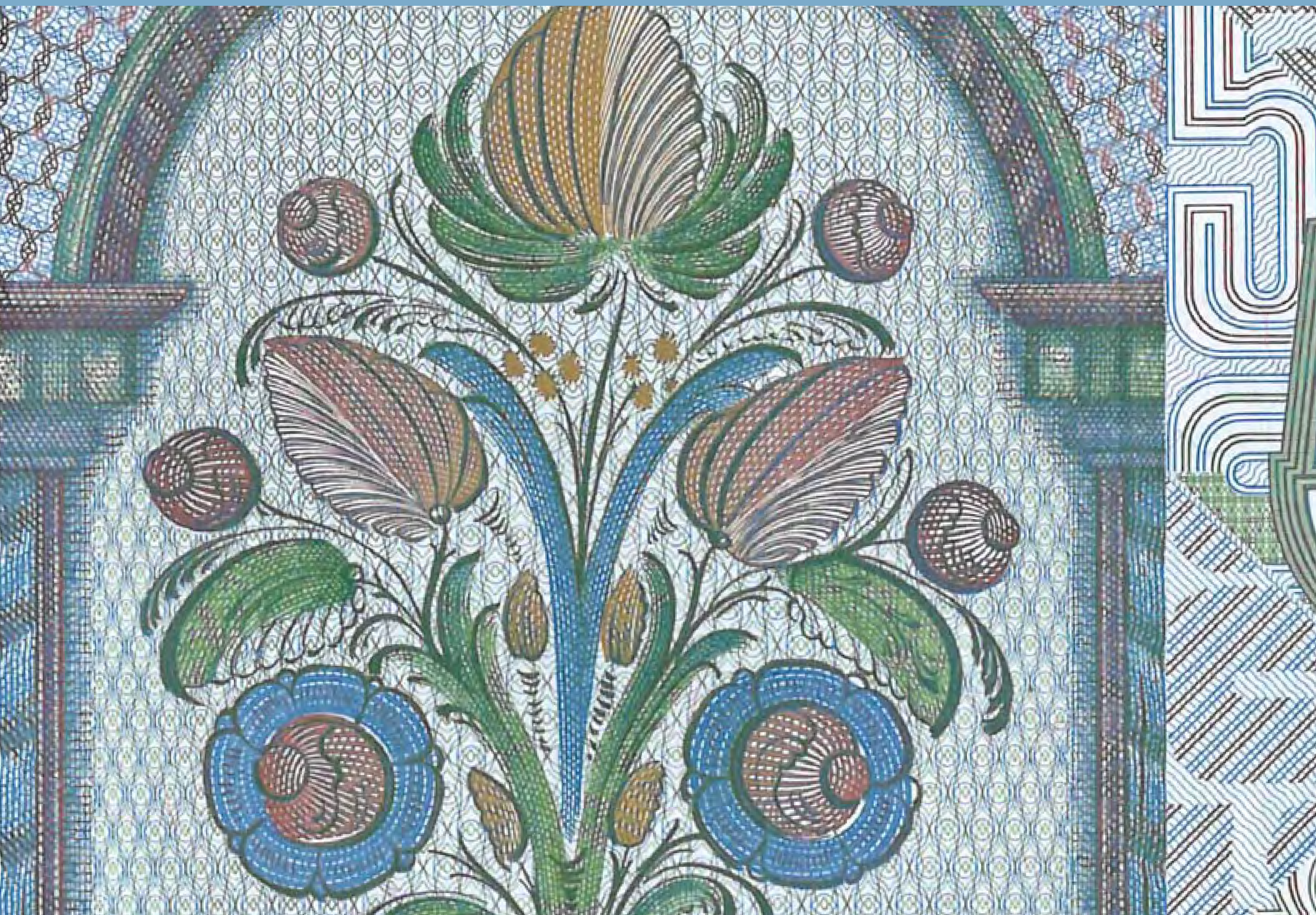
NORGES BANK



Annual Report 2008

Annual Report
2008

NORGES BANK

Norges Bank
Oslo 2009

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Report of the Executive Board 2008

In accordance with the Norges Bank Act, executive and advisory authority is vested in the Executive Board, which is in charge of Norges Bank's operations and the management of its resources.

The Executive Board seeks to fulfil the Bank's objectives and values with particular emphasis on achieving price stability, financial stability and prudent and effective asset management that generates added value.

Financial market turbulence and the development of the financial crisis in autumn 2008 had a strong impact on all of these core tasks and affected the Executive Board's activities to a considerable extent through the year. The Executive Board is particularly concerned that internal control and risk management should be satisfactory in all the Bank's activities. This topic is dealt with in more detail in the chapters on monetary policy, financial stability and investment management and in the section "Internal control and risk management".

The Executive Board held 17 meetings in 2008 and dealt with 180 matters compared with 139 in 2007. In addition to the Executive Board meetings, a number of seminars focusing on the Bank's core activities were held.

Monetary policy and financial stability

Monetary policy and work on financial stability have faced considerable challenges in 2008. International financial markets have been marked by turbulence since 2007, and in autumn last year the problems that originated in the US banking system spread to most markets and countries. When the US investment bank Lehman Brothers filed for bankruptcy on 15 September 2008, confidence between banks was severely compromised. The turbulence developed into an international financial crisis. Banks in global and domestic markets became very reluctant to lend to other banks. Money markets ceased to function in periods, and money market rates were far higher than central bank key rates. Owing to higher funding costs, banks increased their lending rates. Banks also became more concerned with protecting their equity capital and thereby more cautious about extending loans to enterprises and households. Credit channels dried up. Equity prices and oil and commodity prices fell markedly. The global economy entered a sharp downturn. It became clear that the real economic consequences of the financial crisis would be considerable and prolonged, in Norway as elsewhere. The outlook for activity and inflation in the Norwegian economy had deteriorated considerably. The outlook for financial stability had also deteriorated, and uncertainty surrounding developments ahead was unusually high.

The operational target of monetary policy is annual consumer price inflation of approximately 2.5% over time. Viewed over several years, inflation has been low and stable, remaining fairly close to, although somewhat below target. At the beginning of 2008, underlying inflation was estimated to be between 1¾% and 2½%. At the end of the year, it was approximately 2¾%, but was slowing.

The interest rate decisions and changes in Norges Bank's interest rate forecasts through the year reflect the abrupt deterioration in the economic outlook in autumn 2008. Until then the Norwegian economy had been marked by high capacity utilisation, with unexpectedly high and accelerating inflation. From mid-September, the Norwegian economy was exposed to major shocks. From October to December, the key policy rate was lowered by 2.75 percentage points to 3.00%. In interest rate setting, account was taken of money market premiums, other funding costs for banks and banks' deposit and lending rates. Weight was given to moving forward the reduction in the key policy rate so that lending rates for households and firms would be reduced. The key rate is low to counteract any negative effects on the real economy and inflation that might result from the difficulties in the financial system.

Norges Bank has also introduced a number of measures directly geared towards financial institutions and markets.

To improve credit flows in the financial sector and thereby curb the effects of the financial crisis, Norges Bank implemented a number of measures to increase liquidity in the banking system. Norges Bank has, like other central banks, extended the range of direct loans offered to banks.

Through most of the year, Norwegian banks received a larger-than-usual volume of short-term loans. In autumn 2008, the range of loans was expanded to include F-loans with longer maturities, in November loans up to two years' maturity. Norges Bank has also provided USD liquidity. In line with a number of other central banks, Norges Bank agreed on a swap facility with the Federal Reserve in September 2008 which allows Norges Bank to draw up to USD 15bn. Loans from Norges Bank require banks to pledge securities as collateral. The rules governing the types of collateral accepted by Norges Bank were changed several times in 2008.

To facilitate banks' access to funding, Norges Bank has contributed to setting up a swap arrangement whereby banks can borrow government securities in return for covered bonds. These swaps take place through auctions where the banks pay a fee for the exchange. Norges Bank holds the auctions and approves the bonds received by the government. At the end of the year, banks had borrowed government securities in the amount of NOK 43bn. The banks can sell the government securities, use them as collateral for loans or keep them as a reserve for later use. Norges Bank administers the arrangement on behalf of the government.

Owing to the extensive measures implemented by the government and Norges Bank, the market for interbank loans functioned more efficiently towards the end of the year than earlier in the year. The short-term interbank lending rate was closer to the key policy rate. But the premium was still higher than the norm over the past few years. At the end of 2008, banks had unusually large deposits in Norges Bank. Banks had become more reluctant to lend. Towards the end of the year, Norges Bank proposed that banks' financial strength should be improved.

Norges Bank's settlement system was also put to the test in 2008 when Lehman Brothers was declared bankrupt and two Icelandic banks in Norway had discontinued operations. Lehman participated as a remote broker on the Oslo Stock Exchange, and Glitnir and Kaupthing were directly involved in interbank settlement. These situations were resolved without creating problems for the other participants in the payment settlement system. In March 2006, Norges Bank entered into an agreement with the Italian company SIA SSB on the delivery of a new settlement system. In collaboration with the banks, Norges Bank has prepared for its introduction by conducting extensive testing of the new system and training in its use. The system is scheduled to be in operation from April 2009.

Investment management

Norges Bank manages the Government Pension Fund – Global on behalf of the Ministry of Finance. The Bank also manages Norway's foreign exchange reserves, which comprise three subportfolios: the investment portfolio, the money market portfolio and the buffer portfolio. Moreover, the Bank manages the Government Petroleum Insurance Fund on behalf of the Ministry of Petroleum and Energy. At the end of 2008, Norges Bank managed assets totalling NOK 2 544bn in international capital markets.

2008 proved to be a very demanding year for investment management for Norges Bank Investment Management (NBIM). The financial crisis, which was triggered in summer 2007 by a fall in prices for securities backed by US subprime mortgages, developed in the course of 2008 into a fundamental crisis of confidence in the international financial system. Daily fluctuations in both equity and fixed income markets were unusually wide in periods.

Equity prices fell sharply in 2008 and were the main reason for the large negative return on the foreign exchange reserves and in the Government Pension Fund – Global measured in terms of a currency basket corresponding to the composition of the individual portfolio's benchmark index. At end-2008, the market value of the Pension Fund was NOK 2 275bn and the market value of the investment portfolio stood at NOK 179bn.

Since 1997, the Pension Fund has recorded an average annual real return after fund management costs of 1.0%, while the corresponding real return on the investment portfolio has been 1.4% since 1998.

Active management yielded negative results in 2008. The actual gross return on the Pension Fund was 3.4 percentage points lower than the return on the benchmark portfolio defined by the Ministry of Finance. Since 1998, the average annual excess return has been -0.04 percentage point. The investment portfolio for foreign exchange reserves recorded a gross negative excess return of -4.0 percentage points in 2008.

The risk limits in investment management have been set using a risk-based model under so-called normal market conditions. As market fluctuations since summer 2007 have been far from normal, the model has been less accurate than previously. For the past year, it would seem that model-based relative risk in the Pension Fund and the foreign exchange reserves has underestimated the actual risk in the portfolio. Towards the end of 2008, relative risk was the same as measured in the model, in short periods outside the limits set for the Pension Fund by the Ministry of Finance. The increase in measured relative risk was mainly due to market changes, particularly absolute market fluctuations and correlation between different investment strategies, and not to an increase in active risk-taking by the Fund. Norges Bank has been in dialogue with the Ministry of Finance on this matter.

In 2007, Norges Bank's Executive Board established a new business strategy for investment management in the period to 2010. This strategy was updated in 2008 with the particular aim of increasing diversification in internal management and making more efficient use of external managers. NBIM is now divided into several strategic areas compared with the previous two. The principal objectives of the strategy are to generate substantial added value through active management of the government's and Norges Bank's foreign financial assets, to safeguard the owners' long-term financial interests through active corporate governance and to implement the owners' management strategy in a cost-effective, prudent and confidence-inspiring manner.

In recent years, the Executive Board has increased its focus on monitoring investment management in Norges Bank. In 2008, the Board revised the job description and and the investment mandate for the executive director of NBIM. NBIM is in a unique position in the context of the usual central bank tasks, in particular with regard to the management of the Government Pension Fund - Global. This task was delegated to Norges Bank in the Government Pension Fund Act and an agreement with the Ministry of Finance. The new job description provides a further clarification of the particular responsibilities of NBIM's executive director. The investment mandate for the executive director stipulates, within the investment limits specified by the delegating authorities, additional limits for the individual portfolios with regard to investment universe and constraints, delegation of investment management authority and reporting. The investment mandate also describes the risk profile specified by the Executive Board, including principles and parameters for risk management and measurement and reporting requirements.

The Executive Board has laid down corporate governance guidelines for the equity portfolios as a supplement to the Ministry of Finance's guidelines for the Pension Fund portfolio. Norges Bank's main tasks are twofold: first, ownership rights shall be safeguarded and used to secure and generate financial wealth for future generations.

The goal is a high long-term absolute return on the funds under management. Second, Norges Bank shall seek to contribute to high ethical, social and environmental standards in the companies in which it has invested, and thereby also to sustainable financial developments in the long term. It is regarded as important that companies in which the Bank has equity holdings are aware of Norges Bank's corporate governance principles and that the boards of these companies act in accordance with internationally recognised principles of good corporate governance. Norges Bank's corporate governance is anchored in the principles laid down in the UN Global Compact, the OECD Principles of Corporate Governance and Guidelines for Multinational Enterprises, and the new UN Principles for Responsible Investment (UNI-PRI), which Norges Bank has signed and helped to draw up. Norges Bank votes at the general meetings of the vast majority of companies in the portfolios.

The Executive Board lays down guidelines for the management of the foreign exchange reserves. Benchmark portfolios are used as a basis for managing risk and measuring the performance of operational management. The investment portfolio accounts for the largest portion of the foreign exchange reserves. Towards the end of 2008, the equity portion of the investment portfolio was so low that it was necessary to rebalance the portfolio to restore the equity portion to its strategic weight of 40%.

The other subportfolios in the foreign exchange reserves, the money market portfolio and the buffer portfolio, are smaller. The Executive Board decided to increase the size of the money market portfolio in 2008.

The Ministry of Finance has also established ethical guidelines for the Pension Fund's investments. The Council on Ethics advises the Ministry of Finance on how the guidelines for negative screening and exclusion of companies from the investment universe should be applied. The Executive Board has established similar rules for negative screening and the exclusion of companies from the foreign exchange reserves. The Ministry of Finance conducted a public hearing in 2008 to evaluate the ethical guidelines, and Norges Bank reported its views.

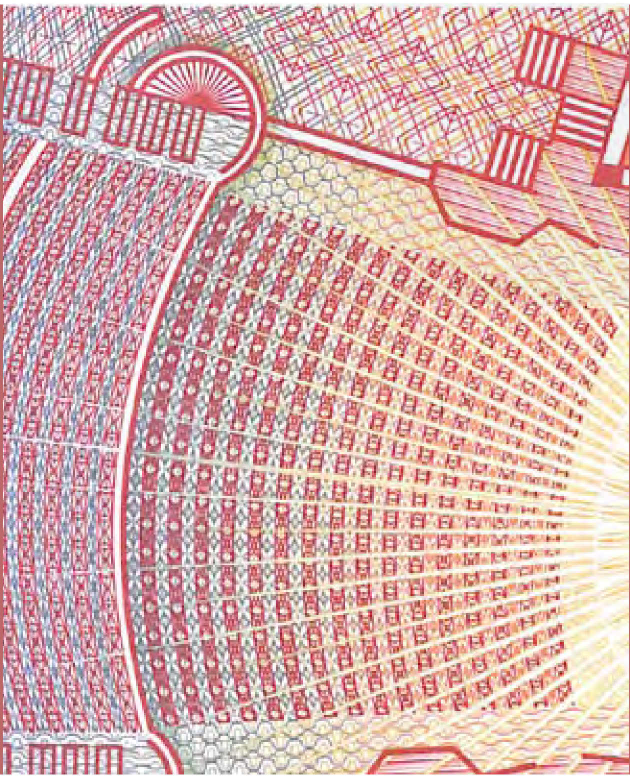
Norges Bank publishes a separate annual report on the management of the Government Pension Fund - Global.

Organisation and personnel

Use of resources and restructuring

Norges Bank is managed from the main office in Oslo and has offices in London, New York and Shanghai. The Executive Board attaches importance to high standards and low costs in the central bank's performance of its tasks. Operations should be well managed, reflect a strong ethical awareness and be in line with best international practice. The Bank should show a willingness and capacity to change.

In recent years, the Bank has concentrated its operations on core activities, i.e. monetary policy, financial



stability and investment management, including related operational and staff functions. This has resulted in substantial restructuring. In 2008, centralised IT operations were outsourced. The plan for a reduction in the Bank's central staff and support functions in the period to 2010 has also been updated.

Since the end of the 1990s, the number of employees has been reduced by approximately 600. This has been accompanied by an increase in the use of resources in the Bank's core areas. The number of employees in NBIM has increased markedly in recent years, owing particularly to the sharp rise in the capital of the Government Pension Fund - Global. The number of permanent employees in NBIM at end-2008 was 217, compared with 178 in 2007. The number employed in this area of the Bank will also be increased in the years ahead, which will strengthen control and support functions and prepare the Bank for the challenges that will accompany a sharp rise in capital under management and the inclusion of new asset classes. At end-2008, the number of permanent employees at Norges Bank totalled 549, compared with 528 at end-2007.

Norges Bank is using human resources policy programmes to facilitate employees' adaptation to the changes in the Bank. From 1999 to end-2008, the Bank concluded termination agreements for 338 employees. In 2008, applications under these agreements were approved for 4 employees in different areas of the Bank, compared with 22 the year before. NOK 114m has been set aside in the accounts to cover future payments related to restructuring.

An agreement has been entered into with Kredittilsynet (the Financial Supervisory Authority of Norway) providing for the leasing of large areas of the Bank that became vacant when the printing works was closed down in 2007. Under the terms of the agreement, extensive conversion would be necessary. Among other things, the printing works' industrial premises are being converted into offices. The conversion has been more technically demanding than anticipated and is scheduled for completion towards the end of 2009. The project has a total upper limit of approximately NOK 400m, as previously authorised by the Supervisory Council of Norges Bank.

Gender equality

Women account for 38% of the employees in Norges Bank. In 2008, the share of women recruited to permanent positions was 32%. At the end of 2008, part-time employees, primarily women, accounted for 7% of permanent employees. The share of women is higher in the lower-paid occupational categories than in management positions and in the category economist/senior economist. The Bank's gender equality programme has set targets for the share of women in different occupational categories. At the end of 2008, the share of women in managerial positions was 32%. The target for this group is 40%. The Executive Board emphasises that there should not be gender-based differ-

ences in pay. A comparison shows that on average the salary of women managers in Norges Bank was 85%[1] of the salary of male managers. The percentage for the economist and senior economist group was 86%. The differences can primarily be attributed to the low number of women applicants for some positions in investment management, where salaries are often higher than in other areas of the Bank, and to the low ratio of women to men in the senior economist group in the Bank as a whole.

Efforts are in progress to increase the share of women in management positions and economist/senior economist positions by seeking women candidates for vacant management positions, both externally and internally. Women are given management training by being engaged as project coordinators and serving as acting managers during temporary vacancies. The working situation is adapted to employees with small children through flexible working hours and the possibility of teleworking via computer.

The Executive Board is closely following developments in gender equality at Norges Bank via regular reporting from the Bank's administration.

Health, environment and safety

Norges Bank has entered into an agreement to be an inclusive workplace enterprise. In 2008, sickness absence was 2.9% of the total number of working days, compared with 3.9% in 2007. Long-term absences (16 days or more) accounted for 1.7% of total absence, against 2.6% in 2007.

According to the assessment by the Bank's Working Environment Committee, the working environment and social climate at Norges Bank is satisfactory. The quality of the physical working environment seems to be particularly high, and the Bank's health service provides technical aids and protective equipment as necessary. The results of health, environment and safety surveys conducted at the Bank are reported to the Committee on a regular basis.

The increase in the work load as a result of the financial market turbulence has largely been met by reordering internal priorities. However, the turbulence has resulted in an exceptional workload for key personnel. The Executive Board is aware that this may constitute a risk factor.

The Executive Board places considerable emphasis on ensuring adequate safety in all areas of the Bank's operations. The objective is to protect the lives and health of the Bank's employees and associates and protect the considerable assets managed by the Bank. No instances of serious personal injury or accident were recorded in 2008. Norges Bank has no significant impact on the external environment.

Internal control and risk management

Internal control and risk management are essential to the Bank's operations and are an integral part of line management responsibilities and the management system at Norges Bank. Processes have been initiated to identify, measure and monitor all the most important sources of risk expo-

[1] Excluding executive directors. The salaries for this group are shown in Note 8 in Norges Bank's accounts for 2008.

sure for Norges Bank. The four most important areas are: market risk, credit risk, counterparty risk and operational risk. Requirements for the management and measurement of risk are, for example, laid down in the Ministry of Finance's expanded guidelines for the Government Pension Fund - Global.

The Executive Board drew up the main principles for internal control at Norges Bank in 2001. The principles are based on Kredittilsynet's internal control regulations, which assign responsibility more clearly and require documentation and verification of internal control.

Norges Bank defines internal control as all measures, arrangements, systems, etc. that contribute to the achievement of the Bank's goals. Requirements are set out regarding the performance and documentation of risk analyses and control measures. The Executive Board receives annual reports on the risk outlook and the quality of internal control in the various areas of operation. NBIM submits reports more frequently. Reports are otherwise submitted as necessary or in the event of any incident.

Developments, particularly in the management of the Government Pension Fund – Global, but also in the Bank's other core tasks, imply greater operational and reputation risk. This poses considerable challenges to the Bank and its governing bodies.

In 2007, an audit committee and an internal audit unit were established, accountable to the Executive Board. The committee is composed of three of the external Board members and is primarily a preparatory body for the Executive Board in selected areas, mainly related to the Board's supervisory functions and responsibility for risk management and control. The internal audit unit, with a staff of six, is also accountable to the Executive Board and is the secretariat for the audit committee. The audit committee and the internal audit unit have been established in agreement with the Supervisory Council, but do not in other respects have any connection with the competence and responsibilities of the Supervisory Council pursuant to the Norges Bank Act, which are to supervise the Bank's operations and the organisation of Central Bank Audit's activities.

Norges Bank's work on management of operational risk was further developed in 2008. Work was also started on introducing new and improved methods of managing operational risk. This work will be continued in 2009. For more information on risk management in investment management, see the Notes section.

Ethical rules

For Norges Bank to be able to fulfil its responsibilities, the general public must have confidence that the Bank will perform its duties in a professional and independent manner. The Executive Board emphasises that the Bank's employees must always conduct themselves in an ethical manner. The Executive Board has therefore established ethical rules for the Bank's staff to prevent employees from exploiting their position to achieve unethical advantages for themselves or others or being disloyal to the Bank. The rules were most recently revised in 2008. Ethical rules have also been established for the members of the Executive Board, cf. the Regulation from the Ministry of Finance of 7 August 2000 concerning the relationship with other credit institutions and enterprises of members for Norges Bank's Executive Board, most recently revised in 2007. In autumn 2007, the Executive Board issued a set of guidelines on internal whistle-blowing at Norges Bank in response to new rules in the Working Environment Act. In December 2008, the Executive Board established revised procedures for the treatment of market-sensitive information. In connection with the rules on money laundering, no reports on suspicious transactions were submitted to Økokrim (the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime) in 2008.

Norges Bank's financial statements

The Supervisory Council adopted Norges Bank's accounting policies at its meeting on 13 December 2007. The annual financial statements are prepared in accordance with these policies.

Net international reserves are Norges Bank's main asset, disregarding the Government Pension Fund – Global, which does not affect the Bank's results. Norges Bank holds interest-free liabilities in the form of notes and coins in circulation. In addition, the Bank has domestic deposits from the central government and banks. This balance sheet composition will normally generate a positive return over time, mainly because the Bank has substantial capital and liabilities in the form of notes and coins in circulation.

The Bank's assets primarily consist of investments that generate a return.

However, since the Bank's assets are largely invested in foreign exchange and liabilities are denominated in NOK, a foreign exchange risk arises that requires adequate capital.

Norges Bank's income consists primarily of interest and any net exchange gains from investments in foreign exchange. Exchange and capital gains are the result of changes in exchange rates and equity prices, and interest rate changes that affect bond prices. Norges Bank's results will depend on developments in these parameters, which may cause wide annual fluctuations in the Bank's results.

Norges Bank's annual accounts for 2008 show a surplus of NOK 3.3bn, compared with a loss of NOK 17.6bn in 2007. Due to the depreciation of the Norwegian krone against most of the main currencies in the foreign exchange reserves, the foreign exchange reserves translated into NOK showed an overall exchange gain of NOK 63.5bn in 2008, compared with exchange losses of NOK 26.9bn in 2007. Exchange gains due to the depreciation of the krone have no effect on the international purchasing power of the foreign exchange reserves.

Movements in international securities markets in 2008 resulted in a capital loss of NOK 54.3bn, compared with a loss of NOK 3.7bn in 2007. Interest income and dividends from foreign investments amounted to NOK 12.6bn, which is NOK 2.9bn lower than in 2007.

Interest payments to the Treasury in 2008 amounted to NOK 6.3bn, compared with NOK 6.5bn in 2007.

The Adjustment Fund stood at NOK 55.5bn at end-2007. After the year-end allocations for 2008, the Adjustment Fund amounted to NOK 58.9bn. The Ministry of Finance has stipulated how much Norges Bank may allocate to the Adjustment Fund as a buffer against changes in exchange rates and securities prices, (cf. description under 'Distribution of profit' below). For the Adjustment Fund to reflect the ratios in the guidelines for provisions and allocation of profits, it would have to total NOK 105.4bn.

Norges Bank's total balance sheet amounted to NOK 2 828.5bn. The Government Pension Fund – Global is integrated into Norges Bank's accounts, and constitutes 80% of the Bank's balance sheet. The NOK deposits in the Government Pension Fund - Global are a liability item for Norges Bank and at year-end amounted to NOK 2 273.3bn. Norges Bank invests the equivalent of the NOK deposits abroad in an earmarked portfolio. The return achieved on the international portfolio is transferred to the Fund's NOK account. The costs incurred by Norges Bank in connection with management of the Government Pension Fund – Global are covered by the Ministry of Finance subject to an upper limit. For detailed information on the financial statements for the Government Pension Fund – Global, cf. Note 29.

For more information, see the financial statements for 2008, which include the profit and loss account, the balance sheet and additional information in the notes.

Distribution of profit

Pursuant to the Norges Bank Act of 24 May 1985, guidelines for the allocation and distribution of Norges Bank's profit were originally adopted by the Council of State on 7 February 1986. The guidelines have been revised several times, most recently by Royal Decree of 6 December 2002, and now read as follows:

Allocations shall be made from Norges Bank's profit to the Adjustment Fund until the Fund has reached 5% of the Bank's holdings of Norwegian securities and 40% of the Bank's net foreign exchange reserves, excluding the immunisation portfolio and capital managed for the Government Petroleum Fund (now called the Government Pension Fund – Global), other claims/liabilities abroad or any other commitments which the Executive Board considers to involve a not insignificant exchange rate risk.

1. The immunisation portfolio is that part of Norges Bank's foreign exchange reserves that is included in a separate portfolio. The return on this portfolio will be credited to/debited from the Treasury in the accounts of the same year. The same applies to the Government Petroleum Fund portfolio.

   If the size of the Adjustment Fund exceeds the levels specified in point 1, first paragraph, the surplus shall be reversed to the profit and loss account.
2. If the Adjustment Fund falls below 25% of the Bank's net foreign exchange reserves excluding the immunisation portfolio and capital managed by the Government Petroleum Fund, and other claims/liabilities abroad at the end of the year, available capital shall be reversed from the Transfer Fund to Norges Bank's accounts until the Adjustment Fund reaches full size according to point 1.
3. Any surplus after provisions for or transfers from the Adjustment Fund shall be allocated to the Transfer Fund.
4. Any deficit in Norges Bank's accounts following the allocations described in point 2 shall be covered by transfers from the Adjustment Fund.
5. In connection with the closing of the books each year, an amount corresponding to one third of the capital in the Transfer Fund shall be transferred to the Treasury.

In accordance with a statement from the Ministry of Finance, NOK 37.0m is to be transferred from other capital to cover the write-down on previously revalued assets. The amount will be transferred to the profit and loss account for allocation.

