

The top of the page features a blue header with a background of faint, semi-transparent images. On the left, there is a stylized representation of the Statue of Liberty. In the center and right, there are digital clock displays for various cities: New York (02:50), London (07:50), Tokyo (08:50), and Shanghai (08:50). The NBIM logo is positioned on the left side of the header.

**NBIM**

Norges Bank Investment Management

# Report on the management of Norges Bank's foreign ex- change reserves

Third quarter 2008

25 November 2008

The foreign exchange reserves are to be available for intervention in the foreign exchange market in connection with the implementation of monetary policy or to promote financial stability. The reserves are divided into a money market portfolio and an investment portfolio. In addition, a buffer portfolio is used for the regular foreign exchange purchases for the Government Pension Fund – Global. Transfers are made to the buffer portfolio from the State’s Direct Financial Interest in petroleum activities (SDFI) and from Norges Bank’s foreign exchange purchases in the market. Within Norges Bank, the investment portfolio and buffer portfolio are managed by Norges Bank Investment Management (NBIM), while the money market portfolio is managed by Norges Bank Monetary Policy and reported on separately.

The investment portfolio has a long-term investment horizon where the aim is to generate the highest possible return within the constraints set out in the guidelines issued by Norges Bank’s Executive Board. The Executive Board has defined a strategic benchmark portfolio for the investment portfolio.

## **1 Key figures**

The financial turmoil that began with problems in the US mortgage market in early 2007 and subsequently developed into a wider global confidence and liquidity crisis continued to dominate in the third quarter of 2008. During the quarter, the crisis in the financial sector evolved into a fundamental crisis of confidence in the financial system. A number of large financial institutions received funding from national authorities, some were nationalised, and others were allowed to fail. Steep falls in equity prices and lower bond yields reflect an increased likelihood of a hard landing for the economy and lower corporate earnings as a result of a dwindling supply of credit.

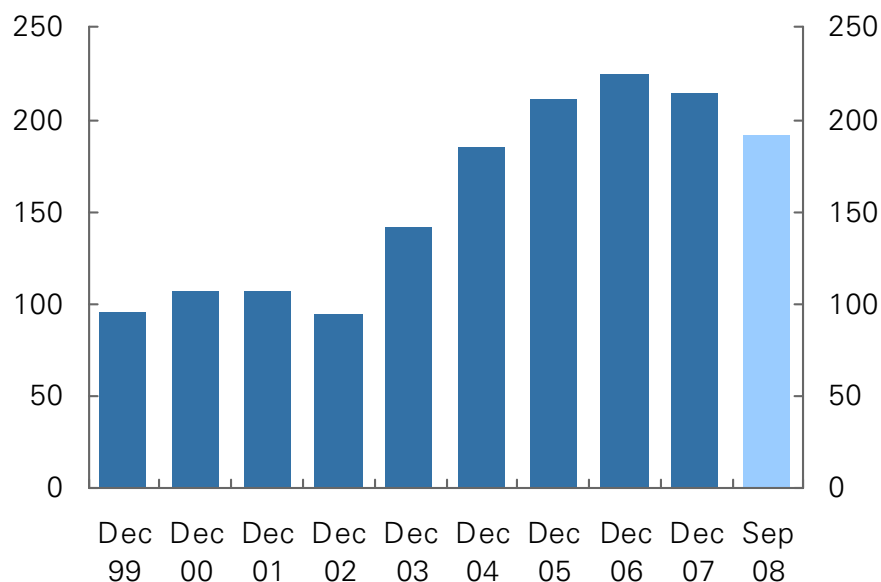
The decrease in prices in international equity markets led to a return on the investment portfolio for the quarter of -4.8 per cent in international currency. The return on the equity portfolio was -11.4 per cent, and the return on the fixed income portfolio was -0.8 per cent. The return on the investment portfolio was 1.04 percentage points lower than the return on the benchmark portfolio defined by the Executive Board of Norges Bank. The market value of the portfolio at the end of the quarter was NOK 192 billion.

Table 1-1 provides a historical overview of risks and returns for the investment portfolio, while Chart 1-1 shows movements in the portfolio’s market value.

