainly invests in commercial property types located within well-developed markets. The unlisted property investments are made through corporate structures. The companies are directly or indirect wholly owned by Norges Bank or jointly owned with co-investors, and ownership control is exercised at several levels. The legal entities have their own boards where we usually appoint or nominate directors. The unlisted real estate investments is managed by Norges Bank Real Estate Management and mandated through an investment mandate issued by Norges Bank Investment Management's CEO.

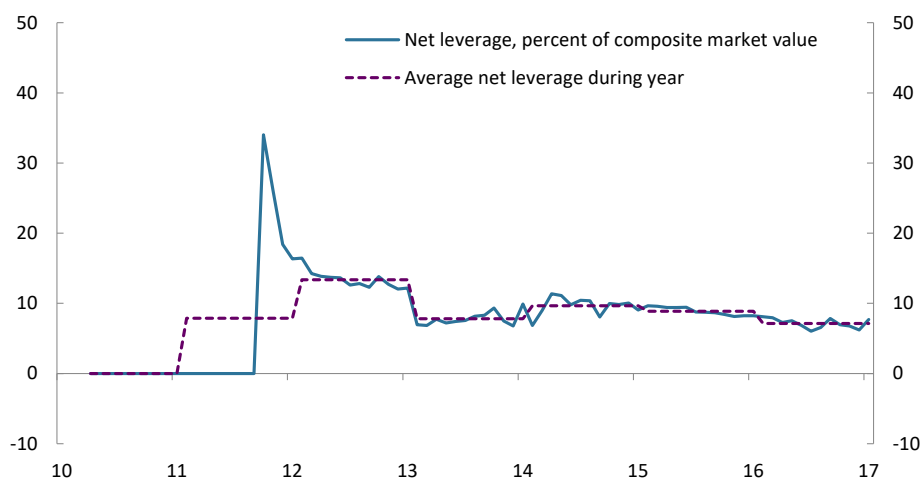
The management mandate issued by the Ministry of Finance opens for investments in unlisted real estate which may constitute up to 7 percent of the Pension Fund. The unlisted real estate composite may be invested in real estate or in equity and interest-bearing instruments issued by non-listed companies, fund structures and other legal entities whose primary business is the acquisition, development and management or financing of real estate. These investments may be made through Norwegian or other legal entities, but not in real estate located in Norway. Real estate is defined as rights to land and any buildings thereon.

Derivatives and leverage

The access to the use of financial derivatives is regulated as part of the provisions on the management of the Government Pension Fund Global, unlisted real estate laid down by Norges Bank Investment Management's CEO. The composite, through its property managing real estate subsidiaries, may include derivative instruments in the normal course of investment management. At 2017 year-end the portfolio includes minor derivatives

positions in the real estate subsidiaries in the United Kingdom. Derivatives have not been used to manage risk at portfolio level during 2017.

The Norges Bank's Executive Board has specified that the maximum allowed debt ratio of the unlisted real estate portfolio is 35 percent. The debt ratio is calculated as the ratio of debt on gross asset property value. As at year-end 2017 the debt ratio of the unlisted real estate portfolio was 7.1. Net leverage is the ratio of net exposure and actual market value. Through 2017, the average net leverage was 7.2 percent. Below, the net leverage in percent of the composite's fair value is shown as a time series.



Description of discretion

Within the mandate, Norges Bank Real Estate Management has discretion in its investment selection activities. Regarding rights to dispose of the assets, there exist general lock-up provisions on the current portfolio of investments as set forth in the agreements with Norges Bank Investment Management's counterparts.

Valuation

Real estate investments are measured at fair value on the basis of International Financial Reporting Standards (IFRS) accounting. At each calendar quarter real estate investments are adjusted to reflect their fair values as estimated by external independent valuation specialists using the discounted cash flow method (DCF) or the equivalent yield method, as appropriate, unless it is deemed that the acquisition price is a better estimate of fair value. At each calendar quarter-end independent external valuations of properties and debt are obtained. Within quarter-ends all other balance sheet items are updated on a daily basis.

Calculation methodology - unlisted real estate

In addition to the general disclosures on calculation methodology, this section describes specific methodology related to unlisted real estate. Composite total returns are calculated monthly, and income and capital component returns are calculated daily both on a time-weighted basis and geometrically linked across months. Returns include cash and cash equivalents. The linking of component returns across months results in a residual when comparing annual total returns and the sum of annual component

returns. This is a result of compounding, and no adjustments are made to counter this effect. Returns are gross-of-fees. Returns are presented after transaction costs and after expensed operating costs relating to the operations of the real estate investment structure. Operating costs include bank charges, consulting and legal fees and administration expenses. Transaction costs are included in the capital return component and operating costs are included in the income return component. Returns are presented before Norges Bank Real Estate Management's internal costs related to real estate such as salaries to the real estate investment team. Returns are measured in the currency basket corresponding to the currencies in the Pension Fund's equity and fixed-income benchmark.