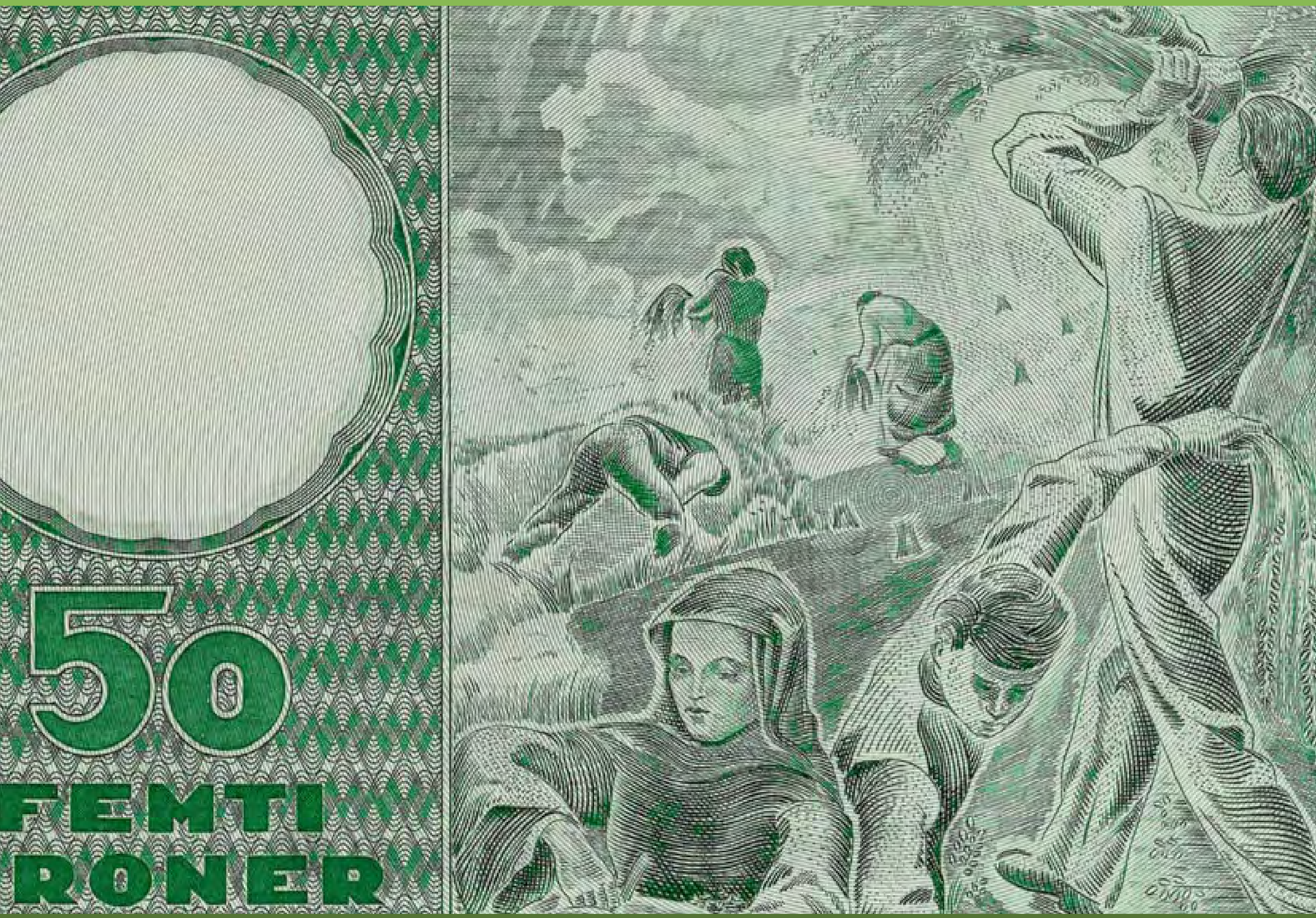
In accordance with the guidelines, the Executive Board proposes the following transfers and allocations:

In accordance with point 1, the surplus for the year after allocations, NOK 3 376m, will be allocated to the Adjustment Fund.

As there are no funds in the Transfer Fund, no transfer will be made to the Treasury.

Oslo, 25 February 2009

Svein Gjedrem (Chair)	Jan Fredrik Qvigstad (Deputy Chair)	Liselott Kilaas
Vivi Lassen	Brit K. Rugland	Asbjørn Rødseth
Øystein Thøgersen	Jan Erik Martinsen (Employees' representative)	Tore Vamraak (Employees' representative)



Financial statements
Norges Bank
2008

Profit and loss account

Figures in millions of NOK

	Note	2008	2007
Interest income and dividends	1	12 599	15 506
Change in value financial instruments	2	-54 318	-3 692
Valuation adjustment of foreign exchange	3	63 522	-26 935
Return on international reserves		**21 803**	**-15 121**
Share dividends, BIS	14	19	19
Gain/loss on other foreign financial instruments	4	-16 379	3 877
Gain/loss on domestic financial instruments in foreign currency	5	1 242	220
Gain/loss on domestic financial instruments in NOK	6	1 862	-233
Interest expenses, Treasury, banks etc.	7	-4 614	-5 455
Net other financial activities		**-17 870**	**-1 572**
Total return financial activities		**3 933**	**-16 693**
Return on investments for Government Pension Fund - Global	29	**-127 046**	**-78 581**
Transferred from/to krone account Government Pension Fund - Global	29	**127 046**	**78 581**
Management remuneration Government Pension Fund - Global	8	2 165	1 783
Other operating income	24	295	104
Total operating income		**2 460**	**1 887**
Personnel expenses	8	-745	-709
Depreciation	19	-82	-79
Other operating expenses	8	-2 227	-1 982
Total operating expenses		**-3 054**	**-2 770**
Net operating expenses		**-594**	**-883**
Profit/loss for the year		**3 339**	**-17 576**
Transferred from Adjustment Fund	27	0	17 539
Transferred from 'Other capital'	28	37	37
Available for allocation		**3 376**	**0**
Allocated to Adjustment Fund	27	-3 376	0
Total allocations		**-3 376**	**0**

Balance sheet at 31 December 2008

Figures in millions of NOK

ASSETS	Note	2008	2007
FOREIGN FINANCIAL ASSETS			
Equities	9	69 974	88 498
Bonds and other fixed income instruments	9	195 624	174 031
Deposits in foreign banks	10	36 970	3 899
Lending	11	49 036	97 302
Claims on the IMF	12	5 699	3 099
Total international reserves	**13**	**357 303**	**366 829**
Other assets in foreign currency	14	172	154
Other assets in NOK	15	55 807	0
Total other foreign assets		**55 979**	**154**
Total foreign assets excl Government Pension Fund - Global		**413 282**	**366 983**
DOMESTIC FINANCIAL AND OTHER ASSETS			
Lending to banks etc	16	80 158	75 627
Other assets in foreign currency	17	57 585	0
Other assets in NOK	18	2 359	1 834
Total domestic financial assets		**140 102**	**77 461**
Fixed assets	19	1 568	1 444
Gold		291	291
Total other domestic assets		1 859	1 735
Total domestic financial and other assets		**141 961**	**79 196**
Total assets excl Government Pension Fund - Global		**555 243**	**446 179**
Investments, Government Pension Fund - Global	**29**	**2 273 289**	**2 016 955**
TOTAL ASSETS		**2 828 532**	**2 463 134**

Figures in millions of NOK

LIABILITIES AND CAPITAL	Note	2008	2007
FOREIGN LIABILITIES			
Deposits in NOK	20	55 873	85
Borrowing in foreign currency	21	85 673	85 201
Cash collateral received	22	27 222	36 797
Other liabilities in foreign currency	14,23	4 491	3 296
Equivalent value of allocated Special Drawing Rights	12	1 811	1 442
Total foreign liabilities		**175 070**	**126 821**
DOMESTIC LIABILITIES			
Notes and coins in circulation	24	55 159	55 685
Treasury deposits	7	147 359	148 494
Deposits from banks etc	25	100 951	53 517
Borrowing in foreign currency		52	0
Other liabilities in NOK	26	16 765	5 114
Total domestic liabilities		**320 286**	**262 810**
Total liabilities excl Government Pension Fund - Global		**495 356**	**389 631**
Deposits in krone account Government Pension Fund - Global	**29**	**2 273 289**	**2 016 955**
Total liabilities		**2 768 645**	**2 406 586**
CAPITAL			
Adjustment Fund	27	58 864	55 488
Other capital	28	1 023	1 060
Total capital		**59 887**	**56 548**
TOTAL LIABILITIES AND CAPITAL		**2 828 532**	**2 463 134**

Norges Bank's Executive Board
Oslo, 25 February 2009

Svein Gjedrem
(Chair)

Jan Fredrik Qvigstad
(Deputy Chair)

Liselott Kilaas

Vivi Lassen

Brit K. Rugland

Asbjørn Rødseth

Øystein Thøgersen

Jan Erik Martinsen
(Employees' representative)

Tore Vamraak
(Employees' representative)

Notes

Note 0. Accounting policies

The accounting policies at Norges Bank were adopted by the Supervisory Council on 13 December 2007. Pursuant to an agreement with the Ministry of Finance, Norges Bank's accounting policies are also applied to the Government Pension Fund – Global.

1. General

Basis for preparing the annual financial statements

Norges Bank is subject to the Act of 24 May 1985 relating to Norges Bank and the Monetary System etc and is not required to comply with the Accounting Act. Nevertheless, the financial statements, with some exceptions, are prepared in accordance with the Accounting Act of 1998, regulations pursuant to the Act and generally accepted accounting principles in Norway (Accounting Act). The departures are due principally to special conditions applying to a central bank and are commented on below:

The principal departures from the Accounting Act are as follows:

- The profit and loss account and balance sheet are presented in a manner appropriate to the Bank's activities.
- A cash flow analysis has not been prepared.
- Financial derivatives and unsettled trades are reported net on the balance sheet.
- The foreign exchange element linked to realised and unrealised changes in the value of financial instruments is specified and entered on a separate line.
- The information in the notes is adapted to the Bank's activities.

Change in accounting policies in 2008

With effect from the financial statements for 2008, the following changes have been made in Norges Bank's accounting policies:

Cash collateral received is now recognised on the balance sheet. The same applies to collateral in the form of securities where these are reinvested (see 4.3 below). The comparative figures for 2007 have been restated accordingly. Further information is included in the relevant notes.

Presentation of the Government Pension Fund - Global

The Government Pension Fund – Global is managed by Norges Bank on behalf of the Ministry of Finance and in accordance with management guidelines. The portfolio under management corresponds to the balance at any given time in the Ministry of Finance's krone account for the Government Pension Fund - Global at Norges Bank. The entire return on the portfolio is added to the krone account. Norges Bank bears no financial risk in connection with changes in the value of the Fund. Therefore, the performance of the Government Pension Fund – Global does not affect Norges Bank's profit and loss account or Norges Bank's capital. The Government Pension Fund's net investments are recognised as an asset on a separate line. The Fund's krone account is recognised as a liability in the same amount to the Ministry of Finance. Separate financial statements are prepared for the Government Pension Fund – Global and included as a note in Norges Bank's annual financial statements.

2. Use of estimates when preparing the annual financial statements

The preparation of the financial statements for Norges Bank involves the use of estimates and valuations that can affect assets, liabilities, income and expenses. Estimates and discretionary valuations are updated regularly and are based on historical experience and expectations of future events that are considered probable at the time the financial statements are presented. The estimates are based on best judgement, but may differ from the final outcome.

3. Currency

Transactions in foreign currency are recognised in the financial statements at the exchange rate prevailing on the transaction date. Assets and liabilities in foreign currency are translated into NOK at the exchange rate prevailing on the balance sheet date.

In the profit and loss account, the foreign exchange element linked to realised and unrealised changes in the value of financial instruments is presented on a separate line. Foreign exchange adjustments for the period are estimated based on the cost price in foreign currency and changes in exchange rates between the time of purchase, or the previous balance sheet date for financial instruments purchased in earlier periods, and the balance sheet date.

4. Financial instruments

4.1. Recognition and derecognition

Financial assets or liabilities are recognised on the balance sheet when Norges Bank becomes a party to the contractual terms of the instrument. The transactions are recognised on the trade date.

Financial assets are derecognised from the balance sheet when the contractual rights to the cash flows expire or when the financial asset and significant risks and returns relating to ownership of the asset are transferred.

Financial liabilities are derecognised from the balance sheet when the liability has ended.

4.2. Fair value measurement

Initial measurement

A financial asset or liability is recognised at the purchase price including direct transaction costs. Direct transaction costs include commissions and stamp duties.

Subsequent measurement
Financial assets and liabilities are recognised at fair value on the balance sheet date. Fair value is the realisable value of an asset or the cost of settling a liability in an arm's length transaction between well-informed and willing parties.

The price quoted by a stock exchange, broker or price provider is used for securities that are traded in an active market.

Valuation methods are used to establish fair value for securities that are not traded in an active market. Valuation methods include the use of recent arm's length market transactions between well-informed and willing parties, if such information is available, reference to current fair value of another instrument that is essentially the same, discounted cash flow calculations and option pricing models. If the valuation method is commonly used by market participants to price the instrument, and this technique has provided reliable estimates of prices achieved in actual market transactions, this technique is used. Market information is used in the valuation methods to the extent possible.

Changes in fair value are recognised in the profit and loss account. Direct transaction costs relating to financial instruments measured at fair value are presented in the profit and loss account on the same line as the instruments to which the respective costs relate. Receivables and current liabilities other than derivatives are carried at amortised cost, and the effective interest is booked in the profit and loss account.

4.3. Securities lending
Securities lending is where securities are transferred from Norges Bank to a borrower against collateral in the form of cash or securities. When the loan is terminated, the identical securities are to be returned. The borrower is obligated to compensate the lender for various events relating to the securities, such as subscription rights, dividends etc. Securities lent are not derecognised from Norges Bank's balance sheet. Lending fees are accrued as interest income on lending. The borrower takes over the voting rights attached to the securities during the lending period.

Cash collateral received is recognised on the balance sheet. The same applies to collateral in the form of securities where reinvested. Unrealised and realised gains and losses on reinvestments recognised at fair value are booked in the profit and loss account.

4.4. Repurchase/reverse repurchase agreements
In connection with repurchase agreements, the security is not derecognised from the balance sheet when the agreement is entered into. During the contract period, the accounting for the underlying securities will follow the ordinary accounting policies for financial instruments. Cash received is recognised as a financial asset and with a corresponding short-term financial liability at amortised cost.

In connection with reverse repurchase agreements, the underlying security is not recognised on the balance sheet. The cash paid is derecognised from the balance sheet, and a corresponding receivable reflecting the cash amount to be returned is recognised.

Earned income and accrued expenses are recognised as they are earned or incurred through the agreement period.

4.5. Accrued interest income and expenses
Accrued interest income and expenses are recognised in the balance sheet on the same line as the related financial asset or liability.

5. Taxation
Norges Bank's activities are not subject to tax. Paid withholding tax on dividends and coupons is booked as a reduction in the corresponding income item. If withholding tax can be refunded, it will be shown as a receivable until it has been refunded.

6. Management fee
Norges Bank's costs related to the management of the Government Pension Fund – Global are covered by the Ministry of Finance up to a set limit. The management fee is taken into account in the financial statements, but is not paid until the following year.

7. Lending to banks etc.
Lending is recognised at nominal value less any write-downs. Income related to maintenance of banks' accounts and lending services are presented under 'Other operating income'.

Actual loan losses/bad debts are recognised as expenses. Estimated losses are recognised as an expense on the basis of a concrete assessment of each loan/debt. In the balance sheet, estimated losses are presented as a reduction in loans outstanding.

8. Fixed assets
Fixed assets are valued at purchase price less scheduled linear depreciation. If the fair value of fixed assets is lower than the book value and the decrease in value is not expected to be temporary, the assets are written down to fair value.

9. Gold, art collection etc
Norges Bank has a collection of gold coins and gold bars. The holdings are valued at purchase price, which is the value at the time the gold was reclassified from international reserves to assets and the purpose changed to long-term ownership. If the fair value (metal value) becomes persistently and substantially lower in the long term, the value will be written down. If the fair value of gold rises, the value of the holdings is not written up. Norges Bank has a substantial collection of art, gifts and museum pieces such as medals, banknotes and coins. This collection is registered, but not recognised on the balance sheet.

10. Pension and payment obligations
Pensions and payment obligations are recognised in the financial statements in accordance with NRS 6 Pension

costs. Norges Bank has two pension schemes, a secured scheme for the Bank's employees, which is financed through the Bank's pension fund, and an unsecured scheme for a number of other employees.

The Bank's payment obligations are related to restructuring measures in the form of severance pay and early retirement schemes. In connection with fund-based schemes through Norges Bank's pension fund, the calculations are based on actuarial assumptions regarding life expectancy, expected wage growth and adjustment of the basic amount in the National Insurance Scheme. The economic assumptions forming the basis for the computation of pension obligations may change over time. Net pension obligations are the difference between the present value of the pension obligations and the value of pension capital that has been allocated for payment of pension benefits. Pension capital is recognised at fair value. Pension obligations and pension capital are measured on the balance sheet date. Employers' National Insurance contributions are included in the figures and are estimated on the basis of actual net underfunding.

The estimation of pension costs is based on linear distribution of pension earnings and consists of the year's accrued pension earnings less return on capital allocated for pensions.

Pursuant to NRS 6 Pension costs, the accumulated effect of changes in estimates and deviations of up to 10% in pension obligations or pension capital, whichever is the larger, may be derecognised in the profit and loss account for the year in order to equalise the results.

Note 1. Interest income and dividends

Figures in millions of NOK

	2008	2007
Interest income on deposits	84	-89
Share dividends	2 313	2 621
Interest income on securities	7 829	6 971
Interest income on lending	2 145	4 605
Interest income, securities lending	278	203
Interest income relating to IMF and SDRs	86	54
Interest income from financial derivatives	-135	1 141
Interest income and dividends	**12 599**	**15 506**

Note 2. Change in value financial instruments

Figures in millions of NOK

	2008	2007
Realised gains/losses, equities	-2 328	8 975
Unrealised gains/losses, equities	-39 711	-8 029
Realised gains/losses, fixed income instruments	-1 389	-2 405
Unrealised gains/losses, fixed income instruments	-6 914	-1 633
Unrealised gains/losses, bonds reinvested in lending programme	-814	-454
Gains/losses, derivatives	-3 162	-146
Change in value financial instruments	**-54 318**	**-3 692**

Note 3. Valuation adjustment of foreign exchange

Figures in millions of NOK

	2008	2007
Realised gains/losses, foreign exchange	12 054	-13 359
Unrealised gains/losses, foreign exchange	51 468	-13 576
Valuation adjustment of foreign exchange	**63 522**	**-26 935**

Note 4. Net other foreign financial instruments

Figures in millions of NOK

	2008	2007
Interest on borrowing	-2 498	-4 338
Gains/losses, borrowing in foreign currency	-13 284	8 170
Exchange rate change SDR	-369	132
Others	-229	-87
Net other foreign financial instruments	**-16 379**	**3 877**

Note 5. Net domestic financial instruments in foreign currency

Figures in millions of NOK

	2008	2007
Interest	351	220
Foreign exchange gains/losses	891	0
Net domestic financial instruments in foreign currency	**1 242**	**220**

Note 6. Net domestic financial instruments in NOK

Figures in millions of NOK

	2008	2007
Interest expenses, borrowing	-274	-413
Gains/losses on forward exchange contracts	2 135	180
Net domestic financial instruments in NOK	**1 862**	**-233**

Note 7. Interest expenses, paid to Treasury, banks etc

Figures in millions of NOK

	2008	2007
Interest expenses, paid to Treasury	-6 307	-6 464
Interest expenses on deposits from banks	-2 138	-1 106
Interest expenses, depots operated by banks	-64	-59
Interest income on lending	3 894	2 173
Other interest income	1	1
Interest expenses, paid to Treasury, banks etc.	**-4 614**	**-5 455**

Interest on Treasury deposits in 2008 was paid at an annual 4.75% in Q1, 3.50% in Q2 and 3.75% in Q3 and Q4. The same interest rates apply for deposits from public account holders who receive interest on their deposits.

Note 8. Operating income and expenses

The Bank's operating income and operating expenses include income and expenses of NOK 2 165m related to the management of the Government Pension Fund – Global, cf. Note 29, GPFG 2 for further specification. These expenses are covered by the Ministry of Finance up to a set limit. The expenses related to management also include distributed indirect and imputed costs.

Included in Norges Bank's operating expenses are the Bank's total personnel expenses of NOK 745m, consisting of the following components:

Figures in millions of NOK

	2008	2007
Personnel expenses		
Salaries and fees	-485	-433
Employers' social security contribution	-67	-61
Pension costs (cf. 8.1)	-94	-106
Restructuring costs (cf. 8.2)	-33	-50
Other personnel expenses	-65	-59
Total personnel expenses	**-745**	**-709**

Salaries, pensions and restructuring

Remuneration to governing bodies

The chair of the Supervisory Council receives an annual remuneration of NOK 38 500, the deputy chair receives NOK 24 000 and the other members of the Council receive NOK 18 500. Alternates receive an annual remuneration of NOK 3 000. Members of the Permanent Committee receive an annual remuneration of NOK 38 500. Remuneration to members of the Permanent Committee and the Supervisory Council totalled NOK 551 000 in 2008.

The five external members of the Executive Board receive an annual remuneration of NOK 165 000 each. Alternates receive a fixed annual remuneration of NOK 33 000 with an additional NOK 4 500 for each meeting they attend. The chair of the Audit Committee receives an annual remuneration of NOK 60 000, while the other members of the Committee receive NOK 50 000 annually. Remuneration to the Executive Board and the Audit Committee totalled NOK 1 154 000 in 2008.

Salaries and pension benefits for Governor of Norges Bank S. Gjedrem, Deputy Governor J. Bergo (1.1.-31.03.2008) and J.F. Qvigstad (Head of Norges Bank Monetary Policy (NBMP) 01.01.2008-31.03.2008 and Deputy Governor 01.04.2008-31.12.2008).

The salaries of the governor and deputy governor of Norges Bank are determined by the Ministry of Finance, and in 2008 a salary of NOK 1 609 162 was disbursed to Svein Gjedrem, NOK 438 510 to Jarle Bergo and NOK 1 407 160 to J.F. Qvigstad (NOK 315 000 as head of NBMP and NOK 1 092 160 for his period as deputy governor in 2008). In addition, they each have a company car at their disposal, a free telephone and insurance covered by their employer. The combined value of these benefits is NOK 122 172, NOK 21 569 and NOK 66 388 respectively. A full retirement pension for the governor and the deputy governor is 2/3 of the prevailing salary for the relevant position. Retirement pensions are payable from the date of retirement, albeit not before the age of 65. The earning period for a full pension is 12 years. The pension is subject to coordination with other public pension schemes. At end-2008, these pension obligations were determined by actuarial assessment to be NOK 9.2m for Governor Gjedrem and NOK 0.8m for Deputy Governor Qvigstad (for his period as deputy governor in 2008), taking into account coordination with the National Insurance Scheme. Coordination with other public pension schemes will reduce Norges Bank's expenses. This is not taken into account in the calculations. Changes in 2008 were charged to Norges Bank's operations. Deputy Governor Qvigstad also has pension benefits accrued from his previous period of service at Norges Bank.

Disbursed salaries and pension benefits for other directors at Norges Bank

Figures in millions of NOK

Director	Name	Salary	Total value of other benefits
Norges Bank Financial Stability	K. Gulbrandsen	1 145 891	13 824
Norges Bank Investment Management	Y. Slyngstad	5 408 036	13 824
Norges Bank Monetary Policy	J. Nicolaisen	1 110 812	16 539
Staff and Group Services	H. Bøhn	1 080 389	12 682
Legal Department	M. Ryel	1 229 168	18 215
Communications Department	S. Meisingseth	1 058 377	13 824
Internal Audit	I. Valvatne	1 124 766	17 274

Slyngstad has been executive director of NBIM since 1 January 2008, with a salary of NOK 5 408 036 in 2008. As head of Equity Management, Slyngstad had, in addition to his average fixed salary of NOK 1.85m, an agreement for the period 2005 to 2007 to defer payment of a portion of his salary for these years until the period was over. Slyngstad therefore received payment of NOK 700 000 in 2008 for each of the years 2005, 2006 and 2007. He received a performance bonus payment of NOK 3 263 000 in 2008 for results achieved as head of Equity Management in 2007 and previous years.

Executive directors' salaries are set by the governor of Norges Bank according to guidelines laid down by the Executive Board and annual assessments.

The same pension rights apply to Norges Bank's directors as to other employees at the Bank, cf. the paragraph on pension schemes. Directors have the same borrowing rights in Norges Bank as the Bank's other employees. Borrowing terms are discussed in Note 16.

Auditing expenses

Total expenses for Central Bank Audit amounted to NOK 25.4m in 2008, including auditing and certification of the Bank's financial reporting and supervision of the Bank's operations on behalf of the Supervisory Council. The amount includes NOK 15.5m paid to an auditing company for auditing the financial reporting for the Government Pension Fund – Global in collaboration with Central Bank Audit.

Norges Bank's pension schemes

Norges Bank's ordinary pension obligations are covered by the Bank's own pension fund, which is organised as a separate legal entity. Pension benefits are equal to 2/3 of the employee's salary at the time of retirement. The earning period for a full pension is 30 years of service. Employees contribute 2% of their gross annual salary to the pension fund. Norges Bank's contribution for 2008 was covered partly by cash payments and partly by capital saved in the premium fund. Benefits from the pension fund are coordinated with benefits from the National Insurance Scheme. As from 1 January 2007, the basis for pension benefits covered by secured schemes is limited to an amount equivalent to 12 times the basic pension (G). An unsecured pension scheme funded by operations has been established to cover that portion of salaries that is in excess of 12G for those employees who already had an agreement entitling them to pension over and above this limit. For those employed after 1 January 2007 the basis for pension benefits is limited to 12G. The pension scheme complies with public service pension requirements.

Pension obligations related to secured schemes in Norges Bank amount to NOK 1 969.6m. The assumptions concerning mortality and other demographic factors are based on the standard K 1963 basis for group pension insurance. The IR 73 rate is used as a basis for calculating disability provisions. A 3% supplement for future administration costs is priced into the pension obligations. The basis for calculating individual pension obligations is the pension benefits the individual has earned or is receiving at 31 December 2008. Pension obligations are equivalent to the calculated cash value of earned benefits. The Bank's pension scheme covers 2196 persons, of whom 973 are drawing pensions, 674 are active members (including all those affected by restructuring) and 549 are former members with deferred rights.

Norges Bank's pension and payment obligations

Pension and payment obligations are calculated based on Norwegian accounting standards for pension costs. Norges Bank has secured pension schemes associated with membership in Norges Bank's pension fund. In addition, the Bank has unsecured schemes that are funded directly through operations. These are special and allocated pensions, the unfunded portion of pensions for employees with salaries higher than 12G, as well as early retirement pensions and redundancy pay agreements related to restructuring. The payment obligations related to restructuring include the present value of all agreements, including agreements with disbursements in 2009 or later.

Economic assumptions underlying the calculations:

	2008	2007
Discount rate	5.5%	5.5%
Pension and basic pension rate adjustment	3.75%	4.0%
Expected wage growth	4.0%	4.5%
Expected return on pension capital	6.0%	6.0%
Expected annual attrition	2-3% up to age 50, then 0	do.
Demographic assumptions	K 2005 for death, IR 73 for disability	do.

The Bank's total pension and payment obligations including employers' contribution are recognised in the balance sheet under 'Other liabilities' and comprise the following components:

Figures in millions of NOK

Pension and payment obligations	2008	2007
Funded schemes (overfinancing)	-217	-219
Special pensions and allocated pensions	58	54
Payment obligations associated with restructuring	114	129
Unfunded portion of pension, for salaries in excess of 12G	46	39
Norsk Kontantservice AS, part of one-time premium	17	22
Total pension and payment obligations	**19**	**25**

8.1. Pension costs

At end-2008, funded schemes were overfinanced. Pension costs are computed in accordance with Norwegian accounting standards for pension costs and include earnings, interest expenses and expected return on the capital in the pension fund for the year.

Norges Bank's share of one-time premiums for employees of Norsk Kontantservice AS who were formerly employed by Norges Bank is included in pension costs.

The increase in special and allocated pensions (unfunded) is included in the Bank's overall pension costs.

Figures in millions of NOK

Pension costs		2008		2007
Pension costs, funded schemes, which consist of:		79		70
Net present value earnings for the year	58		54	
Interest expenses on pension obligations	129		111	
Expected return on pension capital	-133		-116	
Administration expenses	6		6	
Changes in estimates recognised in the profit and loss account	16		14	
Members' contributions	-7		-7	
Employers' social security contribution	10		8	
Special pensions and allocated pensions		7		6
Unfunded portion of pension for salaries in excess of 12 G funded by operations		7		6
Norsk Kontantservice AS,		1		24
- employees previously employed at Norges Bank				
Net pension costs for the year		**94**		**106**

8.2. Restructuring costs

Restructuring expenses are related to study packages, redundancy pay and early retirement pensions. The change in payment obligations takes account of new agreements in 2008.