**Table 1-1** Investment portfolio. Risks and returns measured in NOK.  
Annualised figures as at 30 September 2008

	Last 2 years	Last 3 years	Last 5 years	Last 7 years	Since 01.01.98
Actual return (per cent)	-5.14	-0.71	1.85	1.64	3.66
Benchmark return (per cent)	-3.72	0.23	2.35	1.87	3.79
Excess return (percentage points)	-1.42	-0.94	-0.50	-0.24	-0.13
Standard deviation (per cent)	6.98	7.90	7.65	7.70	7.17
Tracking error (percentage points)	0.87	0.74	0.60	0.53	0.46
Information ratio	-1.64	-1.27	-0.83	-0.44	-0.28

**Chart 1-1** Investment portfolio. Market value 1999-2008. In billions of NOK



## 2 Market value and return

The investment portfolio's market value was NOK 191.9 billion at the end of the third quarter of 2008, a decrease of NOK 3.0 billion during the quarter (see Table 2-1). A negative return on investment decreased the value of the portfolio by NOK 10.2 billion, and NOK 8.9 billion was transferred to the money market portfolio, while a weaker krone against the currencies in which the portfolio is invested increased its value by NOK 16 billion. A change in the krone exchange rate has no effect, however, on the portfolio's international purchasing power.

**Table 2-1** Investment portfolio. Movements in market value. In millions of NOK

	Equities	Fixed income	Total
30.09.07	90 900	122 211	213 111
31.12.07	88 953	125 033	213 986
31.03.08	75 278	123 609	198 887
<b>30.06.08</b>	<b>73 335</b>	<b>121 580</b>	<b>194 914</b>
Inflows of new capital	-3 439	-5 429	-8 868
Return	-8 704	-1 519	-10 223
Movements in krone	5 952	10 091	16 042
<b>30.09.08</b>	<b>67 143</b>	<b>124 722</b>	<b>191 865</b>

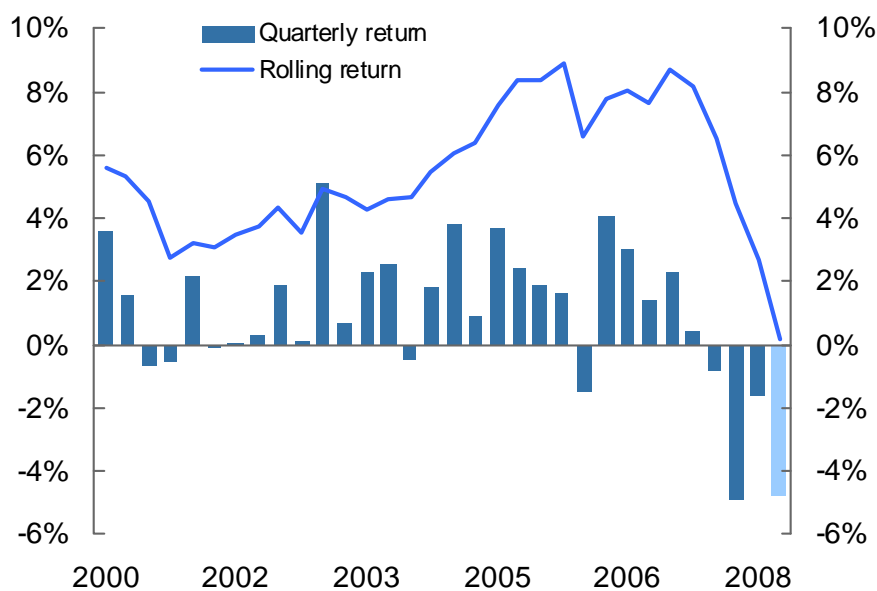
The return on the investment portfolio in the third quarter of 2008 was -4.80 per cent in international currency (i.e. measured in terms of a currency basket corresponding to the composition of the portfolio's benchmark portfolio) (see Table 2-2). There was a return of -11.41 per cent on the equity portfolio and -0.82 per cent on the fixed income portfolio. At the end of the quarter, the three-year rolling annualised return was 0.18 per cent (see Chart 2-1).

Measured in NOK, the aggregate return in the third quarter was 2.99 per cent. The difference between the return in international currency and the return in NOK was due to the depreciation of the krone during the quarter against the currencies included in the benchmark portfolio.

