

2013 | 03

Foreign exchange reserves

November 2013

Management of Norges Bank's foreign exchange reserves

Report for third quarter 2013

Main points in 2013 Q3

- The market value of Norges Bank's foreign exchange reserves at the end of Q3 was NOK 329.2bn, or SDR 35.6bn. Reserves were invested in short-term fixed income instruments (20 percent), long-term fixed income instruments (47 percent) and equities (33 percent).
- The return on the foreign exchange reserves, measured in international currency, was 2.7 percent in 2013 Q3. The return on equity investments was 6.7 percent, the return on long-term fixed-income investments was 0.5 percent, and the return on short-term fixed-income investments was approximately zero.
- The volatility in the value of the foreign exchange reserves, including movements in the krone exchange rate is equal to NOK 24bn in annual fluctuations. This means that the annual variation in the portfolio's market value is expected to be within the interval of +/- NOK 24bn in two out of three years.

Part I: Management

Norges Bank's foreign exchange reserves shall be available for use as part of the conduct of monetary policy with a view to promoting financial stability and for meeting Norges Bank's international commitments to the IMF and individual countries. The reserves are divided into a long-term portfolio, a money market portfolio and a petroleum buffer portfolio. Norges Bank Investment Management (NBIM) manages the long-term portfolio, while the money market portfolio and petroleum buffer portfolio are managed by Norges Bank Markets and Banking Services.

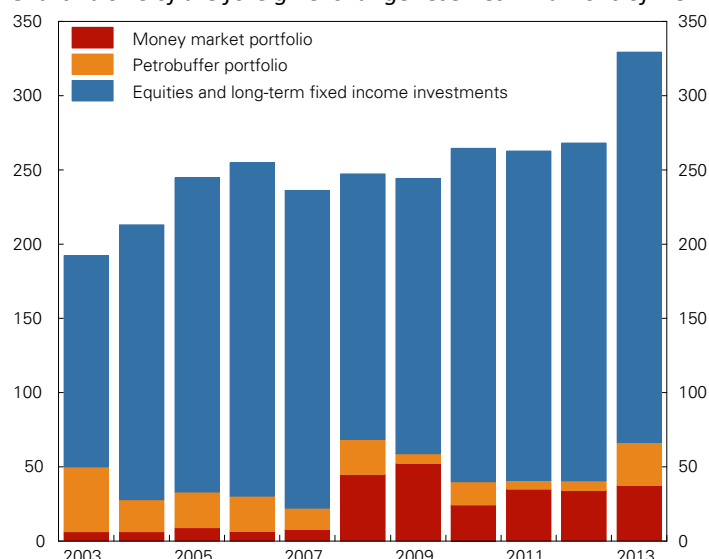
The foreign exchange reserves shall be invested so that at least SDR 10bn, including the entire money market portfolio, can be used within a single trading day without having to realise any appreciable losses. The money market portfolio shall be between SDR 3.5bn and SDR 4.5bn and be invested in short-term fixed income instruments. The benchmark index for the money market portfolio is a composite of USD and EUR overnight money market indices and Treasury bill indices for the same currencies. The long-term portfolio shall be invested in equities and fixed income securities. The benchmark index for the long-term portfolio is a composite of global equity and bond indices. The equity allocation in the strategic benchmark index is 40 percent.

The purpose of the petroleum buffer portfolio is to ensure that the Government Pension Fund Global (GPGF) is provided with an adequate supply of fresh capital. Funds accumulate in the portfolio through transfers of foreign currencies from the State's Direct Financial Interest in petroleum activities (SDFI) and through foreign exchange purchases Norges Bank undertakes in the markets on the basis of the Ministry of Finance's monthly allocations to the GPGF. Funds are normally transferred each month. No benchmark index has been set for the petroleum buffer portfolio.

1 Market value

The market value of the foreign exchange reserves was NOK 329.2bn at the end of 2013 Q3. Equities and long-term fixed income investments totalled NOK 262.6bn, while money market investments and petroleum buffer portfolio came to NOK 37.6bn and NOK 29.0bn, respectively. Reserves increased by NOK 10.3bn during Q3, primarily owing to return on equities and long-term fixed income investments.