Figures in millions of NOK

Restructuring costs	2008	2007
Changes in payment obligations during the period	-15	2
Disbursements from the scheme	48	48
Restructuring costs including employers' social security contribution	**33**	**50**

Note 9. Foreign securities

Figures in millions of NOK

	Purchase price	Fair value	Earned dividend / yield	Total fair value
Equities				
Listed equities	89 380	69 838	136	69 974
Total equities	**89 380**	**69 838**	**136**	**69 974**
Government and government-related bonds:				
Government bonds	34 952	42 095	921	43 016
Bonds issued by local government	6 002	7 099	151	7 250
Bonds issued by supranational entities	1 760	1 969	32	2 001
Bonds issued by mortgage companies	12 192	13 329	252	13 581
Government and government-related bonds	**54 906**	**64 492**	**1 356**	**65 848**
Inflation-linked bonds:				
Bonds issued by central government	8 807	10 430	59	10 489
Corporate bonds	205	182	0	182
Total inflation-linked bonds	**9 012**	**10 612**	**59**	**10 671**
Corporate bonds:				
Bonds issued by utilities	2 097	2 156	42	2 198
Bonds issued by financial institutions	19 807	16 541	390	16 931
Bonds issued by industrial companies	7 848	7 860	179	8 039
Total corporate bonds	**29 752**	**26 557**	**611**	**27 168**
Securitised debt:				
Covered bonds	30 578	36 103	818	36 921
Mortgage-backed securities	16 253	15 372	47	15 419
Asset-backed securities	3 973	3 179	9	3 188
Commercial mortgage-backed securities	5 427	3 434	32	3 466
Total securitised debt	**56 231**	**58 088**	**906**	**58 994**
Total Treasury bonds	**33 164**	**32 943**	**0**	**32 943**
Total bonds and other fixed income instruments	**183 065**	**192 692**	**2 932**	**195 624**

Foreign Treasury bills increased by NOK 33 832m in 2008. The increase is partly due to foreign exchange swaps in autumn 2008 whereby Norges Bank offered NOK liquidity in exchange for USD or EUR to banks in the Norwegian money market. Norges Bank received collateral in foreign currency that was temporarily invested in short-term foreign securities.

Note 10. Deposits in foreign banks

The NOK 33bn increase in deposits in foreign banks is related to turbulence in global financial markets. In autumn 2008, Norges Bank decided to gradually increase the size of the liquid portion of the money market portfolio through transfers from the more long-term investment portfolio.

Note 11. Lending

Figures in millions of NOK

	2008	2007
Cash lending	1 461	20 108
Lending related to repurchase agreements	5 307	60 289
Secured lending (triparty)	46 174	17 341
Financial derivatives (Note 11.1)	-3 907	-436
Lending	**49 036**	**97 302**

Cash lending refers to lending to Sedlabanki Islands, which totalled NOK 1 461m as of 31 December 2008. In connection with the financial turbulence in 2008, Norges Bank and Sedlabanki Islands agreed on a swap facility enabling Sedlabanki Islands to borrow up to an agreed amount in EUR as needed against equivalent collateral in ISK. The collateral is recognised in the balance sheet under 'Cash collateral received', cf. Note 22.

11.1 Financial derivatives

Figures in millions of NOK

	Exposure				Fair value		
	2008		Average 2008				
	Purchased	Sold	Purchased	Sold	Asset	Liability	Net
Foreign exchange contracts	**5 305**	**32 831**	**85 495**	**16 426**	**227 624**	**228 809**	**-1 185**
Listed futures	**6 899**	**12 480**	**11 334**	**13 678**	**176**	**219**	**-43**
Interest rate swaps	48 569	50 505	72 209	64 578	2 841	5 905	-3 064
Total return swaps	1		2 020	25	16		16
Credit default swaps	6 742	4 125	9 996	6 548	813	573	240
Equity swaps	574	18	811	74	13	484	-471
Total swaps	**55 886**	**54 648**	**85 036**	**71 225**	**3 683**	**6 962**	**-3 279**
Options	**6 872**	**4 727**	**12 902**	**11 826**	**739**	**364**	**375**
Total financial derivatives	**74 962**	**104 686**	**194 767**	**113 155**	**232 222**	**236 354**	**-4 132**

NOK 225m in domestic derivatives is also included in total financial derivatives, cf. Note 17.

Foreign exchange contracts

This item consists of foreign exchange transactions (futures contracts) with normal settlement for future delivery. Exposure is the sum of the nominal value of the contracts entered into.

Listed futures

Exposure is the market value of the underlying instruments.

Unlisted (OTC) financial derivatives

Interest rate swaps

Interest rate swaps and foreign exchange swaps are included in this item.
Exposure is nominal and indicates whether Norges Bank receives (contracts purchased) or pays (contracts sold) a fixed rate.

Total return swaps

With a total return swap (TRS), the protection purchaser transfers the total return on an underlying credit to the protection seller in return for a fixed or floating rate of interest. Total return denotes the sum of coupon payments and any change in value. The underlying assets for the TRSs in which the investment portfolio is invested are commercial mortgage-backed securities (CMBS) and mortgage-backed securities (MBS) indices.

Exposure is nominal and indicates whether Norges Bank receives (contracts purchased) or pays (contracts sold) the index return.

Credit default swaps

With a credit default swap, the protection seller receives a periodic premium or lump sum from the protection purchaser as compensation for assuming the credit risk. The protection purchaser receives payment from the seller only if the credit protection of the underlying credit is triggered (credit event). A credit event might include default on the underlying credit/bond. The protection normally expires after the first credit event.

The underlying assets for credit default swaps are corporate bonds, securities issued by nation states, corporate bond indices, asset-backed securities (ABS) indices and commercial mortgage-backed securities (CMBS) indices.

Exposure indicates whether Norges Bank has purchased or sold protection for all or part of the credit risk associated with the various types of underlying assets.

Equity swaps

Equity swaps are unlisted agreements between two counterparties to swap cash flows based on changes in the underlying securities, which may be an equity, groups of equities or an index. In addition, payments are received in connection with dividends and corporate events.

Exposure corresponds to the market value of the underlying equities or indices.

Options

Exposure is the market value of the underlying security. Options written by the Norges Bank portfolio are recognised under 'Sold'. Options where Norges Bank pays a premium are recognised under 'Purchased'.

Note 12. Claims on the IMF

Figures in millions of NOK

	2008	2007
Quota in the IMF	18 045	14 372
The Fund's NOK holdings	-15 410	-13 279
Reserve position in the IMF	**2 635**	**1 093**
Special Drawing Rights (SDR)	3 060	2 000
Earned interest	4	6
Claims on the IMF	**5 699**	**3 099**
Equivalent value of allocated Special Drawing Rights	**-1 811**	**-1 442**

The IMF's task is to promote international monetary and financial stability. The Fund gives advice to member countries and provides temporary funding in the event of balance of payment problems. The IMF quota (SDR 1 671.7m) determines the member country's financial contribution to the IMF and provides the basis for determining the amount of financing the member can obtain in the event of balance of payments problems.

The IMF can use Special Drawing Rights (SDRs) as an instrument for supplying international liquidity. The value of SDRs is calculated on the basis of a currency basket comprising US dollars, euros, sterling and Japanese yen.

The equivalent value of allocated SDRs in the IMF shows total allocations of SDRs since the scheme entered into force in 1970. The change in the item reflects a change in the SDR exchange rate (NOK 10.8 at 31 December 2008).

Note 13. International reserves, by portfolio

Relationship between different reserve terms used in Norges Bank's publications:

Figures in millions of NOK

	2008				
	Investment portfolio	Money market portfolio	Buffer portfolio	IMF portfolio	Total
Securities and deposits	235 692	58 468	8 404	4	302 568
Other foreign exchange reserves	17 029	20 682	11 325	0	49 036
Foreign exchange reserves according to IMF definition	**252 721**	**79 150**	**19 729**	**4**	**351 604**
IMF reserve position/SDRs	0	0	0	5 699	5 699
International reserves	**252 721**	**79 150**	**19 729**	**5 703**	**357 303**
Foreign exchange claims, foreign	60	0	0	112	172
Foreign exchange liabilities, foreign	-3 981	0	0	-510	-4 491
- IMF reserve position/drawing rights and loans	0	0	0	-5 699	-5 699
Borrowing (foreign exchange liabilities)	-53 764	-59 130	0	0	-112 894
Foreign exchange reserves according to Norges Bank's financial statements	**195 036**	**20 020**	**19 729**	**-394**	**234 391**
Foreign exchange claims, domestic	165	57 420	0	0	57 585
Foreign exchange liabilities, domestic	-52	0	0	0	-52
Outstanding financial statements, separate portfolios under management	-16 259	0	0	0	-16 259
Unrecognised unsettled cash agreements	0	0	3 997	0	3 997
Foreign exchange for management	**178 890**	**77 440**	**23 726**	**-394**	**279 662**

Owing to the financial turbulence in global financial markets in autumn 2008, Norges Bank decided to increase the size of the money market portfolio through transfers from the investment portfolio.

Distribution of foreign exchange reserves under 'Foreign exchange for management'.

Figures in millions of NOK

	USD	CAD	EUR	GBP	JPY	SDR	Other	SUM
Securities and deposits	**125 307**	**3 568**	**118 030**	**27 373**	**11 815**	**0**	**16 475**	**302 568**
Lending	17 902	-87	27 512	2 514	323	0	872	49 036
Foreign exchange reserves according to IMF definition	**143 209**	**3 481**	**145 542**	**29 887**	**12 138**	**0**	**17 347**	**351 604**
IMF reserve position/SDRs	0	0	0	0	0	5 699	0	5 699
International reserves	**143 209**	**3 481**	**145 542**	**29 887**	**12 138**	**5 699**	**17 347**	**357 303**
Foreign exchange claims, foreign	10	0	10	5	0	94	53	172
Foreign exchange liabilities, foreign	-4 176	-10	-127	55	0	-23	-210	-4 491
- IMF reserve position/drawing rights and loans	0	0	0	0	0	-5 699	0	-5 699
Borrowing (foreign exchange liabilities)	-71 169	0	-32 612	-5 754	-478	0	-2 881	-112 894
Foreign exchange reserves according to Norges Bank's financial statements	**67 874**	**3 471**	**112 813**	**24 193**	**11 660**	**71**	**14 309**	**234 391**
Foreign exchange claims, domestic	57 420	0	0	0	0	0	165	57 585
Foreign exchange liabilities, domestic	0	0	-52	0	0	0	0	-52
Outstanding financial statements, separate portfolios under management	-2 652	47	-15 531	1 410	-37	0	504	-16 259
Unrecognised unsettled cash agreements	2 046	0	1 951	0	0	0	0	3 997
Foreign exchange for management	**124 688**	**3 518**	**99 181**	**25 603**	**11 623**	**71**	**14 978**	**279 662**

Risk and valuation in the investment portfolio

Risk management is essential at Norges Bank. Processes have been established to identify, measure and monitor significant risks to which Norges Bank is exposed through its operations. The four most important areas are: market risk, credit risk, counterparty risk and operational risk. Requirements relating to risk management and measurement are laid down in the Executive Board's guidelines.

Market risk

Market risk is risk related to changes in the value of the portfolio due to changes in interest rates, equity prices and/or exchange rates. Norges Bank measures the portfolio's absolute and relative market risk.

The portfolio's market risk is largely determined by the benchmark portfolio's market risk. Norges Bank also takes on risk through its active management.

Absolute risk is estimated based on the actual portfolio, as standard deviations in the return. The standard deviation is a statistical term that indicates the magnitude of variation that can be expected in the return on the portfolio. The table below illustrates market risk, expressed as expected annual standard deviation, in the actual portfolio at an overall level and for the two asset classes.

	Risk measurement	31 Dec 08	Min 2008	Max 2008	Average 2008	31 Dec 07
Total risk, portfolio						
Equity portfolio	St. dev	36.37%	15.92%	46.09%	24.54%	14.47%
Fixed income portfolio	St. dev	22.11%	7.85%	22.11%	12.41%	8.97%

The figure for risk at end-2008 means that in two out of every three years the value of the portfolio is expected to fluctuate within +/-22.2% of total market value (one standard deviation) based on the actual portfolio at that time. Market risk has risen considerably in the course of 2008. Estimated expected risk rose in particular in the last half of 2008. Market risk can also be expressed based on the actual fluctuations in the portfolio through the year.

Two factors in particular explain the increase in risk level: changes in the composition of the benchmark portfolio and changes in market dynamics. Changes in the benchmark portfolio in 2008 are related to the inclusion of emerging equity markets and explain some of the increase in risk in the course of the year. Stressed markets and unusually high volatility, particularly in the second half of the year, explain most of the increase in 2008.

Risk model

The model used calculates the expected standard deviation for the value of the portfolio based on the composition of the portfolio and assumptions about sensitivity to fluctuations in relevant market factors and correlations between them. Norges Bank conducts risk calculations on a monthly basis. Parametric calculation and calculation based on Monte Carlo simulation are both used. Parametric calculation was used in the calculation of the figures in the table above. Volatility and correlation are estimated based on daily historical data where more importance is attached to recent market data than to old data. As a result, this risk model reacts very quickly to market changes.

Liquidity risk

Norges Bank defines liquidity risk in relation to portfolio management as the ability to make planned or unexpected changes in the composition of the investment portfolio due to exogenous or endogenous factors without incurring unusually high transaction costs. Management of liquidity risk is integrated throughout the control structure down to individual investment mandates and is performed using a set of quantitative management variables.

For the portfolio's positions in equity markets, the measurement of these management variables is not associated with major challenges since the portfolio comprises equities listed on regulated exchanges. There are a few exceptions, however, as some local exchanges do not function satisfactorily. For fixed income instruments, measurement is more complex due to a high proportion of unlisted instruments, and recent market developments have presented additional problems in terms of quantitative measures of liquidity for fixed income instruments.

Liquidity risk increased considerably in 2008, particularly in the second half of the year. For many fixed income instruments, liquidity was substantially reduced as many of the participants supplying liquidity drastically scaled back their activities. A loss of liquidity on this scale presented challenges to investment management.

Credit risk

Credit risk is the risk of losses if issuers of fixed income instruments default on their payment obligations to the Government Pension Fund - Global. Another form of credit risk is the counterparty risk that arises in derivative and foreign exchange transactions. Settlement risk, which arises in connection with the purchase and sale of securities, where not all transactions take place in real time, also involves counterparty risk.

Credit risk arises in the Fund's fixed income portfolio partly as a result of the Ministry of Finance's investment strategy and partly as a result of Norges Bank's active management. All fixed income instruments in the investment portfolio's benchmark index have a rating from one of the major rating agencies: Standard & Poor's, Moody's and Fitch. All three agencies classify the issuers of fixed income instruments on the basis of their creditworthiness. A credit rating scale from AAA to D is used for long-term bonds. The highest rating from S&P and Fitch is AAA and Aaa from Moody's. The lowest investment grade ratings are BBB from S&P and Fitch and Baa from Moody's. Lower ratings are termed non-investment grade. All bonds in the Fund's benchmark portfolio have an investment grade rating. There is no requirement for a credit rating from the rating agencies for the Fund's portfolio of fixed income instruments. The table below breaks down the fixed income portfolio on the basis of credit ratings from at least one of the rating agencies at the end of the year.

Fixed income portfolio by credit rating:

Figures in millions of NOK

Investment portfolio	Aaa	Aa	A	Baa	Ba	Lower	No rating	Total
Government and government-related bonds	43 493	16 301	2 806	978	922	1238	84	65 822
Inflation-linked bonds	6 414	4 108	149	-	-	-	-	10 671
Corporate bonds	1 908	4 585	13 274	6 693	458	266	4	27 168
Securitised debt	55 172	1 382	1259	268	97	718	99	58 994
Short-term certificates	56	-	-	-	-	-	-	56
Total	**107 042**	**26 356**	**17 488**	**7 939**	**1477**	**2 222**	**187**	**162 711**

The fixed income portfolio by credit rating is based on credit ratings from at least one of the credit rating agencies Moody's, Standard & Poor's and Fitch. The 'No rating' category includes securities not rated by these three agencies. These securities may, however, have been rated by other, local agencies.

The following table shows exposure to credit derivatives:

Figures in millions of NOK

	Nominal amount	Fair value
Credit default swaps, protection purchased	6 742	(410)
Credit default swaps, protection sold	4 125	650

Protection purchased implies that the portfolio's credit risk has been reduced, while protection sold implies increased credit risk.

Norges Bank is also exposed to risk vis-à-vis counterparties in the execution of transactions, vis-à-vis the custodian institutions where securities are deposited and vis-à-vis international settlement and custody systems (counterparty risk). The equity and fixed income portfolios include investments in unsecured bank deposits, unlisted derivatives and foreign exchange transactions. Derivatives are used for both trading and hedging purposes in the portfolio. The Ministry of Finance has decided that no counterparties involved in such transactions may have a credit rating lower than A-, A3 or A- from Fitch, Moody's or S&P, respectively. Norges Bank monitors counterparty risk by monitoring exposure relative to credit risk limits. These limits are partly determined by the credit rating of the counterparty, where a higher rating results in a higher limit.

The table below shows counterparty risk associated with positions in financial derivatives (contracts with a positive market value) at year-end and cash holdings.

Figures in millions of NOK

	Fair value
Credit default swaps	813
Foreign exchange contracts	50
Interest rate swaps	2 857
OTC options	739
Equity swaps	12
Total derivatives	**4 471**
Term deposits	1
Cash deposits	1 843
Total term deposits/cash deposits	1 844
Total counterparty risk	**6 315**

The positions are shown before netting. To minimise counterparty risk, Norges Bank uses bilateral netting agreements.

Fair value measurement of financial instruments

Control environment

An extensive process for ongoing valuation of the portfolio has been established involving sourcing and verification of prices from both external fund accounting service providers and Norges Bank's operating units. Valuation is also subject to a number of additional control procedures delegated to independent control environments at Norges Bank and the external service providers at period-ends. Hierarchies of independent price sources established by Norges Bank are used in the pricing process. The most important price checks are conducted at month-end to ensure the quality of prices and that the pricing hierarchy is being followed in the measurement of returns and the preparation of accounts. Spot checks are also made during the month. Where necessary, the internal control units enlist the support of external pricing specialists chosen to assist with the pricing of particularly challenging investments. The resulting valuations are reviewed by a valuation committee, which is a forum for escalating significant pricing issues. The committee meets at least once a quarter ahead of the presentation of the accounts.

Establishing fair value

The turmoil in financial markets increased in 2008, reaching a provisional peak in the wake of the Lehman Brothers bankruptcy in September. This led to greater uncertainty about the valuation of some types of instrument. However, pricing risk is still expected to be limited for the majority of instruments in which the portfolio is invested. Most financial instruments had observable prices throughout the year. Prices are obtained from multiple sources that are independent of both internal and external portfolio managers.

In cases where no observable price is available due to limited activity in the market, models are used by the independent price providers to price the positions in question. Most securities in this category have observable market data that are included in the model, while a small number are priced by means of extrapolation and estimation.

The table below breaks down the investments into categories of price uncertainty.

Figures in millions of NOK

Categories of investments by price uncertainty	Observable market prices in active markets	Model pricing with observable data points	Model pricing with greater uncertainty about fair value	Total
Equities and units	69 943	7	13	69 962
Bonds	65 794	85 818	11 099	162 711
Total	**135 737**	**85 825**	**11 112**	**232 673**

Equity investments are considered relatively easy to value, as there are official and observable market prices based on an active transaction market for almost all positions in the portfolio. For holdings of bonds, the price uncertainty picture is somewhat more complex. The pricing of government bonds and liquid government-guaranteed bonds is based on observable market prices in an active market with quotes and frequent transactions. Corporate bonds, covered bonds and some government-guaranteed and government-related bonds, however, are priced using models with observable data points.

Exposure considered particularly uncertain in terms of pricing totalled NOK 11.1bn at the end of the year. This consisted almost exclusively of asset-backed securities not guaranteed by US federal agencies such as Fannie Mae, Freddie Mac and Ginnie Mae. This represented a decrease in exposure of NOK 5.3bn since the end of 2007, when there was exposure of NOK 14.6bn to asset-backed securities and NOK 1.8bn to structured investment vehicles (SIVs). The decrease was due primarily to falling prices for asset-backed securities, but also to instruments maturing and repayments of principal. With regard to the remaining exposure to SIVs, only exposure of NOK 14m was considered particularly difficult to price at the end of 2008. An additional NOK 171m in SIV exposure was reclassified into the category for model pricing with observable data points. The remainder of the decrease in exposure to SIVs in 2008 was due primarily to repayments on maturity.

Following a number of analyses and discussions with various players in the market (price providers, brokers and external managers), simple valuation methods have been developed to take account of this additional uncertainty. With these methods, the value of some types of instruments is revised downwards by means of a liquidity deduction from the value reported from the ordinary price sources. The size of this liquidity adjustment depends on the estimated uncertainty related to the price from the price source.

The liquidity adjustment for accounting purposes over and above the prices from ordinary sources totalled NOK 482m at the end of 2008, as against NOK 344m in 2007. Of this total, NOK 150m relates to cash collateral reinvested in bonds.

Note 14. Other assets in foreign currency

Figures in millions of NOK

	2008	2007
BIS shares	94	94
Other assets	78	60
Other assets in foreign currency	**172**	**154**
Allocated, unpaid shares in BIS	**-324**	**-253**

Norges Bank has been allocated a total of 8000 shares at SDR 5000 in the Bank for International Settlements (BIS). 25% of the shares, valued at NOK 25m, have been paid for. Norges Bank has not paid up the share capital for 75% of the shares. There is a limited liability amounting to NOK 347m attached to shares purchased plus previously allotted shares. The portion of the conditional liability corresponding to the value of the shares at the time of allotment, i.e. NOK 23m, is recognised under the item 'Other foreign liabilities'. The remainder of the conditional liability, NOK 324m, is not recognised in the balance sheet but shown in the Notes. In 2008, dividends on BIS shares amounted to NOK 19m.

Note 15. Other assets in NOK

Figures in millions of NOK

	2008	2007
Cash lending as collateral for borrowing	55 807	0
Other assets in NOK	**55 807**	**0**

Norges Bank has posted collateral in NOK in exchange for USD loans from the Federal Reserve Bank. The collateral is recognised under 'Other assets in NOK'. For further information on this credit swap facility, cf. Note 21.

Note 16. Lending to banks etc.

Figures in millions of NOK

	2008	2007
Lending to banks, fixed-rate loans	79 662	75 176
Lending to Norges Bank's employees	496	451
Lending to banks etc.	**80 158**	**75 627**

Lending to banks is in the form of fixed-rate loans provided against collateral in approved securities. Loan maturities averaged 4.2 months in 2008, as against an average of 0.4 months in 2007.

The Bank's loan scheme for its employees comprises mortgages and consumer loans. Mortgages are provided in accordance with guidelines from the Supervisory Council as first mortgages within 85% of estimated value, limited to NOK 2.16m. Consumer loans are limited to a maximum of four times the monthly salary. The loan schemes apply to all employees. In 2008, the interest rate was linked to the norm rate (i.e the norm rate for low-interest loans from an employer). The Ministry of Finance sets the norm rate up to 6 times a year, and in 2008 interest rates increased from 5.00% to 6.25%.

Note 17. Other assets in foreign currency

Figures in millions of NOK

	2008	2007
Time deposits, domestic banks	57 810	0
Regulation futures contracts (Note 11.1)	-225	0
Other assets in foreign currency	**57 585**	**0**

Time deposits, domestic banks, are dollar deposits in Norwegian banks.

Note 18. Other financial assets in NOK

Figures in millions of NOK

	2008	2007
Fee for management of the Government Pension Fund - Global	2 165	1 783
Capital deposited in Norges Bank's pension fund	142	0
Domestic deposits	26	20
Other assets	27	31
Other financial assets in NOK	**2 359**	**1 834**

Note 19. Fixed assets

Figures in thousands of NOK

	Vehicles Machinery, IT equipment	Security system	Machinery, fixtures	Buildings with installations	Bank building, head office Bankplassen 2	Building under construction	Dwellings, Bank's holiday cabins	Land	Total
Original cost at 1.1.	198 561	76 304	11 685	405 780	1 657 410	126 484	3 386	59 881	2 539 491
+ Transfers from building under construction	766	184	671	2 951	0	-4 573	0	0	0
+ Additions	11 583	2 077	1 791	13 087	0	180 584	0	0	209 122
- Disposals	1 743	8 529	768	3 109	0	0	0	0	14 148
Adjustments	170	0	-170	0	0	0	0	0	0
Original cost at 31.12.	209 337	70 036	13 211	418 710	1 657 410	302 494	3 386	59 881	2 734 465
- Accum. depreciation and write-downs	159 042	33 138	5 470	296 918	672 020	0	0	0	1 166 588
Book value at 31.12	50 294	36 897	7 741	121 792	985 390	302 494	3 386	59 881	1 567 877
Undepreciated remainder of previously revalued assets	0	0	0	3 857	959 819	0	2 950	56 580	1 023 206
Ord. depr. for the year	17 840	10 296	1 363	15 300	37 193	0	0	0	81 992
Of which depreciation of revalued assets	0	0	0	771	36 243	0	0	0	37 014
Depreciation rate									
Linear depreciation	20.00	15.00	10.00	5.00	2.00	0.00	0.00	0.00	

Note 20. Deposits in NOK

Figures in millions of NOK

	2008	2007
Banks	55 873	85
Deposits in NOK	**55 873**	**85**

Deposits in NOK are deposits in the Federal Reserve Bank's account at Norges Bank in connection with collateral posted in exchange for USD loans, cf. Note 21. The Federal Reserve Bank has right of disposal over these funds.

Note 21. Borrowing in foreign currency

Figures in millions of NOK

	2008	2007
Borrowing related to deposits	57 661	0
Borrowing related to repurchase agreements	28 012	85 197
Other borrowing	0	4
Borrowing in foreign currency	**85 673**	**85 201**

A swap facility has been established between Norges Bank and the Federal Reserve Bank that enables Norges Bank to borrow USD as needed up to an agreed limit against equivalent collateral in NOK. As at 31 December 2008, Norges Bank had borrowed USD 8.2bn, or NOK 57.6bn. The borrowing is recognised as 'Borrowing related to deposits'.

Note 22. Cash collateral received and securities lending

Cash collateral received

Figures in millions of NOK

	2008	2007
Cash collateral received in connection with securities lending	25 738	36 797
Cash collateral received in connection with credit agreement with Sedlabanki Islands	1 484	0
Cash collateral received	27 222	36 797

The effect of the change in accounting policies implemented in Norges Bank's financial statements for 2008 is that 'Total assets' and 'Total liabilities and capital' have been increased by cash collateral received of NOK 25 738m. The comparative figures for 2007 have been restated, with an equivalent increase of NOK 36 797m in 2007. The change in accounting policies has had no impact on the profit and loss account.

Securities lending

The table below shows securities lending via lending programmes at the turn of the year. These securities are recognised in the balance sheet, as previously, under 'Equities' and 'Bonds and other interest-bearing securities'.

Figures in millions of NOK

	2008	2007
Equities lending	10 653	17 652
Bond lending	29 252	45 267
Total securities lending	**39 905**	**62 919**

Norges Bank entered into lending agreements with international commercial banks. All these agreements contain provisions which protect Norges Bank's interests if the party borrowing the securities is unable to return them or if the collateral posted for the loan is not sufficient to cover losses.

Reinvestment of cash collateral

Collateral in the form of cash is reinvested in repurchase agreements or diversified bond funds with short maturities and the highest credit rating (Aaa from Moody's). Norges Bank entered into agreements with foreign commercial banks that manage these funds. The table below shows reinvestments at the turn of the year as shown on the balance sheet.

Figures in millions of NOK

	2008	2007
Lending associated with reverse repurchase agreements and secured lending	**14 425**	**20 108**
Asset-backed securities	6 926	7 779
Structured Investment Vehicles	185	1 885
Other fixed income instruments	2 940	6 337
Total reinvestment in the form of fixed income instruments	**10 051**	**16 001**
Total reinvestment related to securities lending	**24 476**	**36 109**

The reinvestments are recognised on the balance sheet under 'Lending' (note specification), 'Lending associated with repurchase agreements' and under 'Bonds and other fixed income instruments'. These reinvestments were not recognised on the balance sheet in 2007; only related unrealised losses were recognised at that time.

Interest income of NOK 98m from equities lending and NOK 179m from bond lending has been recognised in the profit and loss account under 'Interest income and dividends'. As a result of further negative market developments in 2008, an unrealised loss in value of NOK 814m on reinvested cash collateral in the form of bonds was recognised in the profit and loss account under 'Change in value, financial instruments'. The equivalent figure in 2007 was NOK 454m.