**Table 2-2** Investment portfolio. Return. Per cent

	Measured in international currency		Measured in NOK		
	Actual portfolio	Benchmark portfolio	Actual portfolio	Benchmark portfolio	Excess return
2007	3.37	4.59	-4.69	-3.57	-1.12
Q1 2008	-4.94	-3.91	-7.06	-6.04	-1.01
Q2 2008	-1.66	-1.88	-2.00	-2.22	0.22
<b>Q3 2008</b>	<b>-4.80</b>	<b>-3.84</b>	<b>2.99</b>	<b>4.03</b>	<b>-1.04</b>
Q1-Q3 2008	-11.01	-9.34	-6.19	-4.43	-1.76

**Chart 2-1** Investment portfolio. Quarterly return and three-year rolling annualised return 2000-2008. Per cent



The nominal annual return in international currency from 1 January 1998 to the end of the third quarter of 2008 was 4.14 per cent (see Table 2-3). After deductions for inflation and management costs, the table shows an annual net real return since 1 January 1998 of 1.96 per cent.

**Table 2-3** Investment portfolio. Return. Per cent

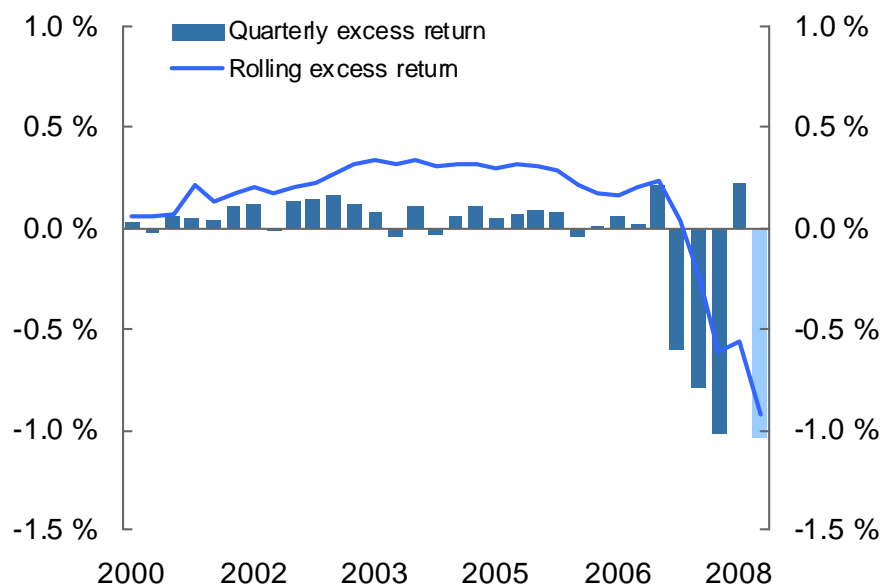
Period	Nominal annual return	Annual inflation*	Management costs	Annual net real return	Annual gross excess return
Since 01.01.98	4.15	2.08	0.06	1.96	-0.13
Since 01.01.99	3.59	2.20	0.06	1.30	-0.14
Since 01.01.00	4.14	2.29	0.06	1.74	-0.17
Since 01.01.01	3.59	2.32	0.06	1.18	-0.20
Since 01.01.02	3.76	2.46	0.06	1.21	-0.26
Since 01.01.03	4.04	2.54	0.06	1.40	-0.37
Since 01.01.04	3.17	2.76	0.06	0.34	-0.55
Since 01.01.05	1.99	2.85	0.06	-0.90	-0.71
Since 01.01.06	-0.47	3.03	0.06	-3.46	-1.07
Since 01.01.07	-4.66	3.52	0.07	-7.97	-1.67

\* Weighted average of the increase in consumer prices in the countries included in the benchmark portfolio during the years in question.

The return achieved by NBIM on the actual portfolio is measured in relation to the return on the benchmark portfolio defined by the Executive Board. The difference between these return figures is the gross excess return achieved by NBIM. The return on the portfolio in the third quarter of 2008 was 1.04 percentage points lower than the return on the benchmark portfolio

(see Table 2-2). Quarterly and three-year rolling annualised excess returns are presented in Chart 2-2.

**Chart 2-2** Investment portfolio. Quarterly excess return and three-year rolling annualised excess return 2000-2008. Percentage points



Transaction costs were incurred during the third quarter when capital was transferred to the foreign exchange reserves' money market portfolio. Norges Bank has estimated direct and indirect transaction costs in the third quarter of 2008 at NOK 131.7 million. This is equivalent to 0.15 per cent of the total amount transferred (NOK 8.9 billion) and 0.06 per cent of the market value of the portfolio at the beginning of the quarter. The benchmark portfolio has not been adjusted for these transaction costs.