Chart 1a Size of the foreign exchange reserves. In billions of NOK¹



¹ Note that for 2013, values are stated as at the end of Q3, while for the other years, values are stated as at 31 December. The petroleum buffer portfolio is normally reduced towards year-end.

Table 1a Market value. In billions of NOK

	2013 Q3	2013 Q2	2013 Q1	2012 Q4	2012 Q3
Money market investments	37.6	37.2	35.2	34.2	34.9
Long-term fixed income investments	153.9	148.6	131.5	128.2	131.1
Equity investments	108.7	104.9	112.2	99.2	99.0
Petroleum buffer portfolio	29.0	28.2	19.4	6.5	20.6
Foreign exchange reserves	329.2	318.9	298.3	268.0	285.6
Total change during the quarter	10.3	20.6	30.3	-17.6	-10.9
Transfers during the quarter	0.8	7.1	11.6	-13.7	-9.6
Return during the quarter	7.7	0.5	11.2	4.4	7.4
Change owing to fluctuations in the NOK exchange rate	1.8	13.0	7.5	-8.3	-8.7

2 Return

The return on the foreign exchange reserves, measured in international currency, was NOK 8bn, or 2.7 percent, in 2013 Q3.

The return on equities and long-term fixed income investments is compared with the return on global benchmark indices, which are based on indices from FTSE Group and Barclays Capital. The return on equity investments was 6.72 percent in 2013 Q3, which was 0.08 percentage point higher than the return on the benchmark index for equities. The return on long-term fixed income investments in the same period was 0.45 percent, which was 0.09 percentage point lower than the return on the benchmark index for bonds.

Money market investments earned a return in Q3 of 0.04 percent. The return is compared with the return on benchmark indices composed of USD and EUR overnight money market indices and Treasury bill indices for the same currencies. The return on money market investments was 0.01 percentage point higher than the return on the benchmark index in Q3. The low return must be viewed in the context of the liquidity requirements for the money market portfolio and to the restrictions in the portfolio's investment universe.

Table 2a Return measured in international currency. Percent

	2013 Q3	2013 Q2	2013 Q1	2012 Q4	2012 Q3
<i>Return:</i>					
Money market investments	0.04	0.02	0.05	0.03	0.03
Long-term fixed income investments	0.45	-1.44	0.08	0.70	1.49
Equity investments	6.72	1.37	10.25	3.30	5.98
Foreign exchange reserves¹	2.66	-0.09	3.95	1.58	2.93
<i>Return on benchmark indices:</i>					
Money market investments	0.02	0.02	0.02	0.03	0.03
Long-term fixed income investments	0.54	-1.51	-0.05	0.59	1.30
Equity investments	6.64	1.15	10.24	3.25	5.94

Table 2b Return measured in NOK terms. Percent

	2013 Q3	2013 Q2	2013 Q1	2012 Q4	2012 Q3
Money market investments	-0.44	4.74	4.48	-2.16	-3.32
Long-term fixed income investments	0.96	2.66	2.62	-2.25	-1.21
Equity investments	7.25	5.59	13.04	0.27	3.16
Foreign exchange reserves¹	3.06	4.14	6.82	-1.30	0.09

¹ Excluding the petroleum buffer portfolio.

The rate of return on the foreign exchange reserves (excluding the petroleum buffer portfolio) was 8.3 percent over the past four quarters. Over the past ten years, the annualised rate of return was 5.8 percent.