Note 23. Other liabilities in foreign currency

Figures in millions of NOK

	2008	2007
Share capital in BIS not paid up (cf. Note 14)	23	23
Unsettled trades	3 285	2 772
Other liabilities	1 183	501
Other liabilities in foreign currency	4 491	3 296

Note 24. Notes and coins in circulation

The Bank's cash holdings have been deducted in the item 'Notes and coins in circulation'. Notes and coins in circulation are recognised at NOK 55 160m and consist of NOK 50 534m in banknotes and NOK 4 626m in coins.

The 1000-krone and 500-krone banknotes in Series V were withdrawn as legal tender on 1 August 1991 and 21 June 1992. The time limit for redeeming these notes expired on 1 August 2001 and 21 June 2002 respectively. NOK 202.2m in unredeemed 1000-krone and 500-krone banknotes, Series V, was booked as income in January 2008.

Norges Bank is obliged to redeem notes and coins for 10 years following the decision to withdraw them as legal tender. Norges Bank has been flexible about redeeming expired notes after the expiry of the 10-year time-limit. In 2008, redeemed/invalidated banknotes and coins amounting to NOK 3.1m were charged as an expense in Norges Bank's financial statements.

At 31 December 2008, there were a total of approximately 5.4m commemorative coins in circulation with a nominal value of about NOK 472.9m. This amount is not included in the item 'Notes and coins in circulation'. Norges Bank is under obligation to redeem the coins at their nominal value.

Note 25. Deposits from banks, etc.

Figures in millions of NOK

	2008	2007
Banks	100 858	53 467
Other deposits	92	50
Deposits from banks, etc.	**100 951**	**53 517**

Note 26. Other liabilities in NOK

Figures in millions of NOK

	2008	2007
Outstanding accounts with other portfolios under management	16 259	4 766
Pension and payment obligations (cf. Note 8)	19	26
Other liabilities	487	322
Other liabilities in NOK	**16 765**	**5 114**

'Outstanding accounts with other portfolios under management' comprises the net value of deposits, short-term borrowing, repurchase agreements and reverse repurchase agreements vis-à-vis other portfolios managed by Norges Bank. These related-party transactions were performed on an arm's length basis.

Note 27. Adjustment Fund

Figures in millions of NOK

	2008	2007
Adjustment Fund balance as at 1 January	55 488	73 027
Transferred from	0	-17 539
Allocated to	3 376	0
Adjustment Fund balance as at 31 December	**58 864**	**55 488**

Note 28. Other capital

Figures in millions of NOK

	2008	2007
Revaluation Fund as at 1 January	1 060	1 097
Reversals from the Fund in 2008	-37	-37
Revaluation Fund as at 31 December	**1 023**	**1 060**

Note 29. Government Pension Fund – Global

The Ministry of Finance has a krone deposit at Norges Bank for the Government Pension Fund - Global of NOK 2 273.3bn. An amount equivalent to the krone deposit is managed by Norges Bank and is invested in foreign currency in an earmarked portfolio. The krone deposits and the managed portfolio are recognised in Norges Bank's balance sheet under 'Deposits in krone account Government Pension Fund – Global' (liabilities) and 'Investments for Government Pension Fund – Global' (assets). The return on the portfolio was negative in 2008 and NOK 127.0bn was transferred from the krone account. This is recognised in the profit and loss account under 'Return on investments for Government Petroleum Fund – Global' and 'Transferred from/transferred to krone account for Government Pension Fund – Global'. The investments represent no financial risk to Norges Bank.

Separate financial statements have been prepared for the Government Pension Fund – Global. The profit and loss account, the balance sheet and the notes (GPFG1-9) follow:

Figures in millions of NOK

Profit and loss account	Note	2008	2007
Profit and loss on financial assets excl. exchange rate adjustments			
Interest income, deposits in foreign banks		494	431
Interest income, lending related to reverse repurchase agreements		14 189	33 564
Net income/expenses and gains/losses from:			
- equities and units	3	-595 304	41 627
- bonds and other fixed income instruments	3	-686	19 750
- financial derivatives		-31 210	5 265
Interest expenses, borrowing related to repurchase agreements		-20 124	-32 509
Other interest expenses		-613	-118
Other expenses		44	-179
Profit/loss before exchange rate adjustments	**1**	**-633 209**	**67 831**
Exchange rate adjustments		506 163	-146 412
Profit/loss before management fee		**-127 046**	**-78 581**
Accrued management fee	2	-2 165	-1 783
Profit/loss for the year		**-129 211**	**-80 364**

Figures in millions of NOK

Balance sheet	Note	2008	2007
ASSETS			
FINANCIAL ASSETS			
Deposits in foreign banks		18 111	30 004
Lending associated with reverse repurchase agreements	3	274 132	870 834
Cash collateral paid	3	114	0
Equities and units	4	1 126 760	945 113
Bonds and other fixed income instruments	4	1 612 236	1 213 806
Financial derivatives		0	2 094
Other assets	5	17 164	5 229
Total financial assets	**8,9**	**3 048 517**	**3 067 080**
LIABILITIES AND CAPITAL			
FINANCIAL LIABILITIES			
Short-term borrowing	3	133	187
Borrowing associated with repurchase agreements	3	514 395	710 898
Cash collateral received	3	188 608	303 680
Financial derivatives	6	36 320	0
Unsettled trades		30 144	33 480
Other liabilities		3 463	97
Management fee due		2 165	1 783
Total financial liabilities	**8,9**	**775 228**	**1 050 125**
Capital	7	2 273 289	2 016 955
Total liabilities and capital		**3 048 517**	**3 067 080**
The Government Pension Fund - Global is presented as follows in Norges Bank's balance sheet:			
Assets			
Investments for Government Pension Fund - Global		2 273 289	2 016 955
Liabilities			
Deposits in krone account Government Pension Fund - Global		2 273 289	2 016 955

GPFG 1. Profit/loss before exchange rate adjustments

Figures in millions of NOK

	Interest	Dividends	Realised gains/losses	Unrealised gains/losses	Total
Interest income, deposits in foreign banks	494	0	0	0	494
Interest income, lending associated with reverse repurchase agreements	14 189	0	0	0	14 189
Net income/expenses and gains/losses from:					
- equities and units	1 349	30 590	-81 986	-545 257	-595 304
- bonds and other fixed income instruments	62 652	0	-14 684	-48 653	-686
- financial derivatives	11 367	0	-6 259	-36 318	-31 210
Interest expenses, borrowing associated with repurchase agreements	-20 124	0	0	0	-20 124
Other interest expenses	-613	0	0	0	-613
Other expenses	44	0	0	0	44
Profit/loss before exchange rate adjustments	**69 359**	**30 590**	**-102 929**	**-630 229**	**-633 209**

GPFG 2. Management costs

	2008		2007	
	Thousands of NOK	Per cent	Thousands of NOK	Per cent
Internal costs	658 423		630 516	
Custody and settlement costs	341 135		273 476	
Minimum fees to external managers	420 376		513 442	
Performance-based fees to external managers	486 859		268 546	
Other costs	258 430		97 295	
Total management costs	**2 165 223**	**0.11**	**1 783 275**	**0.09**
Total management costs excl performance-based fees	**1 678 364**	**0.08**	**1 514 729**	**0.08**

GPFG 3. Repurchase and reverse repurchase agreements, cash collateral paid/received and securities lending

3.1. Repurchase/reverse repurchase agreements

Norges Bank enters into repurchase and reverse repurchase agreements to finance positions at the lowest possible price and to generate additional income for the Fund. The following tables present the repurchase and reverse repurchase agreements recognised in the balance sheet at 31 December 2008:

Lending associated with reverse repurchase agreements

Figures in millions of NOK

	2008	2007
Lending associated with reverse repurchase agreements, ordinary activity	160 009	669 607
Lending associated with reverse repurchase agreements, reinvestment of cash collateral in connection with securities lending	114 123	201 227
Lending associated with reverse repurchase agreements	**274 132**	**870 834**

Short-term borrowing

This item comprises borrowing used in the liquidity management of the portfolio with a maturity of between one and ten days and amounted to NOK 133m at 31 December 2008.

Borrowing associated with repurchase agreements

Figures in millions of NOK

	2008	2007
Borrowing associated with repurchase agreements	**514 395**	**710 898**

3.2. Cash collateral

The Fund pays and receives cash collateral in a number of contexts. These include the monitoring of positions in unlisted financial derivatives (OTCs), securities lending, and the margining of positions in repurchase and reverse repurchase agreements. This cash collateral is recognised on the balance sheet because Norges Bank has access to the bank deposits. The following tables show the amounts recognised on the balance sheet at 31 December 2008.

Cash collateral paid

Figures in millions of NOK

	2008	2007
Cash collateral paid in connection with unlisted financial derivatives	114	0
Cash collateral paid	**114**	**0**

Cash collateral received

Figures in millions of NOK

	2008	2007
Cash collateral received in connection with securities lending	185 606	298 012
Cash collateral received in connection with unlisted financial derivatives	2 882	5 668
Cash collateral received in connection with margining of repurchase and reverse repurchase agreements	119	0
Cash collateral received	**188 608**	**303 680**

As a result of a change in accounting policy at the end of 2008, 'Total financial assets' and 'Total liabilities and capital' on 31 December 2008 were increased by NOK 188 608m in cash collateral received. The comparative figures have been restated, with an equivalent increase of NOK 303 808m at 31 December 2007. This change has had no impact on the profit and loss account.

3.3. Securities lending

Securities lending

The table below shows securities lending through lending programmes at the end of the year. These assets are recognised on the balance sheet under 'Equities and units' and 'Bonds and other fixed income instruments'.

Figures in millions of NOK

	2008	2007
Equities	182 612	181 929
Bonds	191 482	334 424
Total securities lending against collateral	**374 094**	**516 352**

Norges Bank has entered into lending agreements with external lending agents. These agreements contain provisions which protect Norges Bank's interests if the borrower of the securities is unable to return them or if the collateral provided for the loan is not sufficient to cover losses.

Collateral received in connection with securities lending

Figures in millions of NOK

	2008		2007	
	Book value	Fair value	Book value	Fair value
Collateral in the form of cash	185 606	185 606	298 012	298 012
Collateral in the form of equities	0	137 628	0	127 637
Collateral in the form of bonds	0	66 721	0	110 049
Total collateral	**185 606**	**389 955**	**298 012**	**535 698**

Reinvestment of cash collateral

Collateral in the form of cash is reinvested in reverse repurchase agreements or diversified bond funds with short maturities and the highest possible credit rating (Aaa from Moody's). Norges Bank has entered into agreements with international commercial banks as managers of these funds. The table below shows reinvestments at the end of the year as recorded on the balance sheet (at fair value).

Figures in millions of NOK

	2008	2007
Lending associated with reverse repurchase agreements	**114 124**	**201 227**
Asset-backed securities	39 150	45 720
Structured Investment Vehicles	2 461	10 791
Other fixed income instruments	21 564	36 755
Total reinvestment in the form of bonds and other fixed income instruments	**63 175**	**93 266**
Total reinvestment in connection with securities lending	**177 279**	**294 493**

Reinvestments are recognised on the balance sheet under 'Lending associated with reverse repurchase agreements' and 'Bonds and other fixed income instruments'. Re-investments were not recognised on the balance sheet as at 31 December 2007. Interest income of NOK 1 349m from equities lending has been booked in the profit and loss account under 'Net income/expenses and gains/losses from equities and units'. Interest income of NOK 1 146m from bond lending has been recognised under 'Net income/expenses and gains/ losses from bonds and other fixed income instruments'. As a result of further negative market developments in 2008, an unrealised loss of NOK 5 640m on reinvested cash collateral in the form of bonds has been recognised under 'Net income/expenses and gains/ losses from bonds and other fixed income instruments' in 2008, as against NOK 3 088m in 2007.

GPFG 4. Equities and units, bonds and other fixed income instruments

Figures in millions of NOK

	Cost	Fair value	Income accrued	Total fair value
Equities and units:				
Listed equities	1 365 941	1 124 049	1 900	1 125 949
Units in securities funds	1 132	811	0	811
Total equities and units	**1 367 073**	**1 124 860**	**1 900**	**1 126 760**
Government and government-related bonds:				
Government bonds	381 682	455 910	8 655	464 565
Bonds issued by local authorities	45 403	54 777	1 208	55 985
Bonds issued by supranational entities	46 247	57 091	966	58 057
Bonds issued by US federal agencies	124 831	144 418	2 605	147 023
Total government and government-related bonds	**598 163**	**712 196**	**13 434**	**725 630**
Inflation-linked bonds:				
Bonds issued by government authorities	104 558	123 752	792	124 544
Bonds issued by companies	1 941	1 803	4	1 807
Total inflation-linked bonds	**106 499**	**125 555**	**796**	**126 351**
Corporate bonds:				
Bonds issued by utilities	19 513	19 326	357	19 683
Bonds issued by financial institutions	206 338	177 765	3 785	181 550
Bonds issued by industrial companies	87 038	84 298	1 801	86 099
Total corporate bonds	**312 889**	**281 389**	**5 943**	**287 332**
Securitised debt:				
Covered bonds	243 882	283 923	6 544	290 467
Mortgage-backed securities	148 558	144 328	532	144 860
Asset-backed securities	34 639	26 595	124	26 719
Commercial mortgage-backed securities	13 392	10 612	88	10 700
Total securitised debt	**440 471**	**465 458**	**7 288**	**472 746**
Total short-term paper	**140**	**177**	**0**	**177**
Total bonds and other fixed income instruments	**1 458 162**	**1 584 775**	**27 461**	**1 612 236**

GPFG 5. Other assets

Figures in millions of NOK

	2008	2007
Withholding tax	663	292
Outstanding accounts with other portfolios under management	16 259	4 766
Accrued interest, securities lending	242	171
Total other assets	**17 164**	**5 229**

'Outstanding accounts with other portfolios under management' comprises the net value of deposits, lending, repurchase agreements and reverse repurchase agreements vis-à-vis other portfolios managed by Norges Bank. These related-party transactions have been performed on an arm's length basis.

GPFG 6. Financial derivatives

Figures in millions of NOK

	Exposure				Fair value		
	2008		Average 2008				
	Purchased	Sold	Purchased	Sold	Asset	Liability	Net
Foreign exchange contracts	**22 111**		**41 757**		**423**	**395**	**28**
Listed futures	**27 003**	**43 070**	**108 334**	**116 600**	**1 690**	**922**	**768**
Interest rate swaps	415 535	474 465	617 619	592 507	26 280	59 634	-33 354
Total return swaps	2		12 802	4	41		41
Credit default swaps	95 750	61 310	150 134	82 675	6 288	4 894	1 394
Equity swaps	8 260	1 851	19 708	8 310	820	7 085	-6 265
Total swaps	**519 574**	**537 626**	**800 263**	**683 496**	**33 429**	**71 613**	**-38 184**
Options	**42 328**	**33 503**	**89 020**	**75 884**	**4 037**	**2 969**	**1 068**
Total financial derivatives	**610 989**	**614 199**	**1 039 374**	**875 980**	**39 579**	**75 899**	**-36 320**

Foreign exchange contracts
This item consists of foreign exchange contracts with normal settlement for future delivery. Exposure is the sum of the nominal value of the contracts entered into.

Futures contracts
Exposure is the market value of the underlying instruments.

Unlisted (OTC) financial derivatives

Interest rate swaps
This item includes both interest rate swaps and combined interest rate and currency swaps.

Exposure is the nominal value and expresses whether Norges Bank receives (has purchased) or pays (has sold) a fixed rate of interest.

Total return swaps
In a total return swap (TRS), the protection purchaser transfers the total return on an underlying credit to the protection seller in exchange for a fixed or floating rate of interest. Total return denotes the sum of coupon payments and any change in value. The underlying assets for the TRSs in which Norges Bank invests are commercial mortgage-backed securities (CMBS) and mortgage-backed securities (MBS) indices.

Exposure is the nominal value and expresses whether Norges Bank receives (has purchased) or pays (has sold) the index return.

Credit default swaps
In a credit default swap, the protection seller receives a periodic premium or lump sum from the protection purchaser as compensation for assuming the credit risk. The protection purchaser receives payment from the seller only if the credit protection of the underlying credit is triggered (credit event). A credit event might as an example include default on the underlying asset. The protection normally expires after the first credit event.

The underlying assets for credit default swaps are corporate bonds, securities issued by sovereign states, corporate bond indices, asset-backed securities (ABS) indices and commercial mortgage-backed securities (CMBS) indices.

Exposure expresses whether Norges Bank has purchased or sold protection for all or part of the credit risk associated with the various types of underlying asset.

Equity swaps
Equity swaps are agreements between two counterparties to swap cash flows based on changes in the underlying securities, which can be an equity, a group of equities or an index. In addition to the periodic cash flow, payments are received in connection with dividends and corporate events.

Exposure corresponds to the market value of the underlying equities or equity indices.

Options
Exposure is the market value of the underlying assets. Options written by the Fund are reported under 'Sold'. Options where Norges Bank pays a premium are reported under 'Purchased'.

GPFG 7. Capital - deposits in krone account

Figures in millions of NOK

	2008	2007
Deposits in krone account as at 1 January	2 016 955	1 782 139
Inflows during the year	385 545	315 179
Management fee to Norges Bank	-2 165	-1 783
Profit/loss transferred to/from krone account	-127 046	-78 580
Capital – deposits in krone account as at 31 December	**2 273 289**	**2 016 955**

GPFG 8. Currency distribution

Figures in millions of NOK

BALANCE SHEET	USD	CAD	EUR	GBP	JPY	Other	Total
FINANCIAL ASSETS							
Deposits in foreign banks	9 265	-148	6 380	1 145	-883	2 352	18 111
Lending associated with reverse repurchase agreements	102 977	0	123 100	43 868	1 081	3 107	274 132
Financial derivatives	0	0	114	0	0	0	114
Equities and units	353 981	23 790	298 946	150 603	97 175	202 265	1 126 760
Bonds and other fixed income instruments	522 358	33 099	786 251	163 172	67 883	39 473	1 612 236
Other assets	2 829	-47	15 662	-1 401	37	85	17 164
Total financial assets	**991 410**	**56 694**	**1 230 453**	**357 386**	**165 293**	**247 281**	**3 048 517**
FINANCIAL LIABILITIES							
Short-term borrowing	2	1	1	20	1	109	133
Borrowing associated with repurchase agreements	147 774	9 080	247 697	91 804	6 453	11 586	514 395
Cash collateral received	76 751		106 763	5 094			188 608
Financial derivatives	13 989	1 490	12 586	11 471	1 081	-4 298	36 320
Unsettled trades	30 754	-219	1 419	-848	-55	-908	30 144
Other liabilities	3 377	0	0	0	0	87	3 463
Management fee due	0	0	0	0	0	2 165	2 165
TOTAL FINANCIAL LIABILITIES	**272 646**	**10 352**	**368 465**	**107 542**	**7 481**	**8 742**	**775 228**

GPFG 9. Risk and valuation

Risk management is a key activity for Norges Bank. Processes have been established for identifying, measuring and monitoring all of the most important risks to which Norges Bank and the Government Pension Fund – Global's owners are exposed through the activities conducted. The four main areas are: market risk, credit risk, counterparty risk and operational risk. Requirements for the management and measurement of these risk categories are laid down in the Ministry of Finance's extended guidelines.

Market risk

Market risk is the risk of changes in the value of the Fund due to movements in interest rates, equity prices and/or exchange rates. Norges Bank measures both absolute and relative market risk for the Fund.

Absolute risk can be estimated on the basis of the actual portfolio, while relative risk is estimated as the standard deviation of the difference between the return on the actual portfolio and the return on the benchmark portfolio. Standard deviation is a statistical concept which indicates the size of the variations that can be expected in the return on the fund. The table below illustrates market risk as expressed by expected annual standard deviation in the fund's actual portfolio both overall and for the two asset classes.

	Risk measure	31 Dec 08	Min 2008	Max 2008	Average 2008	31 Dec 07
Total risk, portfolio	St. dev.	22.2%	8.0%	25.8%	14.2%	8.6%
Equity portfolio	St. dev.	36.7%	15.7%	46.4%	24.7%	14.5%
Fixed income portfolio	St. dev.	21.5%	7.9%	21.5%	12.6%	8.9%

The overall figure for the end of 2008 means that, in two out of every three years, the value of the fund can be expected to fluctuate within a band of +/- 22.2% of its total market value (one standard deviation) based on the actual portfolio at that time. Market risk rose considerably in 2008, with estimated expected risk increasing particularly in the second half of the year. Market risk can also be expressed on the basis of actual fluctuations in the portfolio during the year.

Two factors in particular explain the increase in risk: changes in the composition of the benchmark portfolio and changes in market conditions. The changes in the benchmark portfolio in 2008 were due mainly to an increase in the allocation to equities in the fund and to the inclusion of emerging equity markets, and these explain some of the increase in risk during the year. However, stressed markets and unusually high volatility, particularly in the second half of the year, explain most of the increase in 2008.

Risk model

The model used calculates expected standard deviation in the value of the Fund on the basis of portfolio composition and assumptions about its sensitivity to fluctuations in relevant market factors and the correlation between them. Norges Bank conducts risk calculations on a regular basis, with main runs each month. Both parametric calculations and calculations based on Monte Carlo simulations are used. The parametric method was used to calculate the figures in the table above. Volatilities and correlations are estimated on the basis of daily historical data where greater importance is attached to recent market data than to older data. As a result, the risk model responds very quickly to changes in the markets.

Liquidity risk

Norges Bank defines liquidity risk in relation to the management of the Government Pension Fund – Global as the ability to make planned or unexpected changes in the composition of the investment portfolio due to exogenous or endogenous factors without incurring unusually high transaction costs. The management of liquidity risk is integrated throughout the control structure right down to the individual investment mandates and is performed using a set of quantitative management variables.

For the Fund's positions in the equity market, the measurement of these management variables is not associated with major challenges, since the portfolio comprises equities listed on regulated exchanges. There are a few exceptions to this rule, however, as some local exchanges are not well-functioning. For fixed income instruments, measurement is more complex due to a high proportion of unlisted instruments, and recent market developments have presented additional problems in terms of quantitative measures of liquidity for fixed income instruments.

Liquidity risk increased considerably in 2008, particularly in the second half of the year. For many fixed income instruments, liquidity was substantially reduced as many of the participants supplying liquidity drastically scaled back their activities. The Government Pension Fund – Global is of a size where a loss of liquidity on this scale presents substantial investment management challenges.

Credit risk

Credit risk is the risk of losses if issuers of fixed income instruments default on their payment obligations to the Government Pension Fund - Global. Another form of credit risk is the counterparty risk that arises in derivative and foreign exchange transactions. Settlement risk, which arises in connection with the purchase and sale of securities, where not all transactions take place in real time, also involves counterparty risk.

Credit risk arises in the Government Pension Fund - Global's fixed income portfolio partly as a result of the Ministry of Finance's choice of investment strategy and partly as a result of Norges Bank's active management. All fixed income instruments in the Fund's benchmark portfolio have a rating from one of the major credit rating agencies: Standard & Poor's, Moody's and Fitch. All three agencies classify the issuers of fixed income instruments on the basis of their creditworthiness. A credit rating scale from AAA to D is used for long-term bonds. The highest rating from S&P and Fitch is AAA and Aaa from Moody's. The lowest investment grade ratings are BBB from S&P and Fitch and Baa from Moody's. Lower ratings are termed non-investment grade. All bonds in the Fund's benchmark portfolio have an investment grade rating. However, there is no requirement for a credit rating from the rating agencies for the Fund's portfolio of fixed income instruments. The table below breaks down the fixed income portfolio on the basis of credit ratings from at least one of the rating agencies at the end of the year.

Fixed income portfolio by credit rating:

Figures in millions of NOK

	Aaa	Aa	A	Baa	Ba	Lower	P-1	None	Total
Government and government-related bonds	495 032	182 737	36 906	6 928	1 993	639	0	1 394	725 630
Inflation-linked bonds	75 634	48 754	1 963	0	0	0	0	0	126 351
Corporate bonds	18 629	67 627	111 240	78 577	5 912	2 657	0	2 690	287 332
Securitised debt	442 645	14 981	9 926	2 418	983	1 792	0	0	472 746
Short-term paper	0	0	0	0	0	0	177	0	177
Total bonds and other fixed income instruments	**1 031 941**	**314 100**	**160 035**	**87 923**	**8 889**	**5 088**	**177**	**4 084**	**1 612 236**

The fixed income portfolio by credit rating is based on credit ratings from at least one of the credit rating agencies Moody's, Standard & Poor's and Fitch. The 'No rating' category includes securities not rated by these three agencies. These securities may, however, have been rated by other, local agencies

The folowing table shows exposure to credit derivatives:

Figures in millions of NOK

	Nominal amount	Fair value
Credit default swaps, protection purchased	95 750	(4 304)
Credit default swaps, protection sold	61 310	5 698

Protection purchased means that the Fund's credit risk has been reduced, while protection sold means increased credit risk. Overall, credit exposure has been reduced slightly through credit default swaps. These contracts relate primarily to credit risk in the Baa, Ba and lower categories.

Norges Bank is also exposed to risk vis-à-vis counterparties in the execution of transactions, vis-à-vis the custodian institutions with which securities are deposited, and vis-à-vis international settlement and custody systems (counterparty risk). The equity and fixed income portfolios comprise investments in unsecured bank deposits, and unlisted derivatives and foreign exchange contracts. Derivatives are used for both trading and hedging purposes in the portfolio. The Ministry of Finance has decided that no counterparties involved in such transactions may have a credit rating lower than A-, A3 or A- from Fitch, Moody's or S&P, respectively. Norges Bank monitors counterparty risk by following up exposure relative to credit risk limits. These limits are partly determined by the credit rating of the counterparty, where a higher rating results in a higher limit.

The table below shows counterparty risk associated with positions in financial derivatives (contracts with a positive market value) at year-end and cash holdings.

	Fair value in millions of NOK
Credit default swaps	6 288
Foreign exchange contracts	423
Swap contracts	26 321
OTC options	4 037
Equity swap contracts	820
Total derivatives	**37 889**
Term deposits	**18 111**
Total counterparty risk	**56 000**

The positions are shown before netting, and collateral provided is not taken into account. To minimise counterparty risk, Norges Bank uses bilateral netting agreements and requires high-quality collateral for otherwise unsecured exposure. Cash collateral received in connection with unlisted financial derivatives totalled NOK 2 882m at the end of 2008 (cf. Note 3). The thresholds for requiring collateral are set at between EUR 0 and EUR 25m, measured as net positive market value per counterparty.

Fair value measurement of financial instruments

Control environment

An extensive process for ongoing valuation of the portfolios has been established involving sourcing and verification of prices at both external fund accounting service providers and Norges Bank's operating units. Valuation is also subject to a number of additional control procedures delegated to independent control environments at Norges Bank and the external service providers at period-ends. Hierarchies of independent price sources established by Norges Bank are used in the pricing process. The most important price checks are conducted at the end of the month to ensure the quality of prices and that the pricing hierarchy is being followed in the measurement of returns and the preparation of accounts. Spot checks are also made during the month. Where necessary, the internal control units enlist the support of external pricing specialists chosen to assist with the pricing of particularly challenging investments. The resulting valuations are reviewed by a valuation committee, which is a forum for escalating significant pricing issues. The committee meets at least once a quarter ahead of the presentation of the accounts.

Establishing fair value

The turmoil in financial markets increased in 2008, reaching a provisional peak in the wake of the Lehman Brothers bankruptcy in September. This led to greater uncertainty about the valuation of some types of instrument. However, pricing risk is still considered to be limited for the majority of instruments in which the Fund is invested. Most financial instruments had observable prices throughout 2008. Prices are obtained from multiple sources that are independent of both internal and external portfolio managers.

In cases where no observable price is available due to limited activity in the market, models are used to price the positions in question. Most securities in this category have observable market data that are included in the model, while a small number are priced by means of extrapolation and estimation.

The table below breaks down the investments into categories of price uncertainty:

Figures in millions of NOK

Categories of investments by price uncertainty	Observable market prices in active markets	Model pricing with observable data points	Model pricing with greater uncertainty about fair value	Total
Equities and units	1 124 096	1 921	743	1 126 760
Bonds	712 224	826 520	73 492	1 612 236
Total	**1 836 320**	**828 441**	**74 023**	**2 738 996**

Equity investments are considered relatively easy to value as there are official market prices based on an active transaction market for almost all positions in the portfolio. For holdings of bonds, the price uncertainty picture is somewhat more complex. The pricing of government bonds and liquid government-guaranteed bonds is based on observable market prices in an active market with quotes and frequent transactions. Corporate bonds, covered bonds and some government-guaranteed and government-related bonds, however, are priced using models with observable data points.