At the end of the third quarter of 2008, the three-year rolling annualised excess return was -0.94 percentage point. The column at the far right of Table 2-3 shows that the average excess return has been -0.13 percentage point per year since 1 January 1998.

### 3 Market risk and management guidelines

Market risk in the investment portfolio is measured as expected tracking error. This is a statistically-derived measure of risk which says something about the amount of variation we can normally expect in the difference between the return on the benchmark portfolio and the return on the actual portfolio, based on the composition of the portfolio and historical market data. In periods of abnormal market movements and the partial collapse of global financial markets, as seen over the last 18 months, the model's assumptions will, to some extent, fail to hold.

Since mid-2007, fixed income markets in particular have been affected by factors that have caused volatility and correlations to depart from historical levels. It will take some time to adjust the model, and it may therefore be less precise during periods with major changes. Over the past year, it appears that modelled risk, expressed as expected tracking error, has underestimated the actual risk in the portfolio. Expected tracking error can vary widely even with an unchanged level of active management. This is because these measures are influenced by various market developments, such as changes in market volatility and changes in correlations between the various asset classes and securities.

The Executive Board’s guidelines set a limit for market risk in the actual portfolio relative to the benchmark portfolio. This relative market risk must always be less than expected tracking error of 1.5 percentage points. Expected tracking error was 72 basis points at the end of the third quarter of 2008 (see Chart 3-1). In retrospect, we can use the variation in the deviation between the returns on the actual and benchmark portfolios (i.e. the variation in excess return) as a measure of actual relative market risk (the darker line in the chart). This tracking error is annualised using 12-month rolling windows.

**Chart 3-1** Investment portfolio. Expected and actual tracking error 1999-2008. Basis points

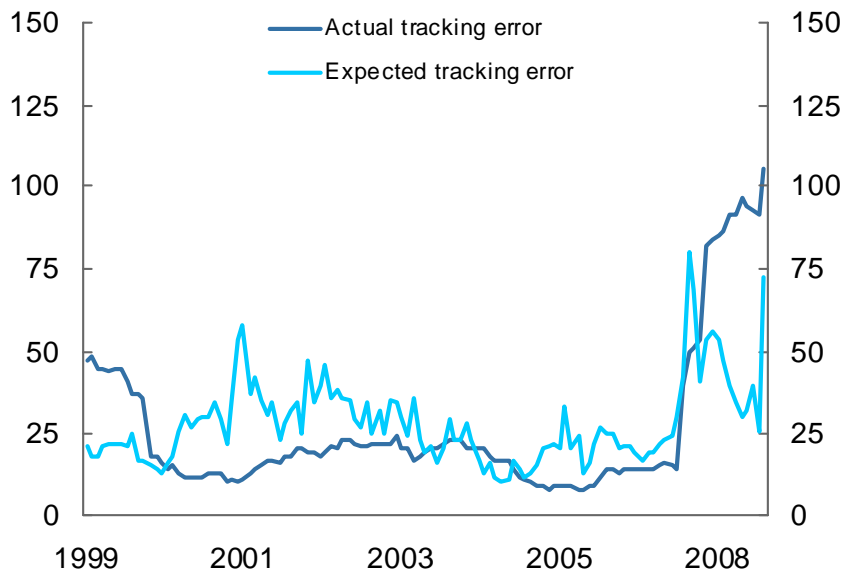


Chart 3-2 shows developments in expected tracking error in the equity and fixed income portfolios over the past 12 months.