Table 2c Key figures as at 30 September 2013. Annualised. Measured in international currency

	Past year	Past 3 years	Past 5 years ¹	Past 10 years ¹
<i>Foreign exchange reserves excluding the petroleum buffer portfolio:</i>				
Gross annual return (percent)	8.34	6.51	8.16	5.79
Annual management costs (percent)	0.04	0.04	0.06	0.06
<i>Money market investments:</i>				
Portfolio return (percent)	0.14	0.28	-	-
Benchmark return (percent)	0.09	0.24	-	-
Excess return (percentage points)	0.05	0.04	-	-
Realised absolute volatility (percent) ²	0.04	0.09	-	-
Realised relative volatility (percentage points) ²	0.03	0.02	-	-
Information rate (IR) ³	1.64	1.43	-	-
<i>Equities and long-term fixed income investments:</i>				
Portfolio return (percent)	9.54	7.37	8.16	5.79
Benchmark return (percent)	8.69	6.74	7.13	5.55
Excess return (percentage points)	0.85	0.63	1.04	0.25
Realised absolute volatility (percent) ²	4.44	4.44	7.47	6.31
Realised relative volatility (percentage points) ²	0.22	0.50	1.36	1.07
Information rate (IR) ³	3.95	1.27	0.76	0.23

¹ Pertains only to equities and long-term fixed income investments.

² Realised volatility is a measure of the fluctuation in monthly return values, expressed here by the annualised empirical standard deviation of monthly return series. Absolute/relative volatility expresses risk related to absolute/relative return.

³ IR is a risk-adjusted return measure. IR is the ratio between excess return and the portfolio's actual relative market risk (measured by relative volatility). IR shows the level of excess return achieved for each unit of risk.

Absolute return²

Chart 2a Money market investments. Basis points

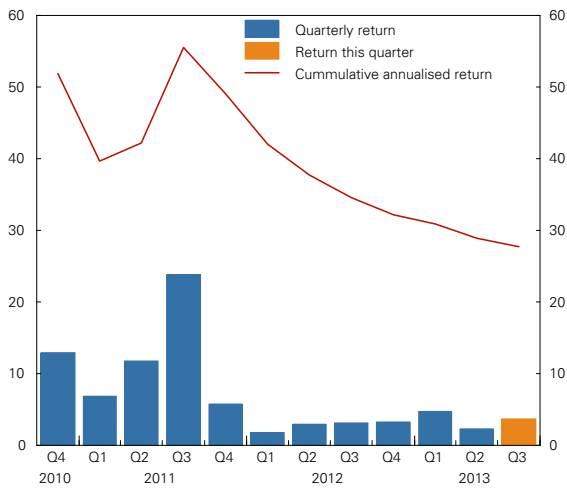
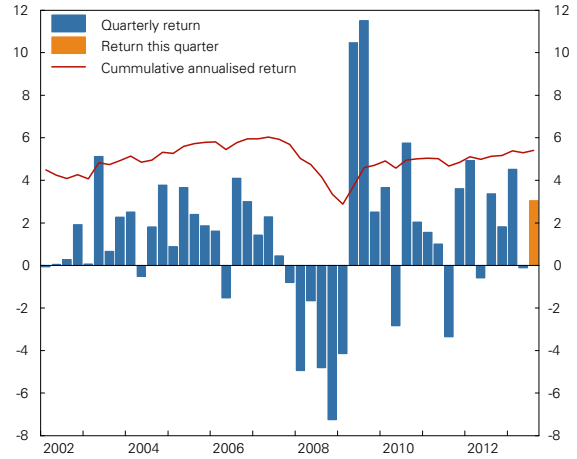