Exposure considered particularly uncertain in terms of pricing totalled NOK 74.2bn at the end of the year. This consisted almost exclusively of asset-backed securities not guaranteed by US federal agencies such as Fannie Mae, Freddie Mac and Ginnie Mae. This represented a decrease in exposure of NOK 29.1bn since the end of 2007, when there was exposure of NOK 92.5bn to asset-backed securities and NOK 10.8bn to structured investment vehicles (SIVs). The decrease was due primarily to falling prices for asset-backed securities, but also to instruments maturing and repayments of principal. With regard to the remaining exposure to SIVs, only exposure of NOK 0.4bn was considered particularly difficult to price at the end of 2008. An additional NOK 2.1bn in SIV exposure was reclassified into the category for model pricing with observable data points. The remainder of the decrease in exposure to SIVs in 2008 was due primarily to repayments on maturity.

Following a number of analyses and discussions with various players in the market (price providers, brokers and external managers), simple valuation methods have been developed to take account of this additional uncertainty. With these methods, the value of some types of instruments is revised downwards by means of a liquidity deduction from the value reported from the ordinary price sources. The size of this liquidity adjustment depends on the estimated uncertainty related to the price from the price source.

The liquidity adjustment for accounting purposes over and above the prices from ordinary sources totalled NOK 3 424m at the end of 2008, as against NOK 2 134m in 2007. Of this total, NOK 975m relates to cash collateral reinvested in bonds (cf. GPFG 3).

Auditors' reports for 2008

The Supervisory Council organises the audit of Norges Bank in accordance with the Norges Bank Act. Central Bank Audit submits an auditor's report to the Supervisory Council concerning the Bank's annual financial statements. The Supervisory Council appointed Deloitte AS, with effect from 2007, as a cooperation partner for Central Bank Audit for the audit of investment management operations. Central Bank Audit and Deloitte submit a separate joint auditor's report to the Supervisory Council concerning the annual financial reporting of the Government Pension Fund – Global.

To the Supervisory Council of Norges Bank
Auditor's report for Norges Bank for 2008

We have audited the annual financial statements of Norges Bank for 2008, which show a profit of NOK 3 339m. We have also audited the information in the Executive Board's report concerning the financial statements and the proposal for the allocation of the profit. The annual financial statements comprise the profit and loss account, the balance sheet and notes to the accounts, including the financial reporting of the Government Pension Fund – Global. The annual financial statements have been prepared based on the provisions in the Accounting Act and generally accepted accounting principles in Norway, with the departures set out in the accounting policies in the notes to the financial statements. The financial statements and the *Annual Report* are the responsibility of the Executive Board. Our responsibility is to express an opinion on the financial statements and other information according to the requirements of the Norges Bank Act.

We conducted our audit in accordance with the Norges Bank Act, the Audit Charter issued by the Supervisory Council and good auditing practice in Norway, including standards on auditing adopted by Den norske Revisorforening (the Norwegian Institute of Public Accountants). These auditing standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. To the extent required by good auditing practice and the Audit Charter, our audit also includes a review of Norges Bank's financial affairs and its accounting and internal control systems. We believe that our audit provides a reasonable basis for our opinion.

The audit of the accounts for the Government Pension fund – Global has been conducted in cooperation with Deloitte AS in accordance with its agreement with the Supervisory Council. A separate auditor's report has been submitted jointly with Deloitte AS for the Government Pension Fund – Global.

In our opinion,
- the financial statements have been presented in accordance with laws and regulations and provide a true and fair view of the financial position of the Bank as of 31 December 2008 and of the results of its operations for the financial year in accordance with the provisions in the Accounting Act and generally accepted accounting principles in Norway, with the departures are set out in the note on accounting policies;
- the management has fulfilled its duty of producing a proper and clearly set out recording and documentation of accounting information;
- the information in the *Annual Report* concerning the financial statements and the proposal for the allocation of the profit are consistent with the financial statements and comply with the laws and guidelines adopted in the Council of State.

Oslo, 25 February 2009

Central Bank Auditor

Svenn Erik Forsstrøm
State Authorised Public Accountant (Norway)

Auditor's report on the financial reporting of the Government Pension Fund – Global for 2008

We have audited the financial reporting of the Government Pension Fund – Global for 2008 included in Norges Bank's financial statements for 2007. The financial reporting, showing a net loss for the year of NOK 129 211m, comprises a profit and loss account, balance sheet and notes to the accounts. The financial reporting of the Government Pension Fund – Global has been prepared in accordance with the provisions of the Norwegian Accounting Act and generally accepted accounting principles in Norway, with the departures set out in the accounting policies in the notes to the accounts. The financial reporting is submitted by Norges Bank's Executive Board as part of Norges Bank's financial statements. Our responsibility is to express an opinion on the financial reporting.

We have conducted our audit in accordance with the Norwegian Act relating to auditing and auditors and with generally accepted auditing practices in Norway, including auditing standards adopted by Den norske Revisorforening (Norwegian Institute of Public Accountants), and issue our auditor's report in accordance with International Standard on Auditing 800 "The auditor's report on special-purpose audit engagements". These auditing standards require that we plan and perform our audit to obtain reasonable assurance that the financial reporting is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting policies and significant accounting estimates applied, as well as evaluating the overall financial reporting. To the extent required by good auditing practice, our audit also includes a review of Norges Bank's financial affairs and its accounting and internal control systems that are relevant to the Government Pension Fund - Global. We believe that our audit provides a reasonable basis for our opinion.

In our opinion,

- the financial reporting gives a true and fair view of the Government Pension Fund – Global's financial position as at 31 December 2008 and the return for the financial year in accordance with the Accounting Act and generally accepted accounting principles in Norway with the departures set out in the accounting policies in the notes to the accounts;
- the management has fulfilled its duty of producing a proper and clearly set out recording and documentation of accounting information.

Oslo, 25 February 2009

Central Bank Auditor	**Deloitte AS**
Svenn Erik Forsstrøm (sign)	Aase Aa. Lundgaard
State Authorised Public Accountant (Norway	State Authorised Public Accountant (Norway)

Resolution of the Supervisory Council on the financial statements for 2008

Pursuant to the current guidelines for the allocation and distribution of Norges Bank's profit, originally adopted in the Council of State on 7 February 1986, last amended by Royal Decree of 6 December 2002, the Supervisory Council adopted the following decision at its meeting on 5 March 2009:

1. The Supervisory Council takes note of the Executive Board's *Annual Report* for 2008.

2. With reference to the Auditor's Report from the Central Bank Auditor concerning Norges Bank's financial statements for 2008 and the joint statement from the Central Bank Auditor and Deloitte AS concerning financial reporting for the Government Pension Fund – Global, the Supervisory Council approves the following transfers and allocations:

   - In accordance with a statement from the Ministry of Finance, the sum of NOK 37m is to be transferred from 'Other capital'. The amount is to be transferred to profit/loss for the year.

   - In accordance with the guidelines, NOK 3 376m is to be transferred to the Adjustment Fund.

3. The Supervisory Council submits Norges Bank's financial statements for 2008 and the Executive Board's *Annual Report* for 2008, the auditors' report and the Supervisory Council's statement on the minutes of meetings of the Executive Board and its supervision of Norges Bank in 2008 to the Ministry of Finance for submission to the King and communication to the Storting

The Supervisory Council's statement on the minutes of meetings of the Executive Board and its supervision of the Bank in 2008

Pursuant to the Act relating to Norges Bank and the Monetary System (Norges Bank Act, Section 5, third paragraph, point four), the Supervisory Council adopted at its meeting on 5 March 2009 the following statement, which under Section 30, second paragraph of the Norges Bank Act, is to be submitted to the Ministry of Finance for submission to the King and communication to the Storting:

In 2008, the Supervisory Council supervised the Bank in accordance with Section 5 of the Norges Bank Act.

In accordance with the Norges Bank Act, executive and advisory authority is vested in the Executive Board. The Executive Board is in charge of the Bank's operations and manages its resources (Section 5, second paragraph of the Act). The Supervisory Council supervises the Bank's operations and ensures that the rules governing the Bank's activities are observed. It organises the auditing of the Bank, including the appointment of a central bank auditor, and draws up instructions for Central Bank Audit. The Supervisory Council adopts the Bank's annual financial statements and, on the recommendation of the Executive Board, approves the budget (Section 5, third paragraph, points 1 and 2 of the Act).

Supervision of the Bank's operations includes ensuring that the Executive Board establishes satisfactory objectives, frameworks and principles for the Bank's operations and systematically follows up the Bank's organisation, and that the Bank's activities, financial reporting and asset management are subject to adequate risk management and control.

Supervision relating to the rules governing the Bank's activities includes checking that appropriate procedures have been established to ensure that the Bank's activities are conducted in accordance with legislation, agreements, decisions, guidelines and the framework laid down by the Supervisory Council. Supervision does not include the Executive Board's exercise of its discretionary authority under the Act.

As a basis for its supervision, the Supervisory Council has examined:

- the minutes of the Executive Board's meetings
- matters submitted by the Executive Board, including
  - the annual report on the quality of internal control
  - the Internal Audit Unit's plan and reports
  - the Bank's budget and accounts
  - the Report of the Executive Board and Norges Bank's financial statements
  - quarterly and annual reports for the portfolios under the Bank's management
- matters submitted by Central Bank Audit, including
  - Central Bank Audit's plan and budget
  - audit statements and reports
- matters raised by the Supervisory Council itself.

The Supervisory Council has established a permanent committee, comprising five Council members, which prepares matters to be submitted to the Supervisory Council. The central bank auditor is present at meetings held by the Supervisory Council and the permanent committee and can express an opinion on matters raised and provide information on current matters relevant to the Council's supervisory responsibility. The Supervisory Council held 5 meetings and dealt with 73 matters in 2008. In addition to discussing matters on its regular agenda, the Supervisory Council receives updated information at the meetings and through seminars.

The financial market turbulence in 2008 has had a strong impact on the Bank's operations in general and posed particular challenges to results and risk management in Norge Bank's Investment Management. This has also had an impact on the Council's supervisory activities.

The Supervisory Council has received all the information requested.

In 2008, the Supervisory Council had no comments concerning the minutes of Executive Board meetings, nor has its supervision of the Bank's operations revealed circumstances that constitute grounds for special remarks pursuant to Section 30, second paragraph of the Norges Bank Act.

Changes in the Bank's audit and supervisory arrangements

Norges Bank has seen considerable development in recent years as a result of new tasks such as the management of the Government Pension Fund – Global. The control and supervision of these activities also entails considerable challenges for the Bank's governing bodies.

In 2007, the Executive Board established an audit committee and an internal audit unit. The Supervisory Council appointed Deloitte AS, with effect from 2007, as a cooperation partner for Central Bank Audit for the audit of financial reporting for the Government Pension Fund - Global. These arrangements are now well established and entail an adjustment to internationally recognised standards for corporate governance and control, within the framework of the Norges Bank Act.

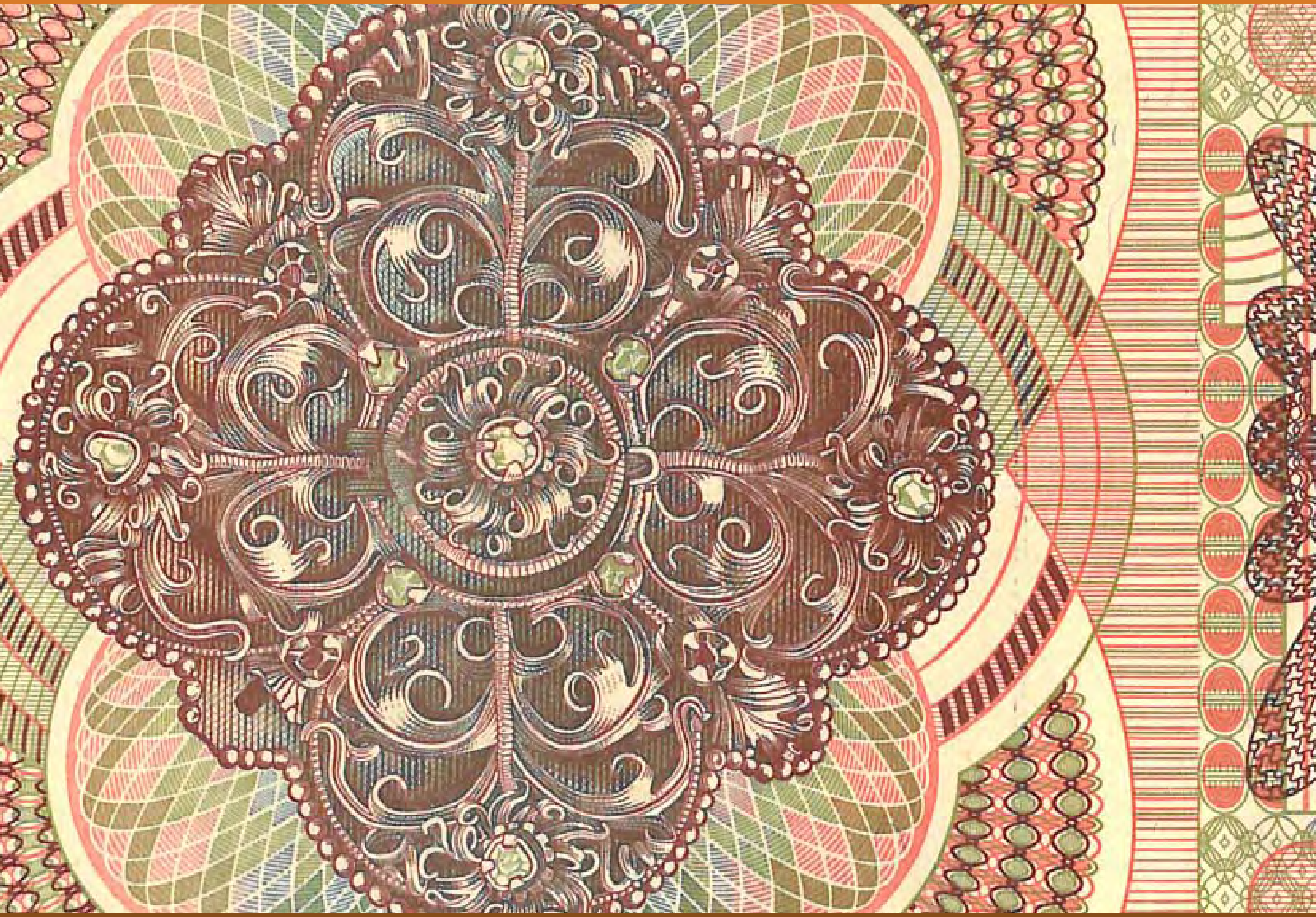
In 2008, a proposal for more specific formulations in the Norges Bank Act of the Executive Board's and the Supervisory Council's responsibilities with regard to management, control and supervision, and changes in the accounting and audit framework were circulated for comment by the Ministry of Finance. The proposal, if adopted, will entail the replacement of Central Bank Audit by an arrangement involving the appointment of an external auditor within the framework of the Accounting Act.

In its submission, the Supervisory Council has supported the proposal in principle. At the same time, the Council has emphasised the importance of its supervision and that it should continue to have access to independent experts of its choice under any new arrangement in order to ensure the continuation and further development of its supervisory tasks.

The Supervisory Council has commenced work on a report intended to provide the basis for further professional development.

Oslo, 5 March 2009
for Norges Bank's Supervisory Council

Mary Kvidal	Frank Sve
Chair of the Supervisory Council	Deputy Chair of the Supervisory Council



Norges Bank's activities

Chapter 1 Monetary policy

Flexible inflation targeting

Monetary policy in Norway is oriented towards low and stable inflation. The operational target of monetary policy is annual consumer price inflation of approximately 2.5% over time. In general, direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account. The operational target provides economic agents with an anchor for inflation expectations. When there is confidence in the inflation target, monetary policy can also contribute to stabilising developments in output and employment.

Norges Bank operates a flexible inflation targeting regime, so that both variability in inflation and variability in output and employment are given weight in interest rate setting. Flexible inflation targeting builds a bridge between the long-term objective of monetary policy, which is to keep inflation low and stable and provide an anchor for inflation expectations, and the more short-term objective of smoothing output.

The mandate for monetary policy in Norway

Monetary policy in Norway is conducted by Norges Bank. The Bank's activities are subject to the Norges Bank Act, adopted by the Storting (Norwegian parliament) on 24 May 1985. Section 2 of the Act defines the relationship with the government authorities, while Section 4 pertains to decisions concerning changes to the exchange rate regime for the krone. Pursuant to Sections 19 and 20, Norges Bank stipulates the conditions for the interest rates on banks' deposits with and loans from the central bank.

Pursuant to Section 2, third paragraph and Section 4, second paragraph of the Norges Bank Act, the Government issued a new regulation on monetary policy on 29 March 2001. Norges Bank's mandate for the conduct of monetary policy is laid down in the Regulation. Section 1 of the Regulation states:

Monetary policy shall be aimed at stability in the Norwegian krone's national and international value, contributing to stable expectations concerning exchange rate developments. At the same time, monetary policy shall underpin fiscal policy by contributing to stable developments in output and employment.

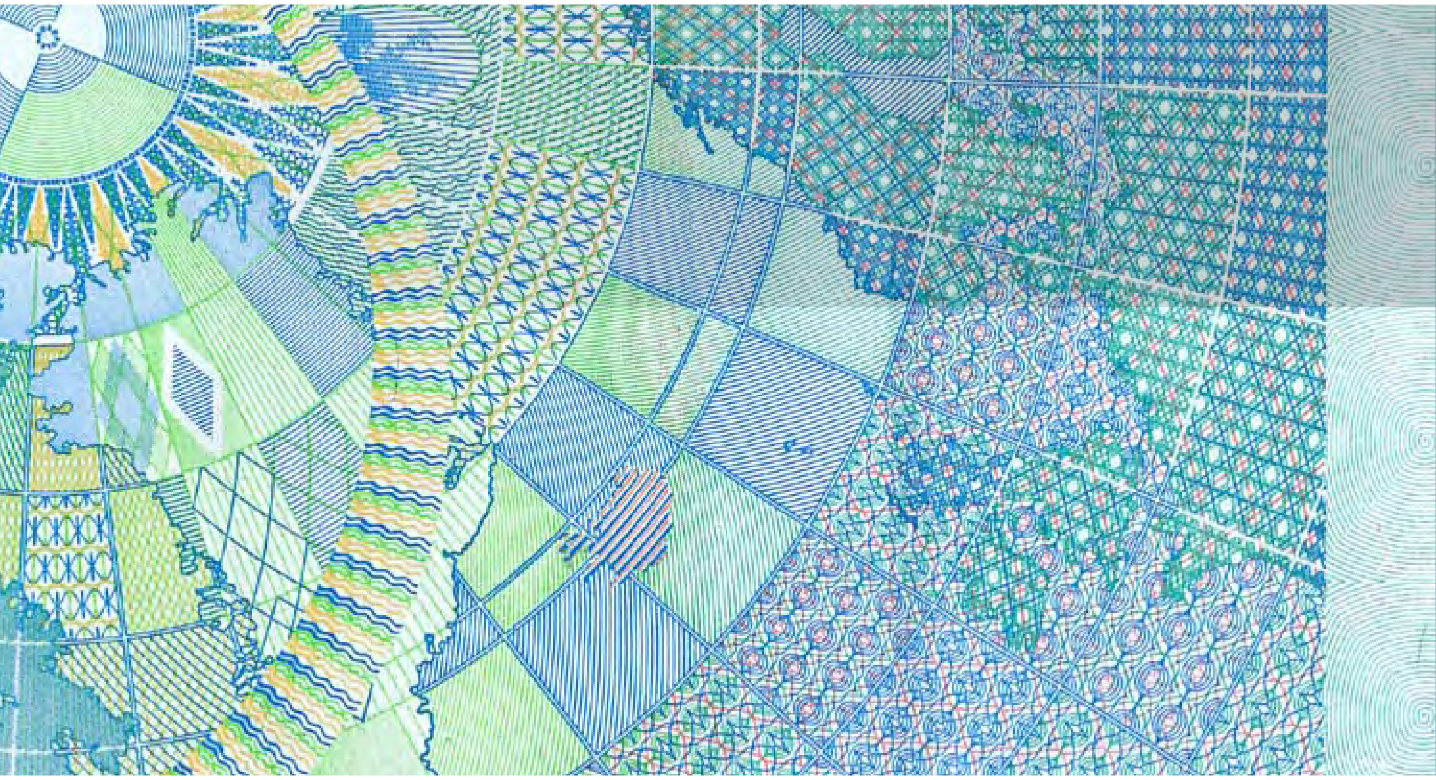
Norges Bank is responsible for the implementation of monetary policy.

Norges Bank's implementation of monetary policy shall, in accordance with the first paragraph, be oriented towards low and stable inflation. The operational target of monetary policy shall be annual consumer price inflation of approximately 2.5% over time.

In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account.

Norges Bank issued its opinion on the mandate in its submission of 27 March 2001 to the Ministry of Finance. The submission stated the following:

Monetary policy affects the economy with considerable and variable lags. Consequently, the Bank must be forward-looking in its interest rate setting. The effects of interest rate changes are uncertain and vary over time. Changes in the interest rate will be made gradually so that the Bank can assess the effects of interest rate changes and other new information on economic developments. If price inflation deviates substantially from the target for a period, Norges Bank will set the interest rate with a view to gradually returning consumer price inflation to the target. Norges Bank will seek to avoid unnecessary fluctuations in output and demand.



The instrument of monetary policy is the key policy rate, which is the interest rate on banks' overnight deposits in Norges Bank. Experience shows that the key policy rate normally has a fairly pronounced impact on the shortest money market rates, i.e. overnight and 1-week rates, but that money market conditions also play a role. Market rates for loans with longer maturities are influenced by the level of the key policy rate, by market risk premiums and by market expectations concerning developments in the key policy rate. Market expectations concerning the key policy rate reflect economic agents' perception of Norges Bank's monetary policy response pattern and economic developments.

The purpose of Norges Bank's liquidity management is to ensure that the Executive Board's interest rate decisions have a broad impact on short-term money market rates. The sight deposit rate forms a floor for short-term money market rates. Norges Bank ensures that the banking system has a daily surplus of liquidity, which is deposited by banks as sight deposits with Norges Bank. Short-term money market rates thus remain close to the sight deposit rate.

Norges Bank normally supplies liquidity via F-loans, i.e. fixed-rate loans. If these loans do not provide sufficient liquidity, Norges Bank can supply NOK liquidity to Norwegian and foreign banks through foreign exchange swaps. Foreign exchange swaps can also be used to supply foreign exchange liquidity, normally US dollars, to Norwegian banks. This will constitute an extraordinary supply of foreign exchange liquidity that will be used in exceptional circumstances on the basis of an assessment of stability in Norwegian financial markets and the Norwegian payment system.

Market rates have an effect on the exchange rate, securities prices, house prices and credit and investment demand. Changes in Norges Bank's key policy rate can also influence expectations concerning future inflation and economic developments. The interest rate operates through all these channels to influence total demand and output, and prices and wages.

Monetary policy operates with a lag. Norges Bank sets the interest rate with a view to stabilising inflation close to the target in the medium term. The relevant horizon will depend on the disturbances to which the economy is exposed and how they affect the path for inflation, output and employment ahead.

Decisions concerning interest rates and other important changes in the use of instruments are normally taken at the Executive Board's monetary policy meeting every sixth week. The basis for the Executive Board's decisions and assessments are made public through a press release and a press conference. The press release is accompanied by a background document providing a detailed account of the basis for the Executive Board's interest rate decision. The interest rate decision is published at a pre-announced time.

Three times a year, at every third monetary policy meeting, the *Monetary Policy Report* is published at the same time as the interest rate decision. In the *Report*, Norges

Norges Bank's system for averaging short-term models (SAM)

The projections published in *Monetary Policy Report* are the result of an overall assessment based on both models and judgment. In its analyses of monetary policy and interest rate forecasts, Norges Bank uses the NEMO model, which combines projections for the Norwegian economy in the next few quarters with our assessments of long-term developments.

In order to make projections of economic developments that are useful for monetary policy analysis, knowledge about the current economic situation is essential. Norges Bank's short-term projections are based on frequently updated information and a number of statistical and econometric models.

No single model can provide a complete description of reality. Different models have different properties and describe different aspects of economic developments.

Experience shows that a weighted average of different model-based forecasts is often more accurate than forecasts from individual models.

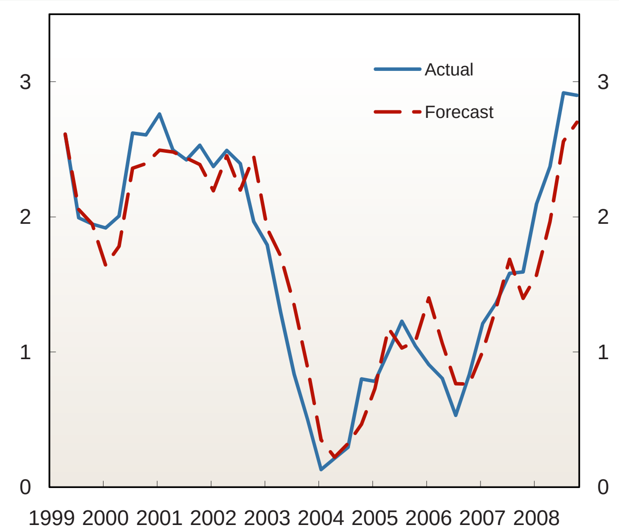
Norges Bank has therefore developed a system, SAM (System for Averaging Models), for averaging short-term forecasts for inflation and mainland GDP provided by different models. The models have been developed to produce accurate forecasts for the coming quarters and an exact description of the uncertainty in the forecast. A number of central banks have developed similar model systems.

The models included in SAM range from purely statistics-based to more theoretically based models.[1] A total of around 80 models are used to forecast inflation and 140 models to forecast GDP. The models are weighted by how accurately their forecasts of economic developments have been from 1999 and up to the most recent quarter for which data are available.

Charts 1 and 2 show historical projections from SAM for the rise in consumer prices (adjusted for taxes and excluding energy products) and mainland GDP respectively two quarters ahead alongside actual developments. The charts can be regarded as an illustration of what the forecasts of inflation and GDP two quarters ahead would have been if short-term forecasts for this period (1999-2008) had been based on SAM.

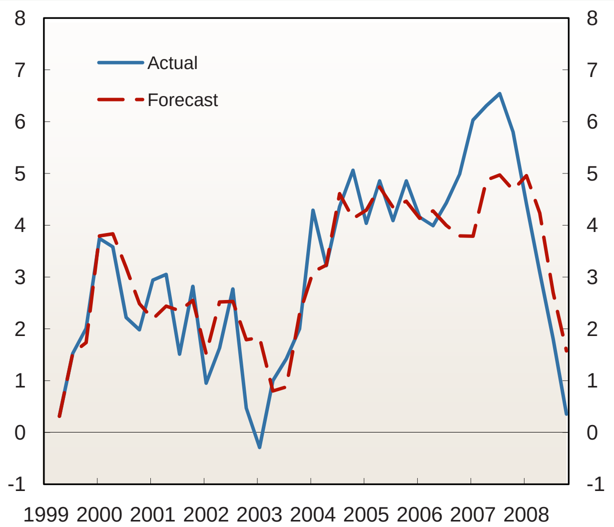
Results so far using SAM indicate that there are clear advantages to averaging forecasts from several models. Accuracy increases and uncertainty is reduced. In the work ahead, whether new types of models can provide even more accurate forecasts will be considered. Whether other ways of averaging forecasts can improve forecasting accuracy will also be considered.

Chart 1 CPI-ATE and historical forecasts from SAM two quarters ahead. Four-quarter growth. Per cent. 1999 Q2 – 2008 Q4



Sources: Statistics Norway and Norges Bank

Chart 2 Mainland GDP and historical forecasts from SAM two quarters ahead. Four-quarter growth (volume). Seasonally adjusted. Per cent. 1999 Q2 – 2008 Q4



Sources: Statistics Norway and Norges Bank

[1] For an overview of the models included in the system, see box in *Monetary Policy Report* 2/08. SAM is described in more detail in Bjørnland et al. (2008): «Improving and evaluating short term forecasts at Norges Bank», *Staff Memo* No. 4.

Bank analyses the current economic situation and publishes its economic forecasts. Since 2005 Norges Bank has published its own interest rate forecast. A set of criteria identify important elements to be included in the assessment of how the interest rate forecast is arrived at. These criteria are set out in the *Monetary Policy Report*.