Benchmark description

The management mandate issued by the Ministry of Finance was updated, effective on 1 January 2017, so that all the fund's investments, including the real estate investments, are benchmarked against the benchmark index consisting of equities and bonds. The strategic benchmark weights were 62.5 percent equities and 37.5 percent bonds at 31 December 2017. Prior to this, the investment mandate from the Ministry of Finance did not specify a benchmark for the real estate asset class. As the real estate portfolio was still considered under development, Norges Bank Investment Management concluded that given the development state of the portfolio, comparing the return against available benchmarks could be misleading. Hence no benchmark returns were presented.

Real estate is assigned a benchmark with combination of bonds and equities from the overall GPFGB benchmarks tailor-made to the actual currency composition and characteristics of the real estate investments.

Country for equity benchmark (Currency for fixed-income benchmark)	Equities Actual benchmark indices	Fixed-income Actual benchmark indices
Asset class weights	35.0	65.0
USA (USD)	46.85	46.17
Total Americas	46.85	46.17
Germany	9.05	
France	8.59	
Netherlands	3.22	
Spain	3.06	
Italy	2.61	
Belgium	1.16	
Finland	1.02	
Austria	0.36	
Ireland	0.25	
Portugal	0.19	
<i>Euro-area (EUR)</i>	<i>29.51</i>	<i>26.37</i>
United Kingdom (GBP)	19.57	20.97
Switzerland (CHF)	2.65	4.64
Total Europe	51.74	51.98
Japan (JPY)	1.41	1.85
Total Asia / Oceania	1.41	1.85

Figures in percent.

Fee schedule

Performance numbers are gross of investment management fees in relation to real estate investment management. However, all costs occurring in the unlisted real estate holding structures, all trading expenses (transaction costs, including stamp duty), taxes, and fixed and variable asset management fees, are included. The management expense ratio for the Pension Fund as a whole was 6 basis points for 2017. The reimbursable investment management fees in relation to the real estate investment management of the composite totalled 23 basis points in 2016 versus 25 basis points in 2015.

Performance results: The investment portfolio of Norges Bank's foreign exchange reserves, equity 31 December 2001 – 31 December 2017

NORGES BANK
INVESTMENT
MANAGEMENT
PERFORMANCE RESULTS

Report presented as of: 31 December 2017

Reported assets currency: Norwegian kroner

Reported returns currency: Norwegian kroner

Year	Com- posite Return ¹	Bench- mark Return ¹	Relative Return ¹	Com- posite 3-Yr St Dev ²	Bench- mark 3-Yr St Dev ³	Number of Port- folios ³	Com- posite Assets ⁴	Firm Assets ⁴
2002	-36.81	-36.30	-0.50			1	16,909	743,670
2003	29.42	29.99	-0.58			1	34,190	1,044,264
2004	6.51	7.07	-0.56	18.35	18.30	1	56,134	1,236,653
2005	24.09	23.92	0.17	12.22	12.17	1	70,669	1,648,874
2006	14.72	14.99	-0.27	10.77	10.83	1	92,143	2,047,074
2007	-3.75	-2.94	-0.81	10.74	10.56	1	88,953	2,261,368
2008	-26.59	-26.07	-0.52	14.26	13.99	1	70,552	2,498,961
2009	13.02	12.14	0.88	17.11	16.83	1	82,865	2,851,020
2010	12.25	11.66	0.59	17.31	17.09	1	93,835	3,317,700
2011	-3.81	-3.81	0.00	14.36	14.29	1	90,720	3,539,396
2012	9.38	9.21	0.17	9.42	9.37	1	99,230	4,043,153
2013	39.56	38.91	0.65	8.95	8.90	1	118,532	5,311,043
2014	29.79	29.54	0.24	7.39	7.38	1	139,984	6,778,049
2015	17.85	17.82	0.03	9.20	9.21	1	169,245	7,886,255
2016	5.59	5.09	0.50	11.58	11.63	1	177,217	7,687,711
2017	16.86	16.79	0.07	11.74	11.79	1	183,721	8,672,176

Notes:

¹ Returns are gross-of-fees and stated in percent. Relative return is supplemental information.

² Three-year annualised ex-post standard deviation in percent using 36 monthly returns.

³ A measure of internal dispersion is not provided since the composite contains only one portfolio.

⁴ Assets are stated in millions of Norwegian kroner.