**Chart 3-2** Investment portfolio. Expected tracking error September 2007 to September 2008. Basis points

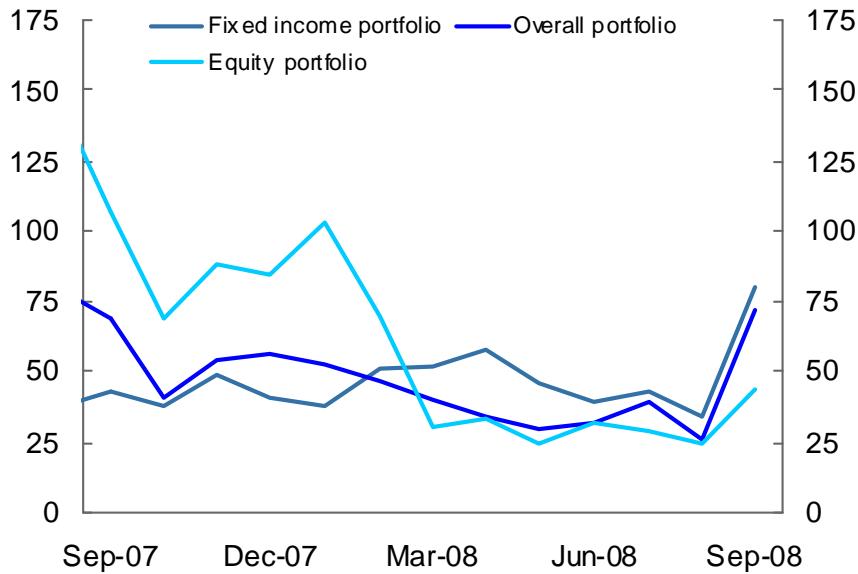


Table 3-1 breaks down the bond portfolio (fixed income portfolio excluding cash) by type of bond and credit rating.

**Table 3-1** Investment portfolio. Bond portfolio by credit rating.<sup>1)</sup> As at 30 September 2008

Percentage of fixed income portfolio								No rating
	Aaa	Aa	A	Baa	Ba	Lower	P-1	
Government and govt-related bonds	20.6	15.0	1.8	0.8	0.5	0.7	-	0.7
Inflation-linked bonds	5.3	2.4	0.1	-	-	-	-	-
Corporate bonds	0.8	4.5	6.7	4.7	0.4	0.1	-	0.1
Securitized debt	31.7	1.4	1.1	0.4	0.1	0.1	-	0.2
Short-term certificates	-	-	-	-	-	-	0.1	-
<b>Total bonds and other fixed income instruments</b>	<b>58.3</b>	<b>23.3</b>	<b>9.7</b>	<b>5.8</b>	<b>0.9</b>	<b>1.0</b>	<b>0.1</b>	<b>0.9</b>

<sup>1)</sup> Based on credit ratings from at least one of the following rating agencies: Moody's, Standard & Poor's and Fitch. The "No rating" category consists of securities not rated by these three agencies; these securities may, however, have been rated by other, local agencies.

Table 3-2 provides an overview of risk and exposure in the investment portfolio. There were no breaches of the Executive Board's investment guidelines in the third quarter of 2008.

**Table 3-2** Investment portfolio. Key figures for risk and exposure

Risk	Limits	Actual		
		31.12.07	30.06.08	30.09.08
Market risk	Tracking error max. 1.5 percentage points	0.56	0.32	0.72
Asset mix	Fixed income portfolio	58.5	62.4	65.2
	Equity portfolio	41.5	37.6	34.8
Market distribution, equities	Europe	52.5	49.8	48.0
	Americas and Africa	33.5	34.6	37.6
	Asia and Oceania	14.0	15.6	14.4
Currency distribution, fixed income	Europe	60.6	61.5	60.4
	Americas	33.4	33.3	34.1
	Asia and Oceania	6.0	5.2	5.5
Ownership interest	Max. 5% of a company	4.62	0.19	0.18

## 4 Buffer portfolio

The purpose of the buffer portfolio is to ensure an appropriate supply of new capital to the Government Pension Fund – Global. The portfolio is built up continuously by means of foreign exchange transfers to Norges Bank from the State's Direct Financial Interest in petroleum activities (SDFI) and by Norges Bank's foreign exchange purchases in the market to meet the foreign exchange requirements of the Government Pension Fund – Global. A benchmark portfolio has not been defined for the buffer portfolio. With the exception of December, capital is normally transferred to the Government Pension Fund – Global each month.

In the third quarter of 2008, NOK 51.2 billion was transferred to the buffer portfolio from the SDFI, and a further NOK 76.3 billion was transferred to the portfolio through Norges Bank's purchases of foreign exchange. A total of NOK 128.3 billion was transferred to the Government Pension Fund – Global during the quarter. The return on the buffer portfolio in the third quarter of 2008 was 6.92 per cent in NOK terms. The market value of the portfolio at the end of the quarter was NOK 10.9 billion. The fund is invested in short-term money market instruments, primarily in EUR, USD and GBP.