The central bank only directly influences the shortest money market rates via the key policy rate. Market rates further ahead are also influenced by market conditions and expectations. The most important influence on economic agents' consumption and investment decisions is therefore market expectations with regard to the key policy rate. To be successful, monetary policy must influence these expectations. Norges Bank's publication of its interest rate forecast may make it easier for economic agents to understand the Bank's intentions in its interest rate setting. Transparency surrounding Norges Bank's assessments on monetary policy trade-offs makes monetary policy more predictable and effective. This may promote stability in inflation and in output and employment. Forecasts based on an interest rate path that is most realistic in Norges Bank's view also make it easier to interpret and evaluate the Bank's projections. However, economic agents may have a different view of inflation and output developments ahead and thus of interest rate developments.

The forecasts for the interest rate and other economic variables are based on incomplete information about the current economic situation and how the economy functions. If developments in the economy's driving forces differ from the assumptions, or if the central bank changes its view of the functioning of the economy, developments in the interest rate and other variables may deviate from the forecasts. This is illustrated in the fan charts.[1] The estimates are evaluated in each *Monetary Policy Report* in relation to the effect of new information. A comprehensive evaluation of the forecasts is published annually in a separate article, while monetary policy is evaluated in the annual report.

On the basis of the analysis in the *Monetary Policy Report*, the Executive Board adopts a monetary policy strategy every fourth month for the next four months. The strategy is published at the beginning of the period to which it applies and is based on the assumption that the economy will not be exposed to major shocks. If the economy is exposed to major shocks, the Executive Board will consider setting a new strategy interval for the period. Interest rate decisions taken during the strategy period are based on this monetary policy strategy, which is published in the *Report*.

The conduct of monetary policy requires a reliable stream of information concerning economic developments. In 2008, approximately 1500 private and public enterprises in Norges Bank's regional network were interviewed about output and price developments and plans for investment and employment. Combined with available official statistics, the reports from the regional network form an important part of the decision-making basis. A national summary is published on the Bank's website in connection with the publication of the *Monetary Policy Report*.

Norges Bank exercises professional judgment in interest rate setting. As a guide in the exercise of this judgment, Norges Bank uses analytical tools and economic models that describe relationships in the economy. The models combine and apply empirical and theoretical knowledge on the functioning of the Norwegian economy, contributing to a consistent analysis of the interaction between different economic variables.

To quality assure the analyses and the basis for decisions, the Bank compares its methods and organisational standards with other central banks by means of external and internal evaluation. An annual evaluation of monetary policy is conducted by a committee of independent economists and published in the *Norges Bank Watch Report*.[2] Economists from other central banks and academic institutions in Norway and other countries visit the Bank or take positions as visiting scholars. For a more detailed description of international cooperation, see Chapter 4.

Monetary policy in 2008

Developments in the period to 2008

Monetary policy operates with a lag. Inflation, output and employment in 2008 are the result of monetary policy trade-offs made in the preceding years and unforeseen shocks to the economy.

When inflation fell and approached zero in tandem with spare capacity in the Norwegian economy, the key policy rate was reduced to 1.75% in March 2004. Norges Bank indicated that the interest rate would remain low until there

[1] Forecast uncertainty was discussed in ***Inflation Report*** 3/2005 and in Jarle Bergo's speech «Interest rate projections in theory and practice», 26 January 2007.

[2] The Norges Bank Watch Report was commissioned by the Centre for Monetary Economics at BI Norwegian School of Management.

were clear indications that inflation was beginning to rise.

From 2003 to 2007, the mainland economy was booming, with annual growth averaging well over 4%. In the same period, inflation was below target. Strong economic growth gradually resulted in high employment and shortages of labour, real capital and other resources. This engendered prospects of higher inflation, and from early summer 2005 monetary policy was therefore oriented towards gradually bringing the key policy rate up towards a more normal level. The interest rate was raised well before inflation moved close to 2.5%.

In 2007, the Norwegian mainland economy grew by more than 6%. As expected, consumer price inflation picked up towards the end of the year. While various measures of underlying inflation in the first half of 2007 were between 1% and 1½%, the same measures showed inflation of between 1½% and 2% in the second half of the year.

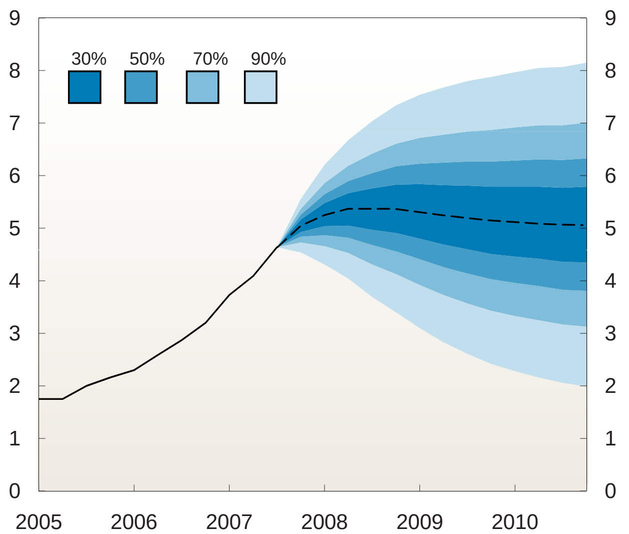
Through the year, the interest rate was raised in seven increments from 3.50% to 5.25%. In *Monetary Policy Report* 3/07, published in November 2007, it was stated that the interest rate would be increased further in the coming half year (see Chart 1). Capacity utilisation was expected to slow gradually towards a more normal level, and inflation was expected to rise and gradually approach the target (see Chart 2-4). At the beginning of 2008, underlying inflation was estimated to be between 1¾% and 2½%.

Monetary policy in 2008

The economic outlook changed abruptly in autumn 2008. This is reflected in the interest rate decisions and changes in Norges Bank's interest rate forecast through the year (see Charts 5 and 6).

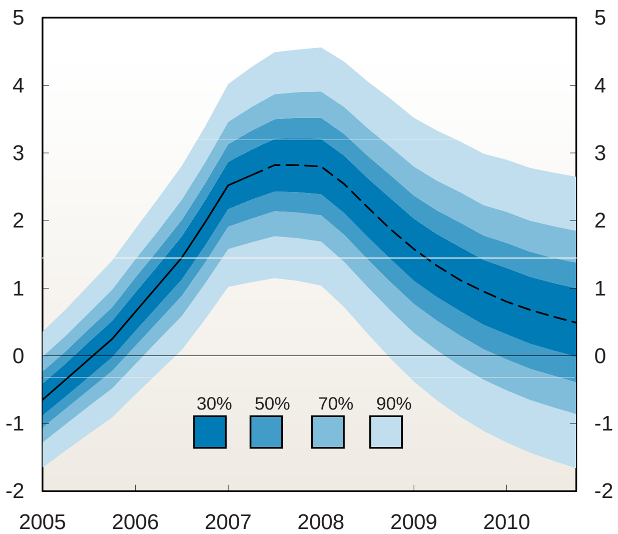
In the first half of 2008, capacity utilisation was high in the Norwegian economy, with unexpectedly sharp and accelerating inflation. Turbulence persisted in international financial markets due to the problems that had arisen in the US banking system in 2007. The global economic outlook was deteriorating, but accelerating inflation led to a rise in key rates and interest rate expectations abroad. The key policy rate in Norway was raised in two increments, by one quarter of a percentage point in April and in June. At the monetary policy meeting on 25 June, the key policy rate was raised to 5.75%, the highest level recorded in this upturn. The interest rate forecast published the same day was higher than the forecast in *Monetary Policy Report* 3/07. In Chart 7, a technical calculation has been used to illustrate how different factors led to an upward revision of the interest rate path through their effects on the outlook for inflation and the output gap. The main reason for the upward revision was the outlook for domestic demand (blue bars) and inflation (red bars), which were stronger than previously expected, while weaker global

Chart 1 *Monetary Policy Report* 3/2007:Projected key policy rate in the baseline scenario with fan chart. Per cent. 2005 Q1– 2010 Q4



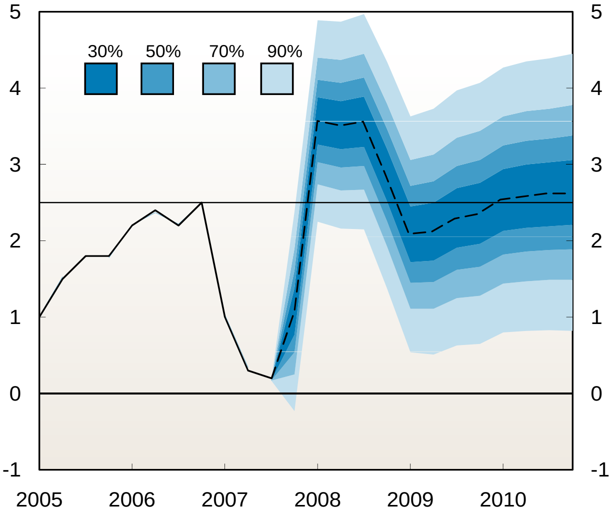
Source: Norges Bank

Chart 2 *Monetary Policy Report* 3/2007: Estimated output gap in the baseline scenario with fan chart. Per cent. 2005 Q1– 2010 Q4



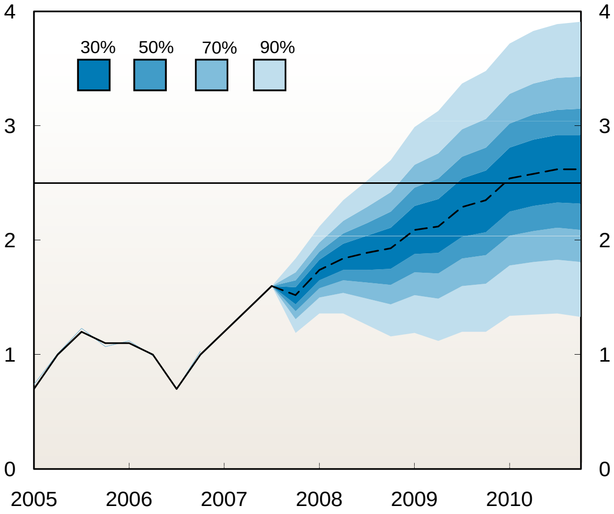
Source: Norges Bank

Chart 3 *Monetary Policy Report* 3/2007: Projected CPI in the baseline scenario with fan chart. Four-quarter change. Per cent. 2005 Q1– 2010 Q4



Sources: Statistics Norway and Norges Bank

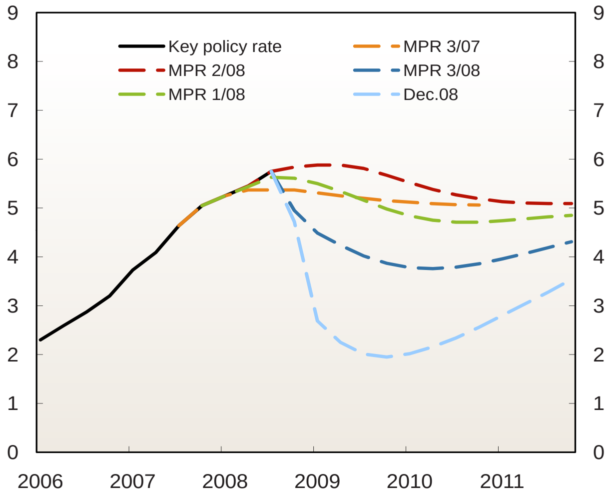
Chart 4 *Monetary Policy Report* 3/2007:Projected CPI-ATE1) in the baseline scenario with fan chart. Four-quarter change. Per cent. 2005 Q1– 2010 Q4



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment has been made for the estimated effect of reduced maximum day-care rates from January 2006

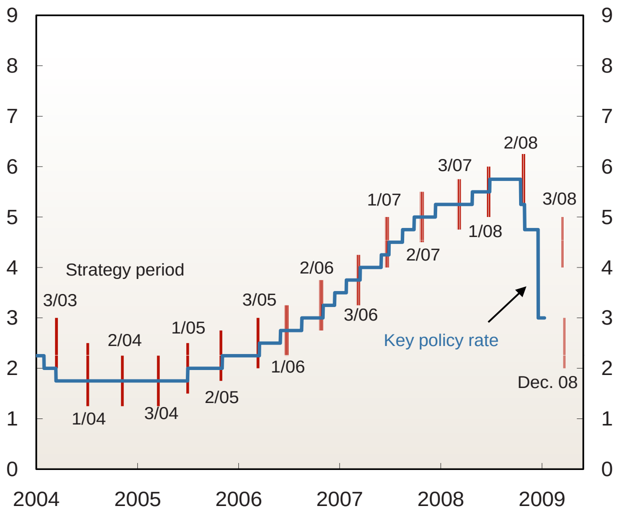
Sources: Statistics Norway and Norges Bank

Chart 5 Key policy rate in the baseline scenario in MPR 3/07, MPR 1/08, MPR 2/08, MPR 3/08 and December 2008. Per cent. 2006 Q1 – 2011 Q4



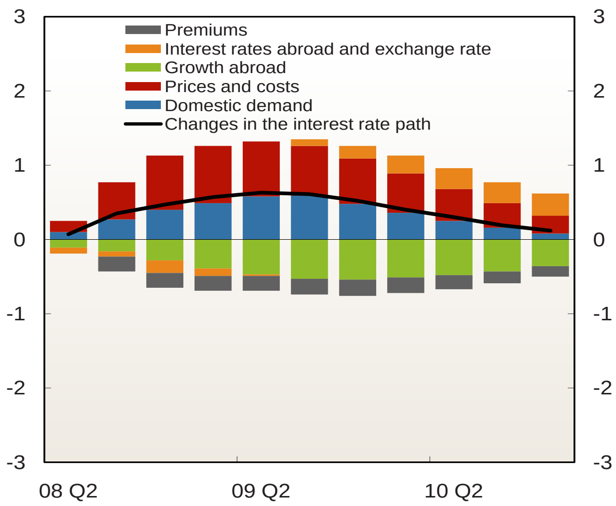
Source: Norges Bank

Chart 6 Interval for the key policy rate at the end of each strategy period and actual developments. Per cent. 2 January 2004 – 31 December 2008



Source: Norges Bank

Chart 7 Factors behind changes in the interest rate path from MPR 3/07 to MPR 2/08 (1st half 2008). Percentage points.2008 Q2 –2010 Q4



Source: Norges Bank

growth (green bars) and higher risk premiums on money market rates (grey bars) pushed the interest rate forecast down again somewhat.

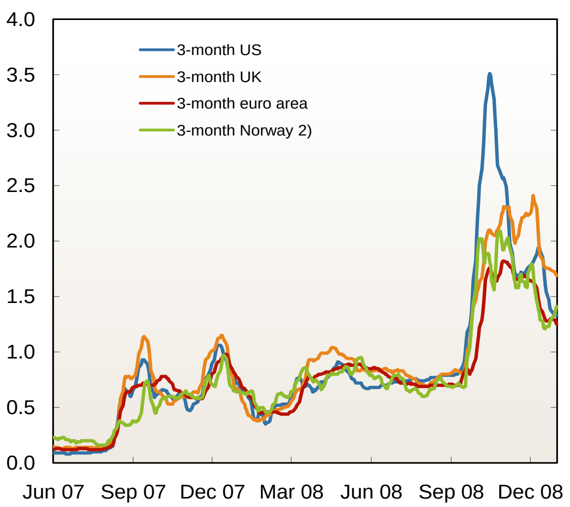
From mid-September, the Norwegian economy was exposed to major shocks. After the investment bank Lehman Brothers was declared bankrupt on 15 September, financial market turbulence became an international financial crisis. Money markets periodically ceased to function. Owing to high risk premiums, money market rates were far higher than central bank key rates (see Chart 8). Norwegian money market rates rose markedly as risk premiums abroad fed through to the Norwegian market (see Chart 9).

Banks raised their lending rates because short-term and long-term funding in money and credit markets had become more expensive. Financial institutions became even more reluctant to lend to each other. Credit channels dried up. Equity prices and oil and commodity prices fell markedly. The global economy entered a sharp downturn. Uncertainty surrounding economic developments was unusually high. It gradually became clear that the consequences of the financial crisis on the real economy would be considerable and prolonged, in Norway as elsewhere. Inflation slowed. The krone depreciated to very low levels towards the end of the year. Low risk appetite prompted market participants to reduce their exposure to less liquid currencies such as the Norwegian krone. It is likely that the decline in prices for oil and other commodities also contributed to the depreciation. Towards the end of the year, the real exchange rate was markedly lower than the year before (see Chart 10).

Norges Bank implemented measures to reduce uncertainty and stave off particularly adverse outcomes for the economy. Banks' liquidity was strengthened to improve credit flows in the financial sector. Banks were provided access to more loans and loans with longer maturities, and collateral requirements for banks' loans were eased. Prices in the Norwegian money market depend on the availability of corresponding loans in US dollars. Norges Bank has provided USD loans to Norwegian banks to compensate for a periodically low supply of dollars in the market. Norges Bank entered into an agreement with the Federal Reserve for a loan of up to USD 15bn against collateral in NOK. The agreement provided Norges Bank with greater leeway in addressing financial market turbulence. The Norwegian parliament (the Storting) adopted a package of measures whereby banks could exchange high quality but illiquid mortgage-backed securities for highly liquid government securities.

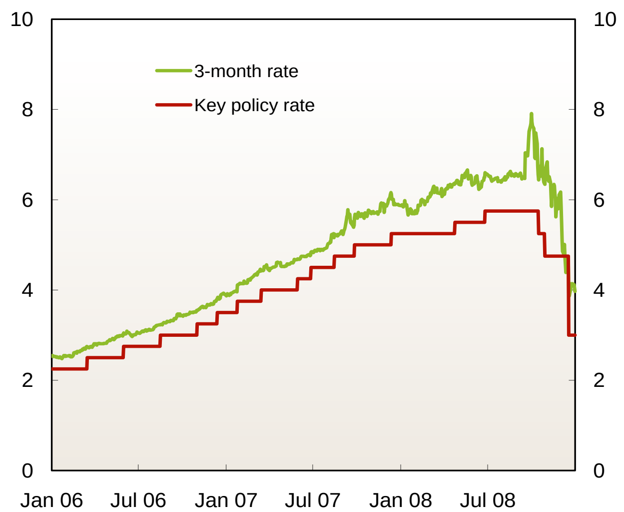
From 15 October to 17 December, the key policy rate was reduced three times, by a total of 2.75 percent-

Chart 8 Difference between 3-month money market rates and key policy rate expectations[1]. Percentage points. 5-day moving average. 1 June 2007 – 31 December 2008



1) The expected key rate is derived from Overnight Index Swap (OIS) renter.
2) Estimated
Sources: Bloomberg, Thomson Reuters and Norges Bank

Chart 9 Norges Bank's key policy rate and 3-month money market rate. Per cent. 1 January 2006 – 31 December 2008



Sources: Thomson Reuters and Norges Bank age points. At the end of the year, the key policy rate stood at 3.00% and Norges Bank's interest rate forecast was considerably below the interest rate projected one year earlier (see Chart 5). Underlying inflation was approximately 2¾% but was slowing.

Chart 11 shows that the main reason for the marked downward revision of the interest rate forecast from June to December was the substantially weaker outlook for domestic and external demand (see blue bars). The increased pace of the interest rate reductions, as a result of the desire to conduct a more active monetary policy, and higher money market risk premiums also exerted downward pressure. The sharp depreciation of the krone in 2008 could push up inflation, and in isolation contributed to a higher interest rate forecast.

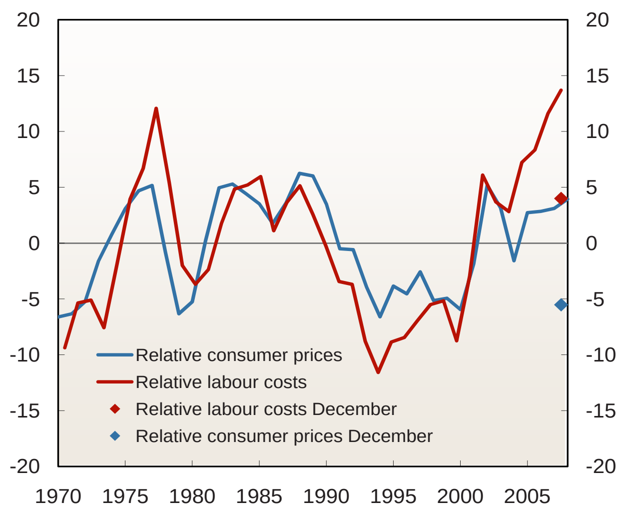
Monetary policy in the period to March 2008

According to the strategy in *Monetary Policy Report* 3/07, the key policy rate should be in the interval 4¾-5¾ per cent in the period to the publication of the next *Report* in March

Table 1 Interest rate decisions in 2008

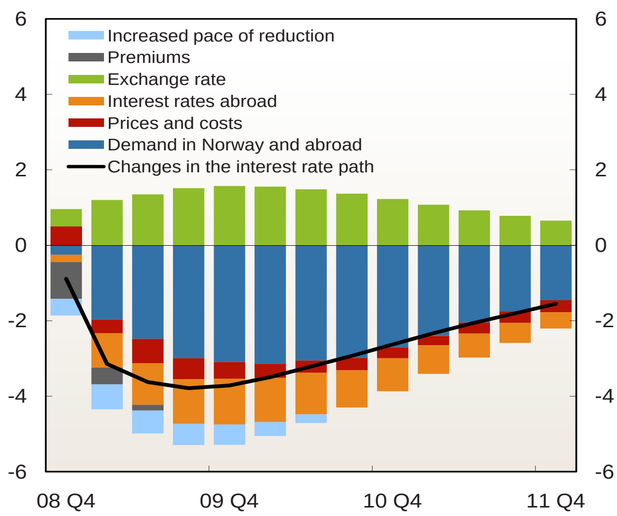
Monetary policy meeting	Change in percentage points	Key policy rate after meeting
23 January	0.00	5.25
13 March	0.00	5.25
23 April	0.25	5.50
28 May	0.00	5.50
25 June	0.25	5.75
13 August	0.00	5.75
24 September	0.00	5.75
15 October	-0.50	5.25
29 October	-0.50	4.75
17 December	-1.75	3.00

Chart 10 Real exchange rates (relative consumer prices and labour costs in common currency). Deviation from mean 1970 – 2008. Per cent. 1970 – 2008



Sources: Statistics Norway, Technical Reporting Committee on Income Settlements and Norges Bank

Chart 11 Factors behind changes in the interest rate path from MPR 2/08 to the monetary policy meeting in December 2008 (2nd half 2008). Percentage points. 2008 Q4 – 2011 Q4



Source: Norges Bank

The regional network in 2008

In autumn 2002, Norges Bank established a regional network of enterprises, local authorities and health enterprises throughout Norway. In 2008, representatives from Norges Bank interviewed business and community leaders concerning developments in their sectors in five contact rounds. Each round comprised about 290 visits. An extra round was conducted by phone in October to gather more information about the impact of the financial crisis. A total of around 1 500 individuals were contacted, representing the production side of the economy, both in terms of industry and geographical area. Six regional research institutions are responsible for the network in their respective regions and conduct the contact meetings on behalf of Norges Bank. The research institutions are the National Centre for Innovation and Entrepreneurship in Bodø, the Centre for Economic Research at the Norwegian University of Science and Technology (NTNU), Møreforskning in Molde, the International Research Institute of Stavanger (IRIS), Agder Research and the Eastern Norway Research Institute (ENRI). In addition, Norges Bank covers a region consisting of four counties in South-Eastern Norway.

Some of the main impressions from the network in 2008 are:

- Output growth declined considerably through 2008. The financial crisis reached regional network enterprises at the turn of the quarter Q3/Q4. In November, they reported a decline in output. Contacts in most industries are expecting a further fall in production in 2009.

- Production in the building and construction industry had already begun to fall before summer. The housing market was also slow in 2008 and building starts were very low. The financial crisis exacerbated the housing market situation and also created problems for the commercial building sector. Spillover effects spread through the year to many different sectors and industries.

- Production in domestically oriented manufacturing showed moderate growth up to the beginning of autumn and then declined through autumn. The boat and building materials industries in particular felt the effect of the fall in demand.

- Growth in the export industry held up at the beginning of 2008. However, after summer the contraction in the global economy resulted in slower demand and a decrease in production. The krone depreciation through autumn did not seem to compensate for the fall in demand.

- Growth in the petroleum supplier sector continued to decline from a high level and growth was moderate towards the end of the year. In November many contacts reported that they were concerned as to whether orders and new projects would be completed.

- Retail trade exhibited relatively solid growth at the beginning of the year, but slowed through the first half of 2008. Sales fell after summer and the situation deteriorated though autumn. The effect on sales of household goods and other high-cost goods such as cars and boats was particularly severe.

- In the services sector, growth also slowed sharply through the year, moving from a high level of growth to a moderate fall in activity. The decline in building and construction explains the fall in building-related services, for example architect services. Greater financial caution among households and enterprises resulted in lower demand in, among others, the hotel, restaurant and tourist industries.

- Capacity utilisation was still at near-peak levels at the beginning of the year. Through the year, capacity utilisation decreased markedly. There are pronounced regional differences. The two regions in western Norway have a high proportion of petroleum sector suppliers and maritime operators, and capacity utilisation was substantially higher here than in the other regions. The number of contacts that reported that the labour supply is a constraint on production fell by more than half through 2008.

- All industries in the private sector exhibited a decreasing willingness to invest through 2008. In November, all private sector industries expected a fall in investment over the next 12 months. Contacts in the public sector expected to be able to increase investment somewhat ahead.

- Employment growth remained positive through the year up to the last round of 2008, when employment was reported to be unchanged. The building and construction industry and manufacturing nevertheless reported a marked and moderate fall in employment respectively in November. Pessimism also increased in the other industries, and in November all industries expected a decline in employment in the following quarter.

- Expectations with regard to annual wage growth were very high throughout 2008. On average, contacts expected annual wage growth to be close to 6%.

- Prices rose sharply in all industries throughout the year, although towards the end of the year the rise was slowing in all industries except the export industry, which was benefiting from the krone depreciation. Food prices rose relatively sharply in 2008, while prices for building-related goods fell somewhat after summer.

- At the beginning of 2008, operating margins were rising in most industries. However, the rise slowed through the year, and at the end of the year all industries reported a fall in operating margins except the petroleum supplier and export industries.

In 2008, the network was also used to examine a number of current issues. Norges Bank asked the contacts about the use of foreign labour, the influence of the petroleum industry on mainland Norway and the importance of energy prices. Enterprises were also asked about how they had been affected by the financial crisis and the action they would be taking.

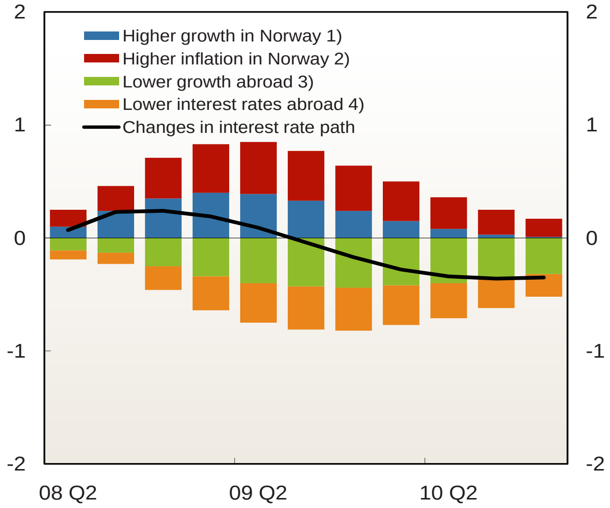
2008, unless the Norwegian economy was exposed to unexpectedly severe shocks. According to the analyses in the *Report*, the key policy rate should move up further from its level of 5.00% (see Chart 5). The key policy rate was raised by 0.25 percentage point to 5.25% at the meeting in December. In the period to the monetary policy meeting on 23 January, inflation increased more than expected and growth in the Norwegian economy was strong. The labour market remained tight. On the other hand, there were prospects of slower growth in the global economy, while turbulence in financial markets resulted in higher money market rates than key policy rate expectations would imply. On balance, the Executive Board considered it appropriate to keep the key policy rate unchanged at 5.25%.

In the period following the monetary policy meeting, inflation continued to rise markedly. Underlying inflation was unexpectedly high and close to 2.5%. Employment was still at a high level and wage growth was accelerating. There were signs of slowing productivity growth in the business sector. The enterprises in Norges Bank's regional network still expected growth in activity, albeit to a lesser extent than previously. The outlook for the world economy had deteriorated. As a result of financial market turbulence, credit standards had been tightened for enterprises and households. Inflation had picked up among many of our trading partners. Food and energy prices had risen at a particularly fast pace.

At the monetary policy meeting on 13 March, the interest rate was kept unchanged at 5.25%. The analyses in *Monetary Policy Report* 1/08 indicated that the key policy rate could be increased in the period to summer (see Chart 5). The Executive Board's strategy was that the key policy rate should be in the interval 5% – 6% in the period to the publication of the next *Report* at end-June, provided the Norwegian economy was not exposed to unexpectedly severe shocks. Compared with the previous *Report*, the interest rate forecast in *Monetary Policy Report* 1/08 was revised up by about ¼ percentage point at end-2008, but revised down by about ¼ percentage point at end-2010.