Chart 2b Equities and long-term fixed income investments. Percent



Relative return³

Chart 2c Money market investments. Basis points

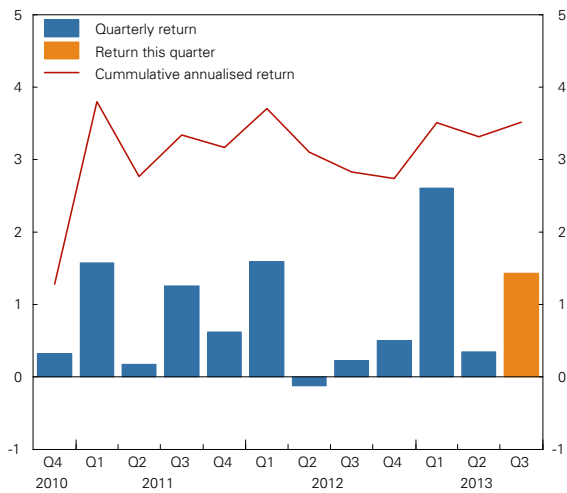
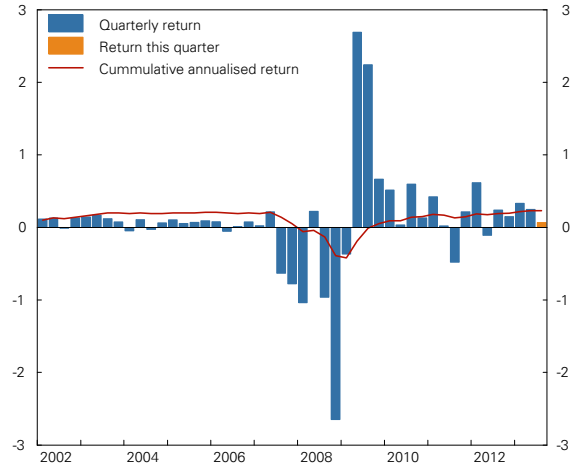


Chart 2d Equities and long-term fixed income investments. Percent



² Cumulative return values have been calculated from December 2010 for money market investments and from January 1998 for equities and long-term fixed income investments.

³ Cumulative excess return values have been calculated from December 2010 for money market investments and from January 1998 for equities and long-term fixed income investments.

3 Risk

Market risk is expressed here by a one standard deviation movement in market value. Expected absolute volatility is an indication of the amplitude of the variations in return that can be expected over a given period.

Including movements in the krone exchange rate, the expected absolute volatility was 7.8 percent for equities and long-term fixed income investments and 9.9 percent for money market investments in 2013 Q3. In NOK terms, this amounts to NOK 20.4bn for equities and long-term fixed income investments and NOK 3.6bn for money market investments. This means that the annual variation in the market value of the foreign exchange reserves is expected to be within the interval of +/- NOK 24bn in two out of three years.

The largest contributor to volatility is movements in the krone exchange rate relative to the currency invested in. Excluding the effect of movements in the krone exchange rate, and if volatility is estimated in international currency, the expected absolute volatility of money market investments is 0.1 percent.

Expected absolute volatility including movements in the krone exchange rate

Chart 3a Money market investments

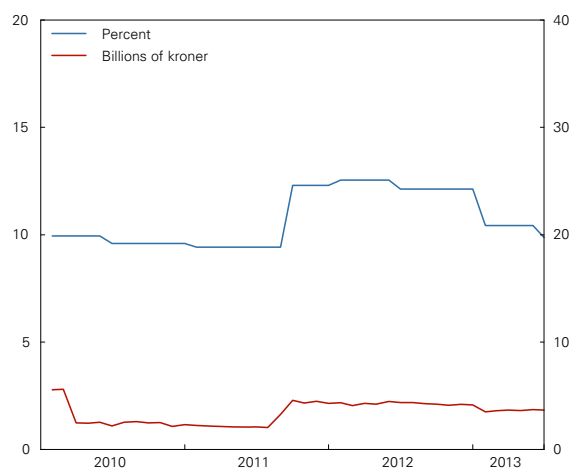
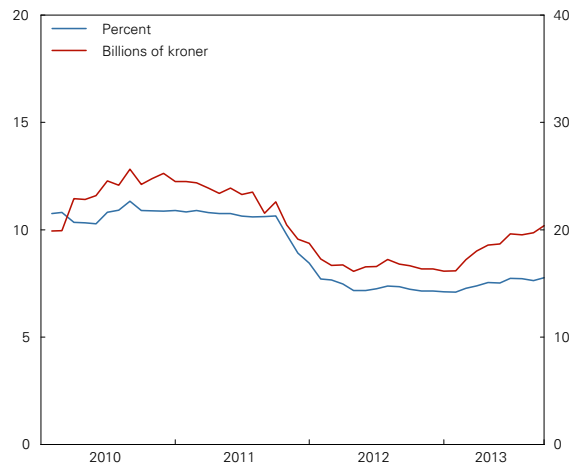


Chart 3b Equities and long-term fixed income investments



Expected relative volatility (tracking error) indicates the extent to which the return on the actual portfolio can normally be expected to deviate from the return on the benchmark portfolio.⁴ At the end of Q3, the expected relatively volatility of equities and long-term fixed income investments was 15 basis points, and for money market investments it was 6 basis points.