**Table 4-1** Buffer portfolio. Movements in market value. In millions of NOK

Period	Transferred from SDFI	Norges Bank's foreign exchange purchases	Transferred to Government Pension Fund – Global	Market value at end of period
2007	151 650	152 871	313 650	14 052
Q1 2008	54 526	29 051	88 065	9 842
Q2 2008	54 472	36 688	90 649	10 296
July 2008	16 691	22 073	40 143	8 845
August 2008	16 722	20 364	41 436	4 744
September 2008	17 782	33 870	46 696	10 882
<b>Q3 2008</b>	<b>51 195</b>	<b>76 306</b>	<b>128 275</b>	<b>10 882</b>
Q1-Q3 2008	160 193	142 046	313 320	

## 5 Financial reporting

Financial information for the investment and buffer portfolios is presented below. The financial reporting for Norges Bank's foreign exchange reserves forms part of, and comprises excerpts from, Norges Bank's financial statements.

### Accounting policies

The interim accounts for the third quarter have been prepared in accordance with the accounting policies for Norges Bank approved by the Supervisory Council on 13 December 2007. A presentation of the accounting policies applied in the preparation of the accounts can be found in the Annual Report for 2007.

The interim accounts do not include all of the information required in a full set of annual financial statements and should be read in conjunction with the Annual Report for 2007.

The preparation of the financial reporting for Norges Bank involves the use of estimates and judgements which can affect assets, liabilities, income and expenses. The accounting policies presented in the Annual Report for 2007 contain further information on significant estimates and assumptions.

### Investment portfolio – profit and loss account and balance sheet

The financial reporting to 30 September 2008 is based on the accounting data used for Norges Bank's monthly balance sheet for September published on 14 October 2008.

**Table 5-1** Investment portfolio. Profit and loss account

(Figures in millions of NOK)	Year to date				
	Q3 2007	Q3 2008	31.12.07	30.09.07	30.09.08
<i>Profit/loss on financial assets excl. exchange rate adjustments</i>					
Interest income, deposits in foreign banks	-52	29	-104	-74	37
Interest income, lending associated with reverse repurchase agreements	1 078	299	3 798	2 988	1 258
Net income/expenses and gains/losses from:					
- equities and units	-1 978	-9 369	3 676	6 213	-21 729
- bonds and other fixed income instruments	2 872	-440	2 572	1 096	-1 906
- financial derivatives	-520	-1 664	1 032	1 323	-1 202
Interest expenses, borrowing associated with repurchase agreements	-1 234	-575	-4 751	-3 637	-2 146
Other interest expenses	16	-5	-21	-18	-6
Other expenses	-50	-8	-118	-89	-48
<b>Profit/loss before exchange rate adjustments</b>	<b>132</b>	<b>-11 732</b>	<b>6 085</b>	<b>7 802</b>	<b>-25 742</b>
Exchange rate adjustments	-11 050	17 131	-16 678	-19 270	12 018
<b>Profit/loss</b>	<b>-10 918</b>	<b>5 398</b>	<b>-10 593</b>	<b>-11 468</b>	<b>-13 724</b>

**Table 5-2** Investment portfolio. Balance sheet

(Figures in millions of NOK)	31.12.07	30.09.07	30.09.08
<b>ASSETS</b>			
<b>FINANCIAL ASSETS</b>			
Deposits in foreign banks	1 490	345	1 793
Lending associated with reverse repurchase agreements	61 849	75 203	33 469
Equities and units	88 489	90 618	66 676
Bonds and other fixed income instruments	158 017	152 914	145 506
Financial derivatives	0	320	0
Unsettled trades	0	0	8 405
Other assets	61	42	65
<b>TOTAL FINANCIAL ASSETS</b>	<b>309 905</b>	<b>319 441</b>	<b>255 915</b>
<b>LIABILITIES AND EQUITY</b>			
<b>FINANCIAL LIABILITIES</b>			
Short-term borrowing	5	1 528	93
Borrowing associated with repurchase agreements	85 196	92 584	41 103
Financial derivatives	436	0	701
Unsettled trades	2 773	5 698	0
Other liabilities	7 493	6 528	13 701
<b>TOTAL FINANCIAL LIABILITIES</b>	<b>95 903</b>	<b>106 338</b>	<b>55 598</b>
<b>NET PORTFOLIO</b>	<b>214 002</b>	<b>213 103</b>	<b>200 317 *)</b>

\*) Net portfolio is higher than the market value reported in table 2-1. This is primarily due to unsettled trades not booked at 30 September 2008. In addition some valuation adjustments have been made after Norges Bank published the balance sheet as of 30 September 2008.