Chart 12 illustrates the contributions from various factors to the interest rate path through their effect on the outlook for inflation and the output gap. Owing to unexpected strong growth in the Norwegian economy towards the end of 2007, capacity utilisation had risen to a higher-than-expected level (blue bars). Combined with an upward revision of the inflation outlook (red bars), this resulted in a higher interest rate forecast in the short term. A weaker outlook and lower interest rates abroad pushed down the interest rate forecast (see green and orange bars). If the expected return on NOK investments is to be equal to the expected return on investments in foreign currency, a fall in external interest rates might, in isolation, lead to a stronger krone. A stronger krone was expected to result in lower inflation and activity in the Norwegian economy. The prospect of higher price and cost inflation more than outweighed in the short term the effects of weaker growth in the world economy. This suggested that the key policy rate might be raised further in the period to summer.

Chart 12 Factors behind changes in the interest rate path from MPR 3/07 to MPR 1/08. Percentage points. 2008 Q2 – 2010 Q4



1) Reflects effects of unexpectedly high output growth in 2007.
2) Reflects effects of higher inflation in Norway over and above the effects of changes in projections for capacity utilisation.
3) Reflects effects of lower expected growth in the global economy.
4) Reflects effects of lower key policy rate expectations among trading partners through effects on the krone exchange rate.

Source: Norges Bank

Monetary policy in the period to June 2008

Developments in the period to the monetary policy meeting in April confirmed the impression of accelerating price and cost inflation and weaker prospects for the global economy. In line with the monetary policy strategy, the interest rate was raised by 0.25 percentage point at the monetary policy meeting in April to 5.50%.

Inflation was unexpectedly high in the period to the monetary policy meeting in May. Underlying inflation moved above 2.5%. Capacity utilisation in the economy

Underlying inflation

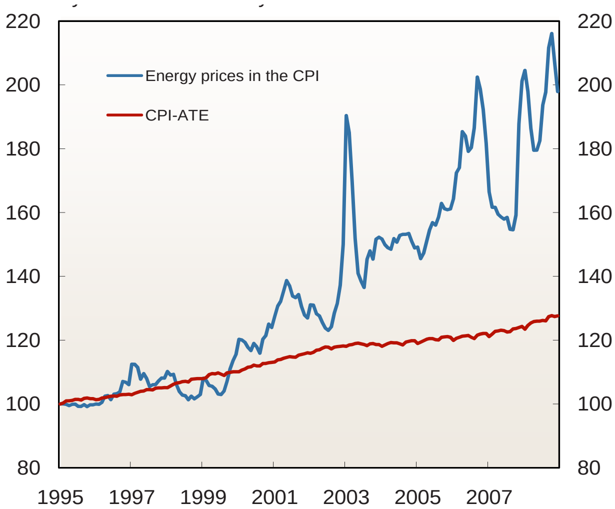
The operational target of monetary policy is annual consumer price inflation of close to 2.5% over time. Looking backwards or forwards in time, this is measured by the total consumer price index (CPI). This index has been marked by substantial, short-term fluctuations in electricity prices. In the conduct of monetary policy, direct effects on consumer prices resulting from this type of movement shall not, in general, be taken into account. Indicators of underlying inflation seek to exclude movements that are due to temporary disturbances.

The consumer price index adjusted for tax changes and excluding energy products, CPI-ATE, has often been used as an indicator of underlying inflation. A weakness in the CPI-ATE is that it does not only exclude temporary effects resulting from tax changes and fluctuations in energy prices, but also trend changes in these factors. In recent years, energy prices have generally increased faster than other consumer prices (see Chart 1). If it is taken into account that energy prices have risen more than other prices over a fairly long period, the result is a picture of underlying inflation that over time is more consistent with developments in the CPI. The CPIXE shows changes in the CPI adjusted for tax changes and excluding temporary changes in energy prices[1] (see Chart 2).

It is always difficult to determine in real time which price movements will persist and which will only have a short-term effect on the CPI.

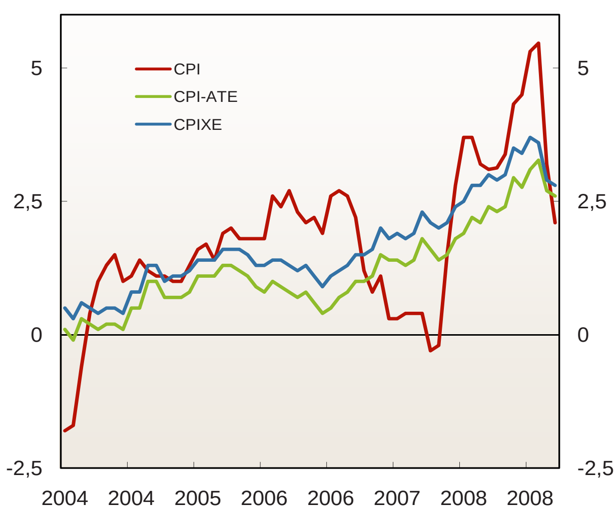
A single indicator cannot provide an accurate picture of underlying price pressures in all situations.

Chart 1 Energy prices in the CPI1) and CPI-ATE2). Index. January 1995=100. January 1995 – December 2008



1) Including electricity and fuel products
2) CPI adjusted for tax changes and excluding energy products
Sources: Statistics Norway and Norges Bank

Chart 2 CPI, CPI-ATE1) and CPIXE2). 12-month change. Per cent. January 2004 – December 2008



1) CPI adjusted for tax changes and excluding energy products
2) CPI adjusted for tax changes and excluding temporary changes in energy prices. See Norges Bank's Staff Memo 2008/7 for more details on the CPIXE
Sources: Statistics Norway and Norges Bank

[1] For further discussion of CPIXE, see *Staff Memo* 2008/7 "CPIXE and projections for energy prices".

was still high but, as expected, there were signs of slowing growth. At the monetary policy meeting on 28 May, the key policy rate was kept unchanged at 5.50%. The pickup in inflation and prospects for accelerating inflation indicated that the key policy rate should be raised further. Owing to financial market turbulence, higher money market premiums and uncertainty surrounding global developments, the Executive Board decided to keep the interest rate unchanged.

In the period to summer, prices for oil and other important commodities rose to a very high level. The global economic outlook continued to deteriorate, but accelerating inflation resulted in a rise in global interest rate expectations. Key rates were raised in a number of countries.

Interest rate premiums in international money markets were still high. In Norway, underlying inflation was close to, but somewhat above 2.5%. Unemployment was at a historically low level, and wages rose considerably. The upturn in Norway was entering a new phase. Low inflation and high growth were being replaced by somewhat higher inflation and slower growth.

At the monetary policy meeting on 25 June, the Executive Board decided to raise the key policy rate by 0.25 percentage point to 5.75%. The interest rate forecast in *Monetary Policy Report* 2/08 had been revised up in relation to the March *Report*. Chart 13 illustrates the background for the upward revisions. Higher expected key rates abroad could, in isolation, result in a weaker krone exchange rate. Combined with unexpectedly high inflation, this contributed to a rise in the interest rate forecast (see yellow and red bars). Higher oil and gas prices might lead to higher demand in Norway, for example in the form of increased investment in the petroleum sector (see blue bars). Weaker global growth prospects and money market premiums suggested a lower key policy rate (see green and grey bars).

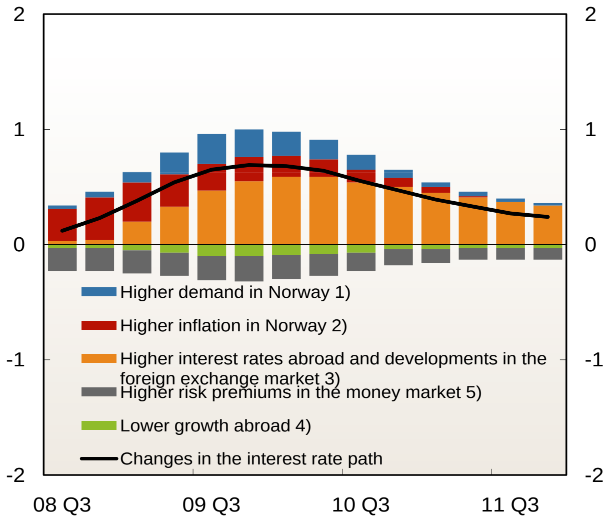
The Executive Board's strategy in *Monetary Policy Report* 2/08 implied that the key policy rate should be in the interval 5¼% – 6¼% in the period to the publication of the next *Report* in October, unless the Norwegian economy was exposed to unexpectedly severe shocks.

Monetary policy in the period to October 2008

Inflation picked up through summer. In July and August underlying inflation was assessed to be close to 3.5%. Capacity utilisation in the Norwegian economy was still high, and the krone somewhat weaker than expected. On the other hand, new figures indicated that growth in the global economy was slowing markedly. Global inflation expectations decreased. Prices for oil and other important commodities fell from high levels. At the monetary policy meeting on 13 August, the Executive Board concluded that the new information did not, on balance, warrant a deviation from the monetary policy strategy. The key rate was kept unchanged at 5.75%.

Inflation remained high after the August meeting, well above the inflation target of 2.5%. Wages rose sharply and it appeared that productivity growth was slowing at a faster pace than expected. The krone depreciated, resulting in prospects that inflation might remain high for a period ahead. At the same time, the outlook for growth in the advanced economies continued to deteriorate. The financial market crisis deepened, and the risk of a prolonged global downturn increased. Prices for important commodities continued to fall. At the monetary policy meeting on 24 September, Norges Bank kept the interest rate unchanged at 5.75%. Unusually high uncertainty in financial markets made it difficult to estimate the duration and extent of the effects on inflation and activity in the Norwegian economy.

Chart 13 Factors behind changes in the interest rate path from MPR 1/08 to MPR 2/08. Percentage points. 2008 Q3 – 2011 Q4



1) Reflects effects of higher demand growth in Norway due to higher oil and gas prices.
2) Reflects effects of higher inflation than what can be attributed to changes in capacity utilisation in Norway.
3) Reflects effects of higher key policy rate expectations among trading partners through effects on the krone exchange rate, and effects of the development in the krone exchange rate in spring 2008 over and above the effects of changes in interest rate expectations abroad.
4) Reflects effects of lower growth expectations in the world economy.
5) Reflects effects of higher money market risk premiums in Norway.

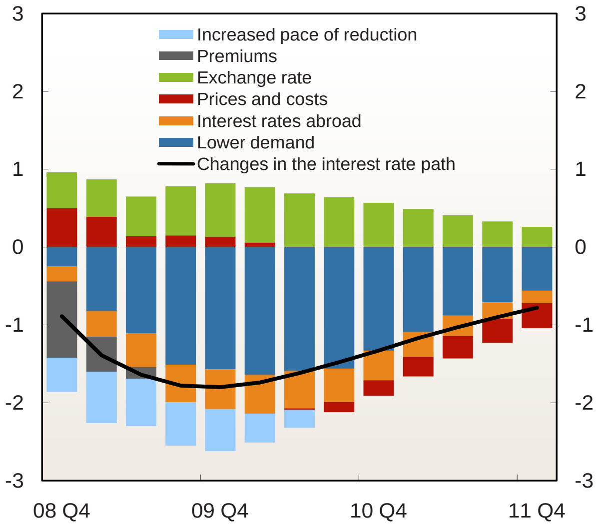
Source: Norges Bank

After a period, the problems in the US banking system spread to most markets and countries and developed into an international financial crisis. Credit markets dried up, and the outlook for global economic growth in 2009 deteriorated considerably. Prices for oil and other commodities fell markedly. On 8 October, coordinated action to reduce key rates was taken by the G10 countries as a result of the global financial crisis. On the same day, Norges Bank announced that the Executive Board would assess the interest rate at its ordinary meeting on 15 October, when preliminary analyses for *Monetary Policy Report* 3/08 would also be discussed. At this meeting, the key policy rate was lowered by 0.50 percentage point to 5.25%. The Executive Board stated that the slowdown in the Norwegian economy appeared to be occurring more rapidly and to be more pronounced than expected. Inflation was still high, but the forces that had driven inflation had weakened. In a situation with unusually high uncertainty, implementing a more active monetary policy, both in interest rate setting and through liquidity policy measures, was considered to be the most robust approach[3].

Monetary Policy Report 3/08 was presented at the interest rate meeting on 29 October, and the interest rate was reduced by a further 0.50 percentage point to 4.75%. The analysis in the *Report* implied that the key policy rate should be reduced fairly quickly to a lower level than envisaged in the June *Report*. Unexpectedly high inflation and an upward adjustment in the near-term inflation outlook indicated, in isolation, that the key policy rate should be higher. Norges Bank expected lower wage growth and higher productivity growth ahead. This pushed down the inflation outlook, and thereby the interest rate forecast over time (see Chart 14). The krone had depreciated markedly, which in itself pointed towards a higher key policy rate (see green bars). The krone depreciation was largely due to financial market turbulence, and was therefore assessed to be temporary. This reduced the contribution of the key rate to the krone depreciation. The downward revision of the interest rate path was primarily ascribed to lower demand (see blue bars). Weak global growth might also result in reduced activity and demand in the Norwegian economy and, eventually, lower price and cost inflation. Falling asset prices and lower expectations with regard to economic developments would result in increased household saving and lower corporate investment. Lower key rate expectations among our trading partners also pushed down the interest rate forecast (see orange bars), as did higher interest rate premiums, which weakened the impact on money market rates of changes in the key policy rate (see grey bars). As illustrated by the light blue bars, weight was given to moving forward the reduction in the key policy rate in order to reduce uncertainty and stave off a particularly adverse outcome for the economy.

The Executive Board's strategy was that the key policy rate should be in the interval 4%-5% in the period to the publication of the next *Monetary Policy Report* in March 2009, unless the Norwegian economy was exposed to new major shocks.

Chart 14 Factors behind changes in the interest rate path from MPR 2/08 to MPR 3/08. Percentage points. 2008 Q4 – 2011 Q4



Source: Norges Bank

Monetary policy in the period to December 2008

After the monetary policy meeting in October, the Norwegian economy was exposed to new major shocks.

The outlook for global and domestic growth deteriorated considerably. In November, the IMF revised down their projections for economic growth in 2009. Key rates were reduced in a number of countries, in some cases sharply, and market participants expected further reductions among most of Norway's trading partners. Governments in a number of countries announced extensive fiscal

[3] See section on liquidity policy on p. 72

measures to stimulate economic activity. Oil prices and other commodity prices continued to fall. An active liquidity policy and swap arrangements mitigated the impact, but premiums remained high and liquidity low in money and credit markets. The business sector found it difficult to obtain funding, and there was growing pessimism in the household and corporate sectors.

New information from Norges Bank's regional network, based on interviews conducted in November, showed that a fall in production and employment was expected in the coming quarters. At the same time inflation fell more quickly than expected, and there were prospects that inflation might fall below target in the course of the coming year. Underlying inflation was now around 3%, ½ percentage point lower than in September and October. The krone depreciated further.

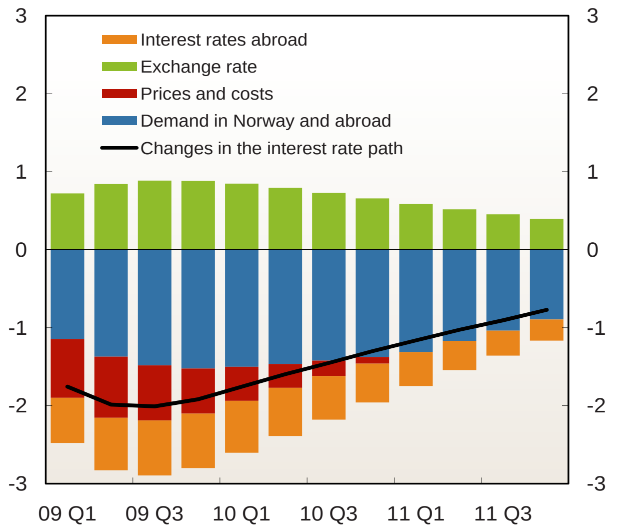
The risk of a pronounced slowdown in the Norwegian economy had increased. At the same time, the risk that inflation ahead would be too high had decreased. Both the objective of stabilising inflation around the target and the objective of stabilising output and employment implied a considerably lower key policy rate, and possible further reductions over the next half year. The key policy rate was reduced by 1.75 percentage points to 3% at this meeting. The Executive Board also stated that the key policy rate should be in the interval 2% – 3% in the period to the publication of the next *Monetary Policy Report* in March 2009, unless the Norwegian economy was exposed to new major shocks. An analysis was conducted of the consequences for interest rate setting given the new information. This indicated a considerably lower interest rate than projected in *Monetary Policy Report* 3/08. Chart 15 illustrates that the downward revision of the interest rate forecasts was mainly due to weaker prospects for domestic and global demand (see blue bars). In addition, unexpectedly low inflation (red bars) and global interest rate developments (orange bars) pushed down the interest rate path. The weakened krone (green bars) was the only factor that, in isolation, contributed to holding up the interest rate.

Liquidity policy in 2008

Monetary policy affects the economy through a number of channels, referred to collectively as the transmission mechanism for monetary policy. In 2008 the relationship between Norges Bank's key policy rate and its effects on activity and inflation was substantially disturbed by the prevailing money market conditions.

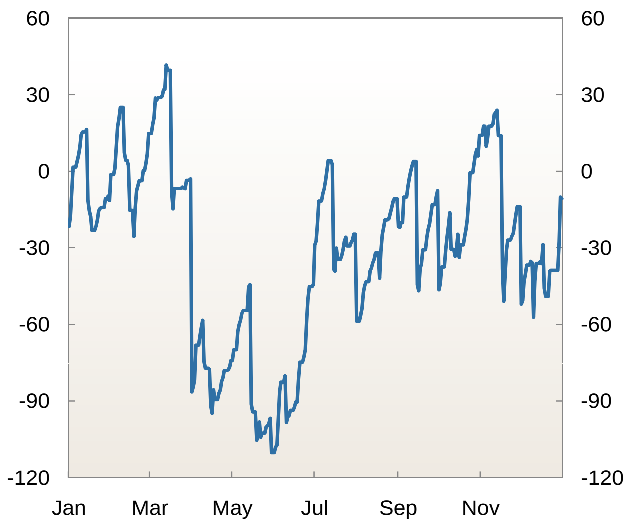
Norges Bank prepares regular forecasts for banks structural liquidity, i.e. banks' sight deposits in Norges Bank before the supply or withdrawal of liquidity through

Chart 15 Factors behind changes in the interest rate path from MPR 3/08 to the monetary policy meeting in December 2008. Percentage points. 2009 Q1 –2011 Q4



Source: Norges Bank

Chart 16 Banks' structural liquidity. In billions of NOK. 1 January 2008 – 31 December 2008



Source: Norges Bank

liquidity measures. On the basis of these forecasts, Norges Bank decides on liquidity requirements, loan maturities and the level of total lending to banks.

Total liquidity, i.e. banks' total sight deposits in Norges Bank, is structural liquidity plus liquidity that Norges Bank supplies through loans to banks. Under normal market conditions, total liquidity of around NOK 15-20bn has been sufficient to keep short-term money market rates close to the key policy rate. At the end of a quarter or year, when petroleum tax payments are made, and in the event of considerable uncertainty or turbulence in the markets, banks' capacity and willingness to redistribute liquidity can be reduced. Higher surplus liquidity may then be needed to hold down short-term rates. As oil prices rose, petroleum tax payments to the state resulted in sharp falls in structural liquidity. Money market rates often rose around the time the payments were made, even though Norges Bank supplied ample liquidity beforehand. As of 1 August 2008, the number of petroleum tax payments increased from two to six a year. This has reduced volatility in structural liquidity (see Chart 16).

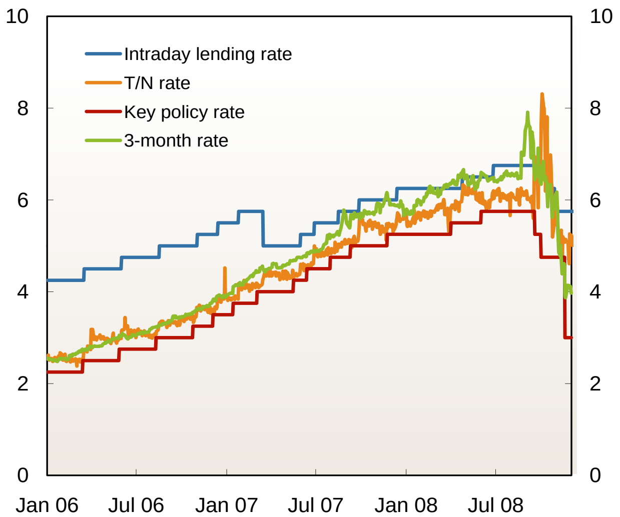
Norges Bank normally supplies liquidity by offering fixed-rate loans (F-loans) to banks established in Norway. F-loans are provided against collateral in the form of approved securities. F-loan maturities will depend on the variation in banks' total borrowing requirements over time. The interest rate on F-loans is normally set by American auction and is usually slightly higher than the sight deposit rate[4].

Liquidity can also be supplied through foreign exchange swaps. In a foreign exchange swap, Norges Bank provides a loan against collateral in another currency, for example a loan in Norwegian kroner against US dollars. Foreign exchange swaps are used when Norges Bank is not able to supply adequate liquidity through F-loans. All banks active in the Norwegian money market can participate, not just banks established in Norway. The price of a foreign exchange swap is normally set by American auction. Banks submit a bid for the desired amount and price. The price is expressed in price points, i.e. the interest-rate differential between the two currencies at the relevant maturity. Prior to 2008, foreign exchange swaps had not been in use since 2001.

Since the financial turbulence broke out in August 2007, banks' capacity and willingness to redistribute liquidity in money markets has been reduced, in Norway and in other countries. Money market rates have been higher than normal relative to the key policy rate. Premiums have generally been higher for longer money market loans than for the shortest loans (see Chart 17).

In order to counteract the increase in the shortest money market rates as a result of these premiums, the supply of liquidity was higher than normal. In April and May 2008, borrowing requirements in the market were particularly high after petroleum tax payments of about NOK 96bn on 1 April and payments of taxes and special excise tax. Borrowing requirements pushed up short money market rates. In order to supply adequate liquidity, Norges Bank concluded foreign exchange swaps to supply NOK against collateral in USD. A total of NOK 42.6bn was supplied in two foreign exchange swaps. Before the petroleum tax payment on 1 April, a longer-than-usual F-loan was also offered for the first time. The loan was settled on 1 April and matured on 19 June. The reason for this long loan was the prospect of a considerable structural liquidity shortfall in the period to mid-June. NOK 70bn was allocated in the auction. The exceptional liquidity measures contributed to a fall in the tomorrow/next (T/N) interest rate of 60 basis points in the course of a three-week period, after which it stabilised in August at around 30 basis points above the key policy rate. Premiums on these somewhat longer money market rates also declined.

Chart 17 Norges Bank's interest rates and short money market rates (money market rate one day ahead and 3 months ahead). Nominal rates. Per cent. 1 January 2006 – 31 December 2008



Sources: Thomson Reuters and Norges Bank

[4] In an American auction, banks submit bids for the desired amount and price. Norges Bank determines the total amount to be allocated. Banks' bids are ranked from highest to lowest price and allocations are made until the total amount is reached. Successful bidders pay the price they have bid.

[5] Tomorrow/next (T/N) rate.

However, because of persistent international turbulence, money market premiums remained higher than normal through summer and autumn 2008. This phenomenon was not particular to Norway. Developments in premiums in Norway were approximately the same as those among our trading partners (see Chart 8). However, the fact that banks in Norway rely on funding in US dollars, which are exchanged for Norwegian kroner through foreign exchange swaps, may have contributed to amplifying the contagion from dollar interest rates.

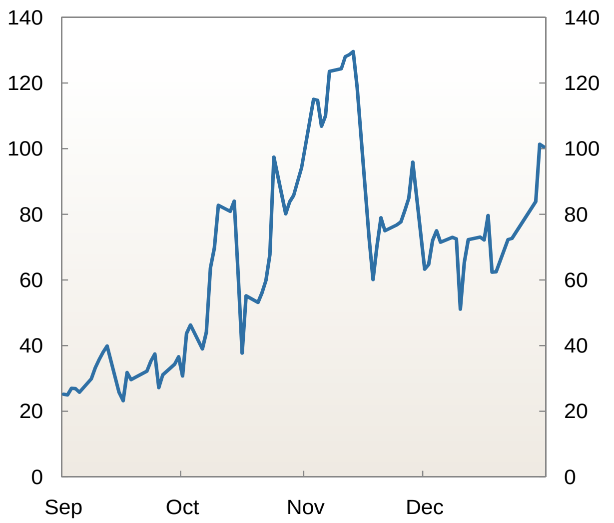
When the turbulence erupted into an international financial crisis in the wake of the Lehman Brothers bankruptcy on 15 September 2008, investors' fears of new losses increased, with the result that liquidity in money markets virtually disappeared. In the days that followed, a number of US and European banks encountered substantial problems rolling over their loans. Some collapsed. Because of the shortage of dollar liquidity, Norwegian banks stopped quoting prices in the Norwegian money market on Tuesday 16 September. Norges Bank then decided to offer US dollars against collateral in NOK in a one-week foreign exchange swap. NOK 5bn was allocated. After this, prices were again quoted in money markets. The foreign exchange swap was rolled over one week later for the same amount.

At the end of September, Norges Bank, like a number of other central banks, agreed on a credit facility with the Federal Reserve. Under this agreement, Norges Bank can draw up to USD 15bn as needed. The agreement applied until 30 April, but was later extended to 30 October 2009. This agreement was used for the first time when Norges Bank offered dollar liquidity for kroner for the third time on 30 September. Interest was more subdued than at the two previous foreign exchange swaps, probably as a result of an improvement in dollar liquidity in the market.

To avoid withdrawing NOK liquidity, which would then in turn have to be supplied to the market through F-loans, Norges Bank switched to lending USD directly against collateral in securities on 14 October. In the course of autumn 2008, Norges Bank offered USD loans five times to ensure that the money market had an adequate supply of USD. The loans were fully allocated at all five auctions.

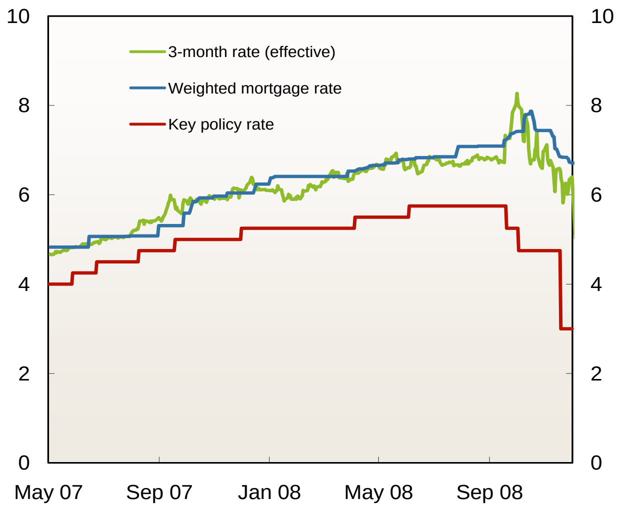
There was also considerable uncertainty in the NOK money market. Redistribution of liquidity among banks was limited, particularly for longer maturities. Because of market turbulence, money market premiums rose markedly and there was a need for an increase in the supply of liquidity. As a result, Norges Bank arranged for a marked increase in surplus liquidity in the banking system in October (see Chart 18). From mid-October to the end of 2008, banks' loans amounted to between NOK 60bn and 130bn. F-loans were offered frequently and weekly foreign exchange swaps were conducted, where NOK was supplied against col-

Chart 18 Surplus liquidity in market after supply from Norges Bank. In billions of NOK. 1 September 2008 – 31 December 2008



Source: Norges Bank

Chart 19 Key policy rate, money market rate and banks' lending rate on new loans1). Per cent. 3 May 2007 – 31 December 2008



1) Nominal interest rates on new mortgage loans of NOK 1m within 60% of purchase price with floating interest rate. Figures for the 20 largest banks, weighted according to market share.

Sources: Norsk familieøkonomi AS and Norges Bank lateral in EUR. Surplus liquidity was kept at an average of NOK 65bn higher than normal, contributing to a marked fall in the premiums on the shortest money market rates from mid-October and through November. After this, premiums varied somewhat up to the turn of the year but remained on average considerably lower than when they had been at their highest (see Chart 17).