	3 Years	5 Years	10 Years	Since inception
Composite return ¹	13.29	21.37	9.95	7.28
Benchmark return ¹	13.08	21.08	9.73	7.33
Relative return ¹	0.21	0.29	0.22	-0.05
Standard deviation of composite return ²	11.74	10.30	12.85	13.71
Standard deviation of benchmark return ²	11.79	10.33	12.77	13.62
Tracking error ³	0.15	0.16	0.32	0.42
Information ratio ⁴	1.19	1.48	0.66	-0.08
Composite Sharpe ratio ⁵	1.10	1.93	0.78	0.50
Benchmark Sharpe ratio ⁵	1.08	1.90	0.77	0.50
Jensen's alpha ⁶	0.24	0.31	0.15	-0.08
Appraisal ratio ⁷	1.64	1.88	0.48	-0.19

Notes: All figures are annualised.

¹ Gross-of-fees returns stated in percent. Relative return is supplemental information.

² Ex-post standard deviation in percent using monthly returns.

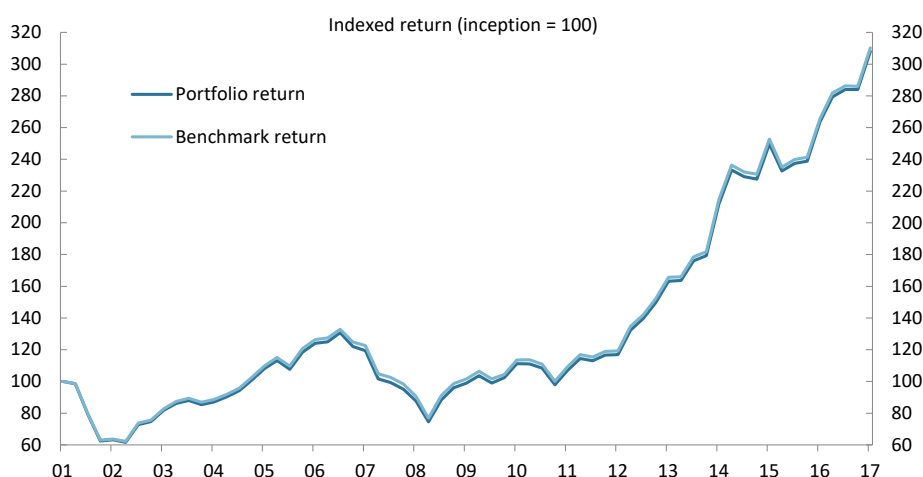
³ Ex-post standard deviation of monthly relative returns.

⁴ Average relative return divided by the tracking error.

⁵ Average monthly return in excess of the risk-free rate divided by the standard deviation of monthly returns.

⁶ Average return in excess of the risk-free rate minus beta-adjusted benchmark excess return.

⁷ Jensen's alpha divided by the standard deviation of the residuals of the CAPM regression.



Composite creation date and inception date

The composite inception date and the composite creation date of the investment portfolio of Norges Bank's foreign exchange reserves, equity are 31 December 2001.

Composite description

Norges Bank Investment Management has been responsible for the management of the long-term investment portfolio of the Norges Bank's foreign exchange reserves. The long-term investment portfolio has been managed with the objective to achieve the highest possible long-term return and in a way that ensures sufficient liquidity, subject to the constraints set out in the management guidelines issued by the Central Bank Governor and the principles for management set by Norges Bank's Executive Board. In November 2016 the responsibility for the fixed income part of the portfolio was moved

to Norges Banks Markets and ICT division. The equity part of the portfolio remains under management by Norges Bank Investment Management.

The investment portfolio of Norges Bank's foreign exchange reserves, equity is the equity composite of the total Reserves Fund. The investment strategy for equity management has been relatively stable throughout its history with enhanced indexing as the core strategy. During 2001, the equity part of the Reserves Fund was established as part of a transition process. In this process large cash inflows and subsequent large asset purchases were incurred. No return numbers or fair values are reported for 2001. Irrespective of this, the equity portfolio's fair value is included in the total Reserves Fund's assets and the firm assets as of 31 December 2001.

Until 2010, the management of the portfolio was based on the same overall processes and procedures as the management of the Pension Fund, albeit different investment mandates. However, in February 2010 Norges Bank's Executive Board adopted new guidelines for the management of the portfolio with more focus towards holding liquid assets. For the equity management, emerging markets were removed and custom regional weights were replaced by market capitalisation weights. The changes were effective from June 2010 on the benchmark side, while the changes in the portfolio were implemented gradually. After the removal of the fixed income part of the portfolio the composite's base currency was changed to Norwegian kroner, as the currency basket calculated on the overall portfolio no longer is representative.