Expected relative volatility. Foreign exchange reserves. Basis points

Chart 3c Money market investments

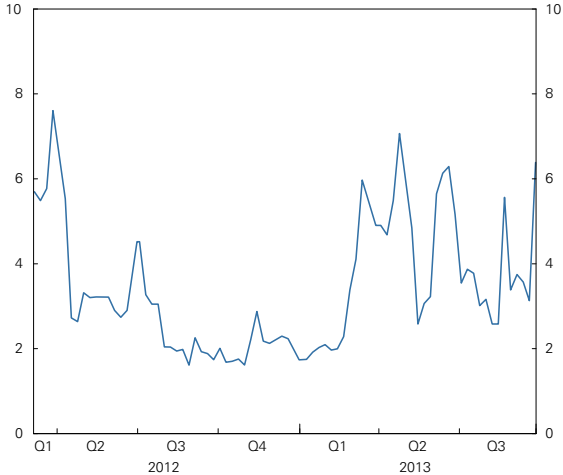


Chart 3d Equities and long-term fixed income investments

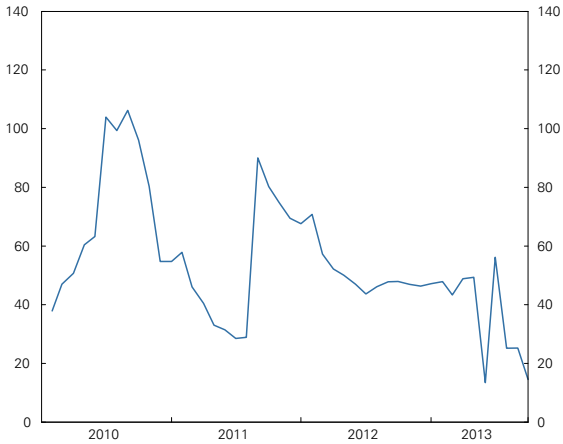
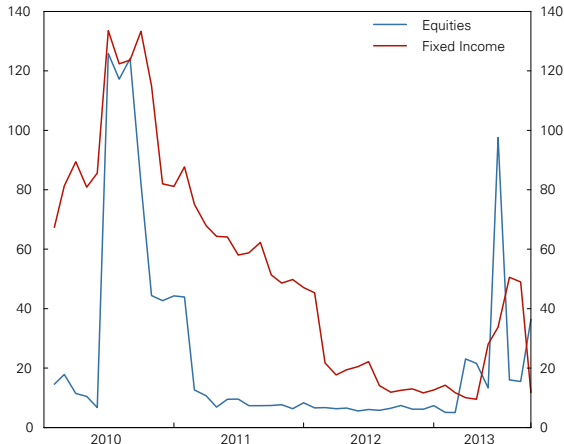


Chart 3e Equities and long-term fixed income investments separately



⁴ Under the guidelines for equities and long-term fixed income investments issued by the Governor, the aim of management is to limit relative volatility to no more than 1.0 percentage point (100 basis points). In the guidelines for the money market portfolio, a limit of 1.0 percentage point has been set for expected relative volatility. Relative volatility of 1 percentage point means that the excess return on the portfolio is expected to be within the interval +/- 1.0 percentage point in two out of three years.