#### Operating expenses

The costs incurred in NBIM's management activities consist partly of fees to external managers and custodian institutions, and partly of Norges Bank's internal operating costs. In the first three quarters of 2008, NBIM's total costs associated with the management of the investment portfolio, including performance-based fees, amounted to NOK 100.9 million, which corresponds to 0.06 per cent of the average portfolio (annualised).

#### Buffer portfolio – profit and loss account and balance sheet

The financial reporting to 30 September 2008 is based on the accounting data used for Norges Bank's monthly balance sheet for September published on 14 October 2008.

**Table 5-3** Buffer portfolio. Profit and loss account

(Figures in millions of NOK)	Year to date				
	Q3 2007	Q3 2008	31.12.07	30.09.07	30.09.08
<i>Profit/loss on financial assets excl. exchange rate adjustments</i>					
Interest income, deposits in foreign banks	46	98	197	162	161
Interest income, lending associated with reverse repurchase agreements	88	123	511	394	375
Interest expenses, borrowing associated with repurchase agreements	0	0	-1	0	-2
Other interest expenses	-11	-49	-76	-27	-113
Other expenses	0	0	-1	-1	-1
<b>Profit/loss before exchange rate adjustments</b>	<b>123</b>	<b>172</b>	<b>630</b>	<b>529</b>	<b>421</b>
Exchange rate adjustments	-410	1 103	-1 119	-1 468	1 049
<b>Profit/loss</b>	<b>-288</b>	<b>1 274</b>	<b>-489</b>	<b>-939</b>	<b>1 470</b>

**Table 5-4** Buffer portfolio. Balance sheet

(Figures in millions of NOK)	31.12.07	30.09.07	30.09.08
<b>ASSETS</b>			
<b>FINANCIAL ASSETS</b>			
Deposits in foreign banks	7	1	4 153
Lending associated with reverse repurchase agreements	10 121	15 856	23 181
Financial derivatives	0	0	139
Other assets	2 273	0	0
<b>TOTAL FINANCIAL ASSETS</b>	<b>12 401</b>	<b>15 857</b>	<b>27 472</b>
<b>LIABILITIES AND EQUITY</b>			
<b>FINANCIAL LIABILITIES</b>			
Financial derivatives	0	21	0
Other liabilities	0	16 373	20 622
<b>TOTAL FINANCIAL LIABILITIES</b>	<b>0</b>	<b>16 394</b>	<b>20 622</b>
Unsettled trades	1 651	3 395	0
<b>NET PORTFOLIO</b>	<b>14 052</b>	<b>2 858</b>	<b>6 850</b>

## Enclosures

### Investment portfolio Benchmarked portfolio as at 30 September 2008. Per cent

	Equities		Fixed income instruments	
Country for equity benchmark Currency for fixed income benchmark	Strategic benchmark portfolio	Actual benchmark portfolio	Strategic benchmark portfolio	Actual benchmark portfolio
<b>Asset class weights</b>	<b>40.0</b>	34.6	<b>60.0</b>	<b>65.4</b>
Belgium		0.7		
Finland		1.0		
France		8.2		
Greece		0.5		
Ireland		0.3		
Italy		2.8		
Netherlands		1.9		
Portugal		0.3		
Spain		3.3		
Germany		6.1		
Austria		0.4		
Euro area (EUR)		25.3		48.3
UK (GBP)		14.5		9.4
Denmark (DKK)		0.8		0.7
Switzerland (CHF)		5.3		0.5
Sweden (SEK)		1.6		1.1
<b>Total Europe</b>	<b>50.0</b>	<b>47.6</b>	<b>60.0</b>	<b>59.9</b>
USA (USD)		32.3		32.4
Brazil		1.1		
Canada (CAD)		2.7		2.2
Mexico		0.4		
South Africa (ZAR)		0.6		
<b>Total Americas and Africa</b>	<b>35.0</b>	<b>37.2</b>	<b>35.0</b>	<b>34.6</b>
Australia (AUD)		2.4		0.2
Hong Kong		1.5		
Japan (JPY)		8.1		5.0
New Zealand (NZD)		0.1		0.1
Singapore (SGD)		0.5		0.2
South Korea		1.5		
Taiwan		1.2		
<b>Total Asia and Oceania</b>	<b>15.0</b>	<b>15.2</b>	<b>5.0</b>	<b>5.4</b>