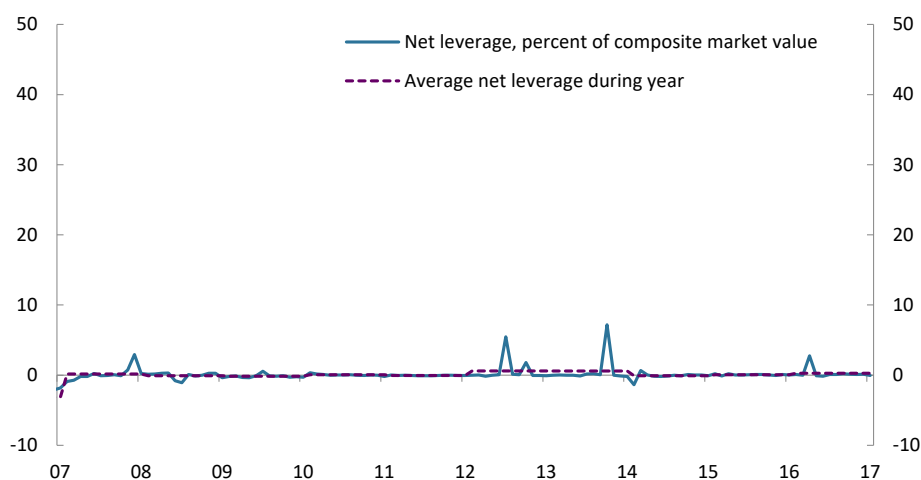
Derivatives, leverage and short positions

Norges Bank's Executive Board has laid down guidelines for the Reserves Fund's investments. These guidelines state that the portfolio may be invested in derivatives that are naturally linked to listed equity instruments, fixed-income securities and money market instruments. However, the use of derivatives in the Reserves Fund's equity composite is very limited and immaterial for the investment strategy.

Financial derivatives	Average exposure through year				Net fair value at year-end	
	2017		2016		2017	2016
	Purchased	Sold	Purchased	Sold		
Exchange traded futures	65	230	134	25	-	-
Warrants and rights	4	-	4	-	2	2

Figures in millions of Norwegian kroner.

Leverage in the composite is mainly used to efficiently handle fund management activities and has historically not been of any significant size. Net leverage is calculated by comparing net exposure and actual market value (net asset value). Net exposure is found by converting all derivatives to underlying exposure. Prior to 2011 the leverage was calculated from the net sum of all cash positions. Below, the net leverage in percent of the composite's fair value is shown as a time series.



* The leverage shown in June 2013, September 2014 and March 2017 was related to rebalancing of the portfolio.

Short positions are permitted in the management of the Reserves Fund given that Norges Bank Investment Management has access to the securities through an established borrowing arrangement. However, restrictions exist in the management guidelines laid down by the Central Bank Governor. The current use of short positions in the composite's portfolio is immaterial.

Sub-advisors

Norges Bank Investment Management currently does not use external investment managers in the Reserves Fund. However, external managers were previously used to manage parts of the Reserves Fund equity composite's portfolio from its inception until March 2005.

Benchmark description

The strategic benchmark index for the investment portfolio of Norges Bank's foreign exchange reserves, equity composite is a market capitalisation weighted custom benchmark compiled by the FTSE Group. It consists of the FTSE All World Developed Market Index limited to members of the Eurozone, United States, United Kingdom, Japan, Canada, Australia, Switzerland, Sweden and Denmark. It is adjusted for Norges Bank's tax position on dividends and for excluded companies following the exclusion list in the Pension Fund. At year-end the benchmark consisted of around 1,800 securities from 18 countries. The actual country weights of the benchmark as at 31 December 2017 can be seen below, together with a summary of historical strategic changes to the benchmark.

Country for equity benchmark	Actual benchmark indices
Total	100.0
USA	59.19
Canada	3.39
Total Americas	62.58
Germany	3.90
France	3.81
Netherlands	1.37
Spain	1.32
Italy	1.04
Belgium	0.46
Finland	0.40
Austria	0.10
Ireland	0.10
Portugal	0.06
<i>Euro-area</i>	<i>12.56</i>
United Kingdom	6.69
Switzerland	3.28
Sweden	1.09
Denmark	0.71
Total Europe	24.33
Japan	10.26
Australia	2.83
Total Asia / Oceania	13.09

Figures in percent.

Strategic benchmark changes	Advice by Norges Bank	Implementation
Inclusion of developed Emerging Markets	01.07.2004	November 2004
Benchmark changed from FTSE All World to FTSE All Cap	12.06.2007	September 2007
Emerging markets removed from the benchmark	03.02.2010	June 2010
Benchmark changed from FTSE All Cap to FTSE All World Developed Market indices limited to a small number of countries	30.01.2015	March 2015

Fee schedule

Performance numbers are gross of management fees and custodial fees, but net of all trading expenses (transaction costs). In addition, non-reclaimable withholding taxes are deducted in the performance numbers. Norges Bank Investment Management does not operate with a fee schedule as mutual funds typically do. Costs for the management of the Reserves Fund are not reimbursed as for the Pension Fund. The management expense ratio for the Reserves Fund equity composite was 5 basis points for 2017.