Table 3a Key figures for risk and asset allocation, foreign exchange reserves

Risk	Limits	Actual		
		2013 Q3	2013 Q2	2013 Q1
<i>Money market investments:</i>				
Market risk	1.0 percentage point expected relative volatility	0.06	0.05	0.03
Asset allocation	Cash	14.81	16.41	16.65
	Securities	85.19	83.58	83.34
<i>Equities and long-term fixed income investments:</i>				
Market risk	1.0 percentage point expected relative volatility	0.15	0.56	0.49
Asset allocation	Fixed income portfolio	58.59	58.61	53.97
	Equity portfolio	41.41	41.39	46.03

The Bank's fixed income investments are highly rated. At the end of Q3, 99 percent was invested in government securities rated AA or higher.

Table 3b Foreign exchange reserves, fixed income investments, by credit rating. Percent¹

	AAA	AA	A	BBB	Lower	Total
Treasury bills	24.2	0.0	0.0	0.0	0.0	24.2
Sovereign bonds	43.6	31.4	0.0	0.0	0.0	75.0
Corporate bonds	0.0	0.0	0.0	0.0	0.0	0.0
Collateralised bonds	0.0	0.0	0.0	0.7	0.0	0.7
Total fixed income securities	67.9	31.4	0.0	0.7	0.0	100.0

¹Percent of fixed income investments in the Bank's foreign exchange reserves

Part II: Financial reporting

INCOME STATEMENT		<i>Amounts in millions of NOK</i>			
	Quarter		Year-to-date		
	2013 Q3	2012 Q3	2013 Q3	2012 Q3	2012 Q4
NET INCOME FROM FINANCIAL INSTRUMENTS					
Interest income from deposits and claims	3	3	15	16	19
Interest income, lending associated with reverse repurchase agreements	6	6	18	34	41
Net income/expenses and gains/losses from:					
Equities	7 283	5 548	20 917	11 911	15 598
Bonds and other fixed income instruments	451	1 842	-1 537	5 245	5 925
Financial derivatives	-6	-6	28	-44	-43
Interest expense, borrowing associated with repurchase agreements	-1	-1	-1	-2	-3
Tax expenses	-9	-	-47	-	-13
Other financial income/expenses	-1	0	1	0	-1
NET INCOME FROM FINANCIAL INSTRUMENTS BEFORE FOREIGN EXCHANGE GAINS/LOSSES	7 726	7 392	19 394	17 160	21 523
Foreign exchange gains/losses	1 716	-8 677	22 281	-12 595	-20 885
NET INCOME FROM FINANCIAL INSTRUMENTS *	9 442	-1 285	41 675	4 565	638

* Net income from financial instruments includes profit and loss items associated with outstanding balances with the GPFG (see Note 3).

BALANCE SHEET		<i>Amounts in millions of NOK</i>		
FINANCIAL ASSETS	2013 Q3	2012 Q4	2012 Q3	
Deposits in banks	7 672	3 672	6 179	
Lending associated with reverse repurchase agreements	35 630	12 388	35 226	
Unsettled trades	14 898	1	1 232	
Equities	103 314	96 520	93 554	
Equities lent	8 710	2 821	5 611	
Bonds and other fixed income instruments	182 006	152 735	157 155	
Financial derivatives	7	6	3	
Other financial assets	1 417	2 053	2 078	
TOTAL FINANCIAL ASSETS	353 654	270 196	301 038	
FINANCIAL LIABILITIES	2013 Q3	2012 Q4	2012 Q3	
Short-term borrowing	2 399	0	0	
Borrowing associated with repurchase agreements	0	0	0	
Cash collateral received	1 824	1 160	1 654	
Unsettled trades	20 736	1 450	15 970	
Financial derivatives	11	4	10	
Other financial liabilities	942	1 015	1 506	
TOTAL FINANCIAL LIABILITIES	25 912	3 629	19 140	
TOTAL PORTFOLIOS *	327 742	266 567	281 898	

* Total portfolios includes outstanding balances with the GPFG (see Note 4).

NOTES

Note 1 Accounting policies

Financial reporting pertains solely to Norges Bank's foreign exchange reserves including outstanding balances with the Government Pension Fund Global (GPF) as at 30 September 2013. The financial statements of Norges Banks are prepared in accordance with International Financial Reporting Standards (IFRS) as endorsed by the EU. For a description of accounting policies and methods of computation, see Norges Bank's annual financial statements for 2012. Financial reporting for Norges Bank's foreign exchange reserves does not include a statement of cash flows and a statement of changes in equity, and is thus not fully compliant with IFRS.

Note 2 Significant estimates and critical accounting judgements

The preparation of the financial statements of Norges Bank, which include the financial reporting for the Bank's foreign exchange reserves in accordance with the accounting policies in Note 1, involves the use of estimates and judgements that may affect assets, liabilities, income and expenses. Estimates and judgements are based on historical experience and expectations about future events that are considered probable at the time the financial statements are present

Estimates are based on best judgement; however, actual results may deviate from estimates. In cases of particularly uncertain estimates, this is described in Note 2 in Norges Bank's annual financial statements for 2012.

Note 3 Specification of the income statement by portfolio

Amounts in millions of NOK

INCOME STATEMENT	Long-term portfolio	Money market portfolio	Petroleum buffer portfolio	Elimination of items not incl. in foreign exchange reserves	Total foreign exchange reserves
	2013 Q3	2013 Q3	2013 Q3	2013 Q3	2013 Q3
Interest income, deposits in foreign banks	2	0	0	1	2
Interest income, lending associated with reverse repurchase agreements	0	1	5	-	6
Net income/expenses and gain/losses from:					
Equities	7 283	-	-	-	7 283
Bonds and other fixed income instruments	435	15	0	-	451
Financial derivatives	-6	0	-	-	-6
Interest expense, borrowing associated with repurchase agreements	-1	-	0	-1	0
Tax expenses	-9	-	-	-	-9
Other financial income/expenses	0	0	-	-	0
NET INCOME FROM FINANCIAL INSTRUMENTS BEFORE FOREIGN EXCHANGE GAINS/LOSSES	7 705	16	6	0	7 726
Foreign exchange gains/losses	1 328	-228	616	44	1 672
NET INCOME FROM FINANCIAL INSTRUMENTS *	9 033	-213	621	44	9 398

* For the long-term portfolio, net income from financial instruments includes profit and loss items associated with outstanding balances with the GPF. Profit and loss are excluded from the term foreign exchange reserves presented in Norges Bank's annual financial statements (cf. IMF definition).

Note 4 Specification of the balance sheet, end of quarter, by portfolio

Amounts in millions of NOK

BALANCE SHEET	Long-term portfolio	Money market portfolio	Petroleum buffer portfolio	Elimination of items not incl. in foreign exchange reserves	Total foreign exchange reserves
	30 Sep. 2013	30 Sep. 2013	30 Sep. 2013	30 Sep. 2013	30 Sep. 2013
FINANCIAL ASSETS					
Deposits in banks	2 054	1 565	4 052	-	7 672
Lending associated with reverse repurchase agreements	1 822	7 996	25 812	-	35 630
Unsettled trades	14 898	-	-	-	14 898
Equities	103 314	-	-	-	103 314
Equities lent	8 710	-	-	-	8 710
Bonds and other fixed income instruments	150 072	31 934	0	-	182 006
Bonds lent	-	-	-	-	-
Financial derivatives	0	1	6	-	7
Other financial assets	1 417	-	-	1 368	49
TOTAL FINANCIAL ASSETS	282 288	41 496	29 870	1 368	352 286
FINANCIAL LIABILITIES					
Short-term borrowing	2 399	-	-	-	2 399
Borrowing associated with repurchase agreements	0	-	-	-	0
Cash collateral received	1 824	-	-	-	1 824
Unsettled trades	15 473	3 998	1 265	-	20 736
Short-sale bonds	-	-	-	-	-
Financial derivatives	9	2	0	-	11
Other liabilities	0	-	942	-	942
TOTAL FINANCIAL LIABILITIES	19 705	4 000	2 208	-	25 912
TOTAL PORTFOLIOS *	262 583	37 496	27 662	1 368	326 374

*For the long-term portfolio, total portfolios includes outstanding balances with the GPFG.

Outstanding balances are excluded from the term foreign exchange reserves presented in Norges Bank's annual financial statements (cf. IMF definition).

Reconciliation between market value at the end of the period and net portfolio value for financial reporting purposes

Amounts in millions of NOK

	Long-term portfolio	Money market portfolio	Petroleum buffer portfolio	Total foreign exchange reserves
	30 Sep. 2013	30 Sep. 2013	30 Sep. 2013	30 Sep. 2013
Market value (end of the period)	262 583	37 555	29 021	329 159
Total portfolio	262 583	37 496	27 662	327 741
Difference between market value and net portfolio	-	59	1 359	1 418
Transfers SDFI, trade date 30 Sep. 2013, settlement 2 Oct. 2013	-	-	-1 159	-1 159
Foreign exchange purchases, trade dates 27 and 30 Sep. 2013, settlement 1 and 2 Oct. 2013	-	-	-200	-200
Foreign exchange element included for financial reporting purposes 3 October 2013	-	-59	-	-59
Rounding difference	-	-	-0	-0

Note 5 Equities, bonds and other fixed income securities

Amounts in millions of NOK

Table 5.1 Specification equities	30 Sep. 2013		
	Fair value excluding dividends	Accrued dividends	Fair value including dividends
Equities:			
Listed equities	111 819	205	112 024
OTC equities	0	0	0
Total equities	111 819	205	112 024
<i>Of which equities lent</i>			8 710

Note 6 Risk

Market risk

Market risk is the risk of changes in the value of the portfolio due to movements in interest rates, equity prices, foreign currency exchange rates and credit spread. For the long-term portfolio, Norges Bank measures risk in both absolute terms for the actual portfolio, and the relative market risk for investments in the portfolio. For the money market portfolio, the Bank measures both absolute and relative market risk.

Asset classes and currencies

The Bank's foreign exchange reserves are invested across several asset classes and currencies as shown in the table below.

Volatility

Norges Bank uses risk models to quantify the economic risk associated with all or portions of the portfolios. The expected relative risk associated with the portfolios is presented below.

Key figures for risk and asset allocation, Norges Bank's foreign exchange reserves

Risk	Limits	Actual		
		2013 Q3	2013 Q2	2013 Q1
<i>Money market investments:</i>				
Market risk	1.0 percentage point expected relative volatility	0,06	0,05	0,03
Asset allocation	Cash	14,81	16,41	16,65
	Securities	85,19	83,58	83,34
<i>Equities and long-term fixed income investments:</i>				
Market risk	1.0 percentage point expected relative volatility	0,15	0,56	0,49
Asset allocation	Fixed income portfolio	58,59	58,61	53,97
	Equity portfolio	41,41	41,39	46,03

Key figures for risk and asset allocation

The models used to calculate the information above are explained in Note 24 Risk in Norges Bank's annual financial statements for 2012.

Credit risk

Credit risk is the risk of losses if issuers of fixed income instruments default on their payment obligations. Norges Bank uses credit ratings to monitor credit risk in the bond portfolio. The table below shows a breakdown of the long-term portfolio and money market portfolio into credit rating categories.

Foreign exchange reserves, fixed income securities, by credit rating. Percent¹

	AAA	AA	A	BBB	Lower	Total
Treasury Bills	24,2	0	0	0	0	24,2
Sovereign bonds	43,6	31,4	0	0	0	75
Corporate bonds	0	0	0	0	0	0
Collateralised bonds	0	0	0	0,7	0	0,7
Total fixed income securities	67,9	31,4	0	0,7	0	100

¹ Percent of fixed income investments in the Bank's foreign exchange reserves.

The portion of Bank's foreign exchange reserves invested in fixed income instruments primarily consists of highly rated securities. At the end of Q3, 99 percent was invested government securities rated AA or higher.