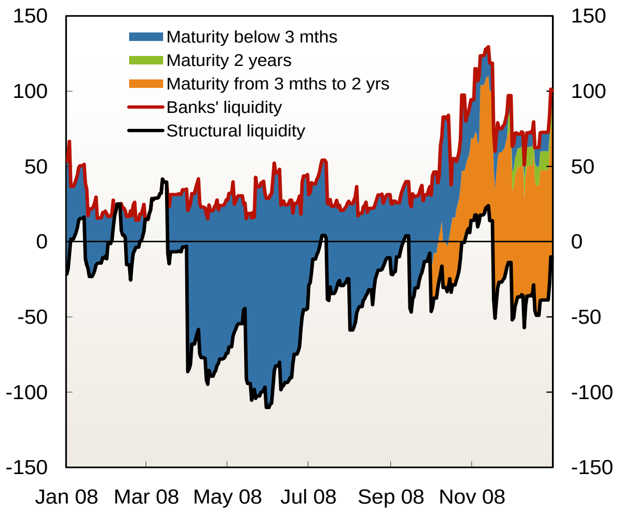
The spread between three-month money market rates and the expected key policy rate nevertheless remained wide. Three-month rates are important to economic developments as they affect banks' lending rates (see Chart 19).

It was difficult for banks to obtain loans in the market at all, other than loans with very short maturities. In order to improve predictability in banks' liquidity, Norges Bank provided loans with longer-than-normal maturities. Chart 20 shows how the loans were distributed over short and longer maturities.

Three-month F-loans were provided three times with settlement dates on 1, 16 and 30 October. Loans in a total amount of NOK 51.9bn were provided at these auctions. Interest in the last two auctions was somewhat lower than in the first, probably because the last two auctions were held after the government announced a swap arrangement for covered bonds on 12 October to help banks obtain funding in capital markets (see discussion below).

In addition to three-month F-loans, Norges Bank concluded two foreign exchange swap agreements to supply NOK for USD. The first was offered in the period when Norwegian money market premiums were particularly high. The other was offered to ensure adequate NOK liquidity in the market over the turn of the year. In both foreign exchange swaps, bid prices were very low, with the result that the volume allocated in the auction was low in relation to the total volume of bids.

Chart 20 Banks' liquidity and structural liquidity.In billions of NOK. 1 January 2008 – 31 December 2008



Source: Norges Bank

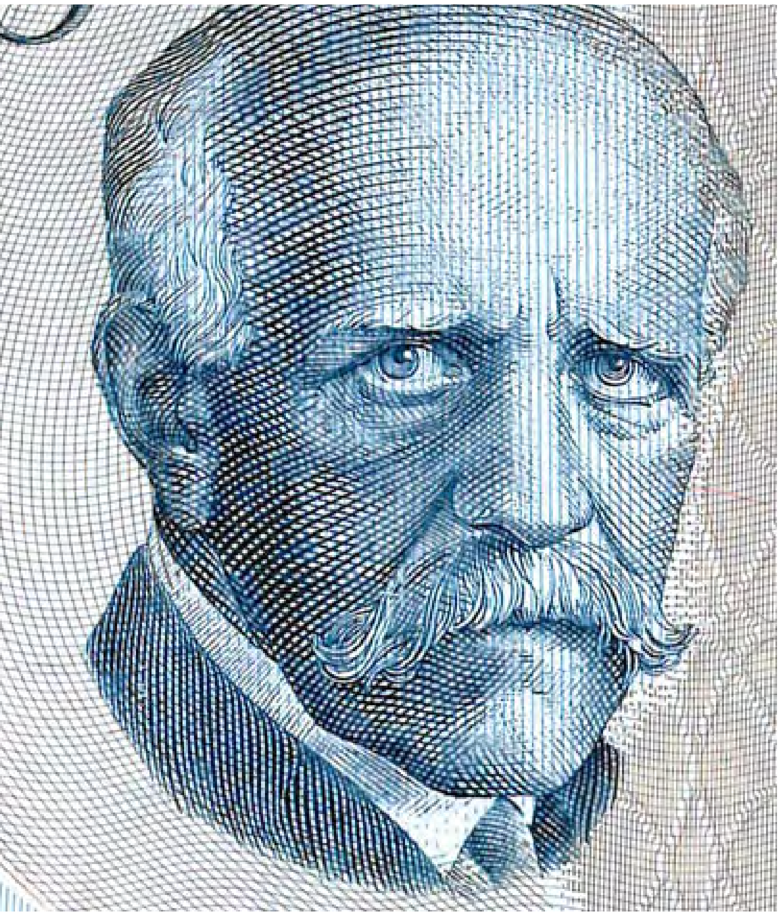
High premiums pushed up funding costs for banks and borrowing costs for their customers. Banks refused to lend against even high-quality collateral in the situation that ensued. The Swedish and UK governments offered banks government securities in exchange for high-quality securities. This eased banks' access to market funding in the form of loans collateralised by government securities and improved the distribution of interbank liquidity in the two countries.

Norges Bank's recommendation to the Ministry of Finance was that an arrangement similar to the arrangement in the UK should be established in Norway, whereby the government would issue government paper to itself, which would then be lent through Norges Bank against collateral in covered bonds (OMF). Most banks in Norway can issue covered bonds through wholly-owned or part-owned mortgage companies. Foreign-owned banks can participate through mortgage companies established in their home country.

On 24 October 2008, the Storting (Norwegian parliament) decided to authorise the Ministry of Finance to establish an arrangement whereby the government would sell government paper in exchange for covered bonds (OMF) in order to ease banks' funding situation (see box on page 99).

All covered bonds issued in accordance with Norwegian regulations were accepted under the swap arrangement. Thus, the cover asset pool could include residential mortgages, commercial mortgages and municipal loans. Covered bonds issued in other countries and backed by Norwegian assets were also accepted.

Norges Bank set a minimum price of NIBOR minus 20 basis points at all the auctions.[6] Each participant was permitted to submit three competitive bids at each auction. Participants that did not wish to submit competitive bids could submit a non-competitive bid of up to NOK 500m. In each auction, the bidders could choose between four different swap periods. The shortest swap period was between three and six months, while the longest was about three years.

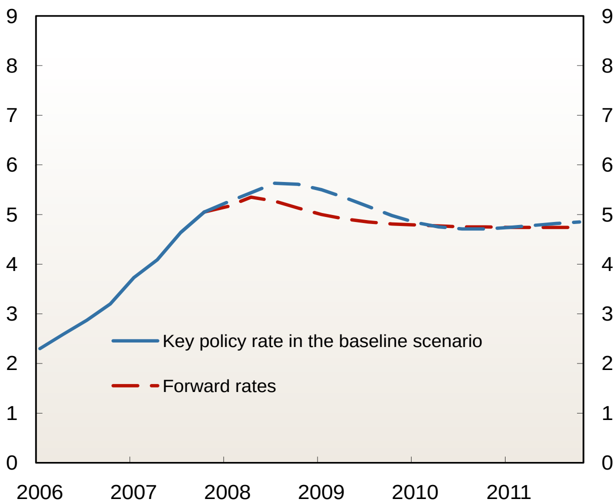


In November and December 2008, four auctions were held under the swap arrangement. Bids submitted totalled NOK 43.5bn and swap agreements were concluded in an amount of approximately NOK 42bn. Of the total amount allocated, 85.5% was allocated for the longest swap period (around three years), 14% for the next longest swap period (around two years) and 0.5% for the shortest swap period.

In autumn 2008 it was very difficult for small and medium-sized banks to obtain long-term funding. This applied to banks that primarily borrow from larger banks in Norway and not in international money markets. In order to ease the situation, Norges Bank offered F-loans at fixed rates and maturities of six months and two years. The loans were limited to a maximum of NOK 1bn per bank. Banks showed considerable interest in the arrangement and the full amount was allocated in both operations. Norges Bank also announced that another long loan would be offered with settlement in February 2009.

Increased access to liquidity, F-loans with longer maturities, a reduced key policy rate and substantial supplies of dollar liquidity all over the world contributed to a fall in Norwegian money market rates towards the end of the year. At the turn of the year, premiums were still higher than normal, but considerably lower and more stable than in September and October.

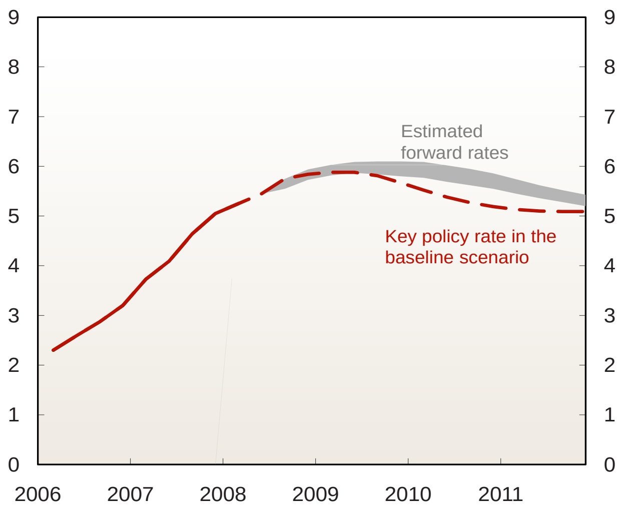
Chart 21 *Monetary Policy Report* 1/08: Key policy rate in the baseline scenario and estimated forward rates[1]. Per cent. 2006 Q1 –2011 Q4



1) A credit risk premium and a technical difference of 0.20 percentage point have been deducted when calculating the forward rates at 10 March to ensure comparability with the key policy rate.

Source: Norges Bank

Chart 22 *Monetary Policy Report* 2/08: Key policy rate in the baseline scenario and estimated forward rates[1]. Per cent. 2006 Q1 –2011 Q4



1) Forward rates are based on money market rates and interest rate swaps. A credit risk premium has been deducted when calculating the forward rates to ensure comparability with the key policy rate. The grey interval shows the highest and lowest forward rates in the period 9 June – 20 June 2008.

Source: Norges Bank

6 The price of a swap agreement was determined by Dutch auction.

Assessment – use of instruments

Cross-checks for appropriate interest rate setting

Financial market expectations concerning the key policy rate

Norges Bank's communication on monetary policy primarily aims to influence financial market interest rate expectations. The aim of publishing Norges Bank's interest rate forecasts and monetary policy strategy is to make it possible for others to anticipate and evaluate monetary policy.

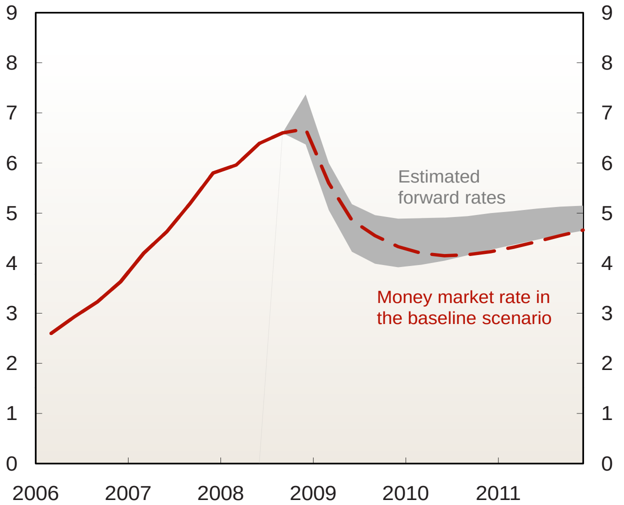
Forward rates can under certain circumstances reflect market expectations concerning the future key policy rate. If this is the case, they will provide a cross-check of the Bank's interest rate forecast. Deviations may indicate that the central bank and market participants have differing perceptions of future economic developments. They may also reflect differing views concerning future monetary policy trade-offs. In the following section, the interest rate path in the three monetary policy reports presented in 2008 are compared with market rates immediately prior to the publication of the reports.

A similar comparison has been conducted for the interest rate path presented at the monetary policy meeting on 17 December.

In *Monetary Policy Report* 1/08, Norges Bank's key policy rate forecasts were somewhat higher than market expectations at the beginning of the forecast period. The reason for this might be that market participants had a different perception of the outlook for inflation and production. The difference became smaller further ahead, and Norges Bank and market participants expected the same interest rate developments in 2010 (see Chart 21). In *Monetary Policy Report* 2/08, forward rates in Norway had risen. Estimated forward rates thus corresponded with the interest rate forecast in the *Report* in the short term (see Chart 22). In the longer term, forward rates were somewhat higher than projected in the *Report*.

Up to *Monetary Policy Report* 3/08, negative developments in financial markets and in the global economy resulted in a substantial decline in key rate expectations among market participants. At the same time, money market rates remained high because of very high risk premiums. Norges Bank based its projections on the assumption that premiums on money market rates after the turn of the year would edge down, but that they would remain high somewhat longer than indicated by pricing in the market. Thus, money market rates were expected to decline more sharply than the key policy rate. Norges Bank's money market rate forecast was in line with forward rates in the market (see Chart 23). When the interest rate forecast was revised down at the monetary policy meeting on 17 December, the forecast was somewhat lower than forward rates (see Chart 24).

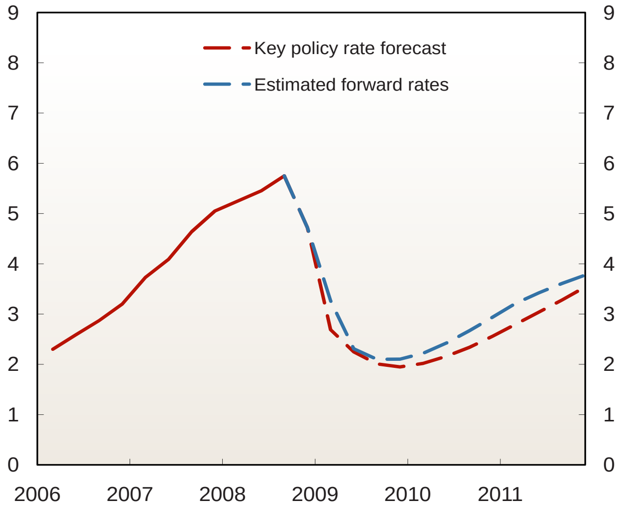
Chart 23 *Monetary Policy Report 3/08:* Money market rate in the baseline scenario and estimated forward rates[1]. Per cent. 2006 Q1 –2011 Q4



1) Forward rates are based on money market rates and interest rate swaps. The grey interval shows the highest and lowest forward rates in the period 10-23 October 2008

Source: Norges Bank

Chart 24 Key policy rate forecast from the monetary policy meeting on 17 December and estimated forward rates[1]. Per cent. 2006 Q1 –2011 Q4



1) Forward rates are based on money market rates and interest rate swaps. A credit risk premium has been deducted when calculating the forward rates to ensure comparability with the key policy rate. Estimated forward rates are an average for the period 3–16 December 2008

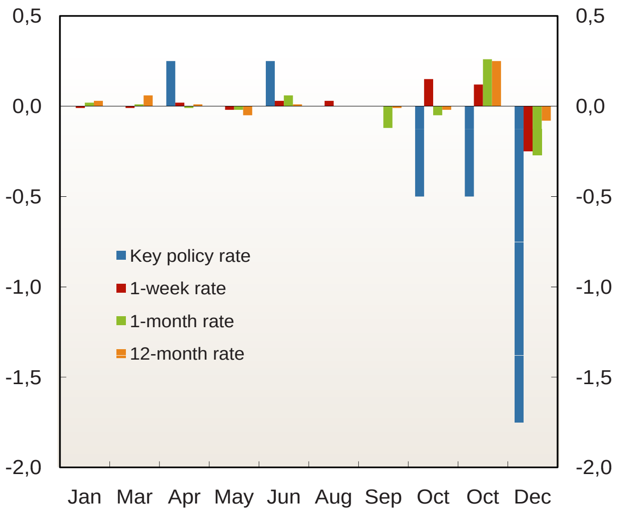
Source: Norges Bank

Impact on money market rates around monetary policy meetings

One indicator of predictability in interest rate setting is the impact on money market rates around the Executive Board's monetary policy meetings. Substantial changes in market rates may indicate that the decision was unexpected. Changes in market rates must also be viewed in the context of financial market turbulence, which increased general fluctuations in interest rates, particularly towards the end of the year.

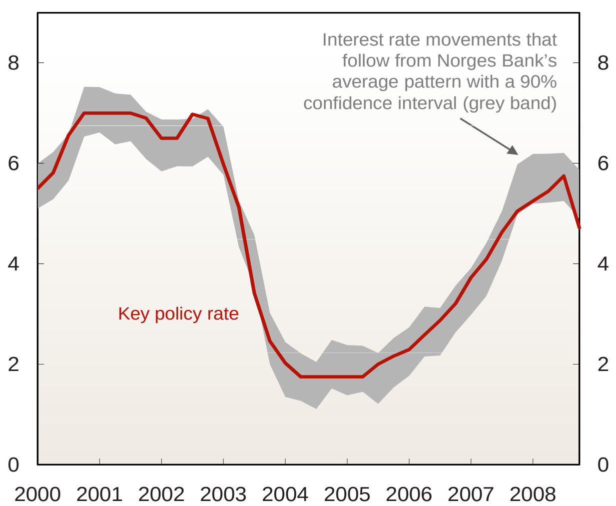
The limited effects of the monetary policy meetings from January to August may indicate that interest rate setting in this period was expected (see Chart 25). The effects were greater further into autumn. When the key policy rate was kept unchanged at the monetary policy meeting in September, money market rates with a one-month horizon edged down. At the extraordinary monetary policy meeting on 15 October, the key policy rate was reduced by 0.5 percentage point. This resulted in a moderate increase in the shortest money market rates. When the key policy rate was reduced by a further 0.5 percentage point at the monetary policy meeting on 29 October, accompanied by the announcement of further interest rate cuts ahead, money market rates edged up. This may indicate that the market expected a larger interest rate cut.

Chart 25 Change in the key policy rate and effect on money market rates following monetary policy meetings in 2008. Percentage points



Source: Norges Bank

Chart 26 Key policy rate and interest rate developments that follow from Norges Bank's average pattern of interest rate setting[1]. Per cent. 2000 Q1 – 2008 Q4



1) Interest rate movements are explained by developments in inflation, mainland GDP growth, wage growth and key rates among trading partners. See *Staff Memo* 3/08 for further discussion

Source: Norges Bank

When the key policy rate was reduced by 1.75 percentage points, to 3.00%, on 17 December, accompanied by the adoption of a new monetary policy strategy and the presentation of a new interest rate forecast, there was a marked decline in the shortest money market rates. Market participants were expecting a decrease in the key policy rate, but the changes in market interest rates indicate that both the decrease in the key policy rate adopted at the meeting and the future cut that was announced were unexpectedly large.

Simple rules

Another cross-check for interest rate setting may be to focus on how the key policy rate has previously responded to developments in key economic variables. Market participants will seek to form a picture of Norges Bank's response to new information about the economy and interest rate setting as a result of developments in key economic variables. The response pattern in interest rate setting may be approached using a reaction function whereby historical interest rate changes are explained by changes in macroeconomic variables. Such an estimated relationship will not capture all the elements that are given weight. In particular, it does not capture specific assessments made at individual monetary policy meetings. An estimated reaction function for interest rate setting will therefore be a considerable simplification and will only provide an indication of how Norges Bank on average has responded to selected variables. Estimation results will also depend on the data period and the econometric method used.

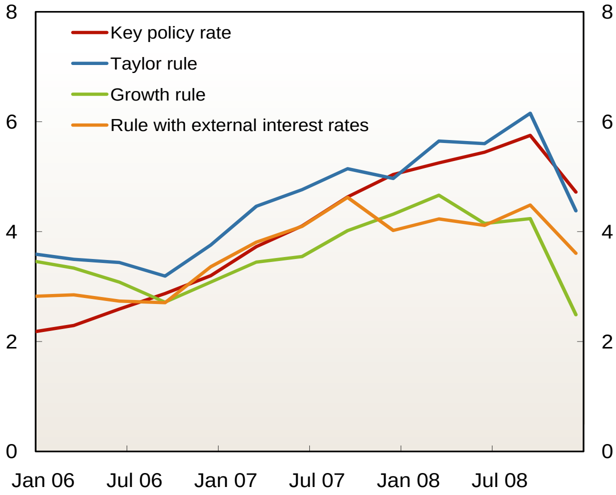
Chart 26 shows the interest rate path that follows from the Bank's average response pattern from 2000 to 2008 and the actual path of the key policy rate. The estimated equation includes developments in inflation, wage growth, Norges Bank's projections for mainland GDP growth and money market rates abroad. The interest rate in the previous period is also included. The chart shows that interest rate developments through 2008 have been in line with Norges Bank's average interest rate setting pattern, but that they edged below towards the end of the year.

Interest rate setting may also be assessed in the light of simple monetary policy rules (see Chart 27). The rules must be interpreted with caution and only provide a rough indication of whether the interest rate level is appropriate to the economic situation. A common feature of many simple monetary policy rules is that the interest rate is set with a view to maintaining inflation around a specific target over time while contributing to stabilising output.

The Taylor rule[7] is based on the output gap and inflation. The growth rule[8] is instead based on observed GDP growth and inflation. Simple monetary policy rules do not take account of the economic outlook ahead but focus solely on the economic situation today. The rules have some limitations as a reference for a small, open economy. They do not take into account that any changes in the interest rate level that would be consistent with the rules may result in changes in the exchange rate, thereby influencing the inflation outlook. In principle, the rule involving external interest rates[9] is better suited for a small, open economy. Through 2008, the key policy rate has been close to the key policy rate according to the Taylor rule. It has been somewhat above the interest rates according to the growth rule and the rule with external interest rates.

Nominal GDP growth for the mainland economy can serve as another cross-check that is less reliant on methodology than simple interest rate rules. Over time, nominal GDP will grow in pace with the sum of the rise in prices

Chart 27 Key policy rate, Taylor rule, growth rule and rule with external interest rates[1)]. Per cent. 2006 Q1 –2008 Q408



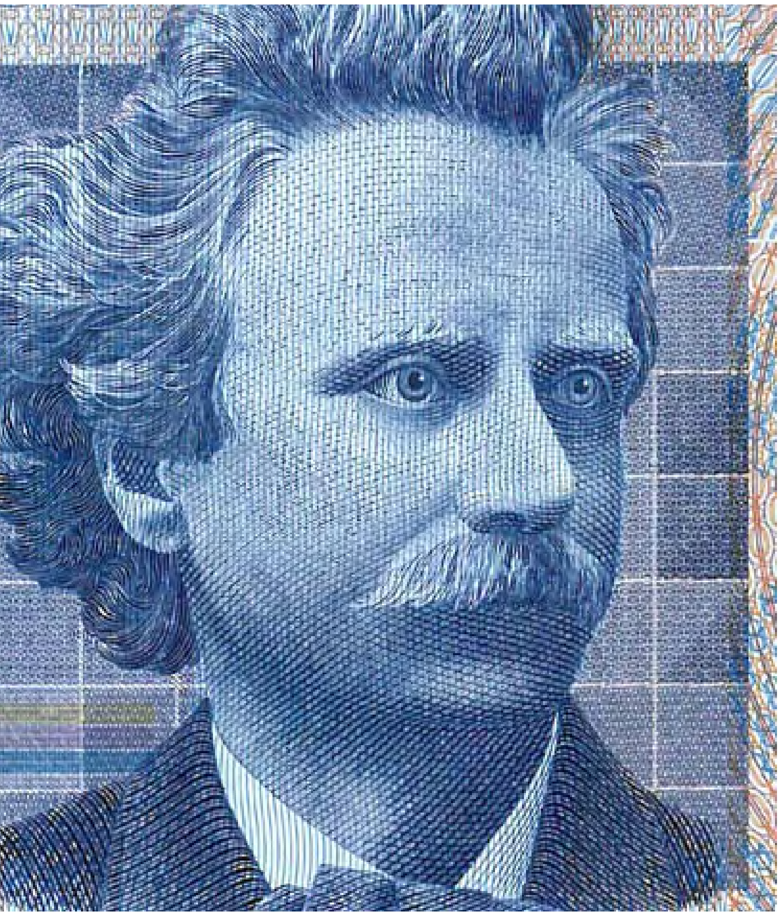
1) The calculations are based on Norges Bank's estimates of the output gap, consumer prices adjusted for tax changes and excluding temporary changes in energy prices (CPIXE) and 3-month money market rates. To ensure comparability with the key policy rate, the simple rules are adjusted for the risk premium in 3-month money market rates.

Sources: Statistics Norway and Norges Bank

7 Taylor rule: Interest rate = Inflation target + equilibrium real interest rate +1.5(inflation – inflation target) + 0.5 x output gap. See Taylor J.B. (1993): "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pp. 195-214. The CPI-ATE is used as a measure of inflation.

8 The output gap is replaced by the difference between actual growth and trend growth in the economy (growth gap).

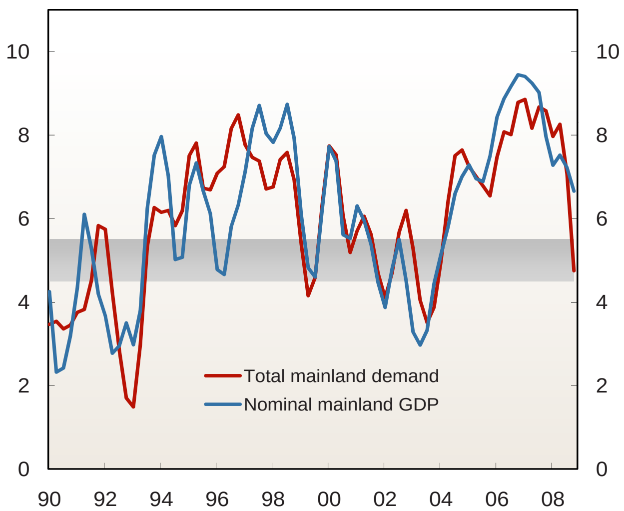
9 External real interest rate rule = 0.5 x Taylor rate + 0.5 x money market rate among Norway's trading partners.



and growth in production capacity in the economy. Experience shows that production capacity increases by about 2-3% annually over time. An inflation target of 2.5% implies nominal GDP growth of approximately 4.5-5.5% annually over time. Nominal GDP growth that is higher than this over a longer period, and that does not appear to be decreasing, indicates in isolation that monetary policy should be tightened. Nominal GDP growth through the first three quarters of 2008 was higher than the growth that can be expected to be consistent with the inflation target over time (see Chart 28). The figures for the fourth quarter nevertheless show that growth is slowing. One of the reasons growth in nominal GDP has been so high is that the rise in the prices included in GDP – the GDP deflator – has been high in recent years. This is partly because prices for some other goods and services, excluding consumer goods, have risen markedly, particularly export goods. This change in relative prices reflects an improvement in Norway's terms of trade. It may also reflect unusually strong production capacity growth in the Norwegian economy in recent years due to inward labour migration and solid productivity growth.

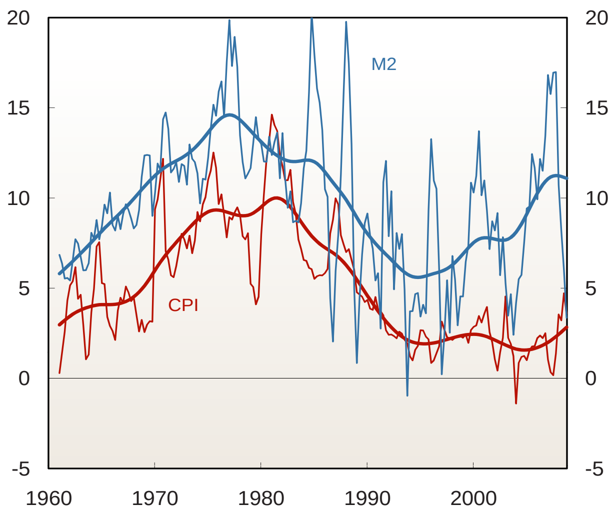
Historically, there has been a relationship between inflation and money growth (M2). There is a tendency for stronger money growth to accompany higher inflation and

Chart 28 Nominal mainland GDP and total mainland demand[1]. Four-quarter change. Per cent. 90 Q1– 08 Q4.



1) Adjusted for seasonal variations and irregular components.
Sources: Statistics Norway and Norges Bank

Chart 29 Consumer prices (CPI) and money supply (M2). Estimated trend rise[1]. Four-quarter change. Per cent.61 Q1 – 08 Q4



1) Trend calculated using HP filter. See *Staff Memo* 2005/2 for further discussion.
Sources: Statistics Norway and Norges Bank

weaker money growth to accompany lower inflation. Trend money growth can serve as a rough cross-check of inflation projections generated by other models. In recent years, the difference between trend money growth and trend consumer price inflation has increased (see Chart 29), reflecting a period of low inflation as a result of favourable supply-side conditions in the Norwegian and global economies. At the same time, trend money growth has increased markedly, indicating strong growth in the Norwegian economy and high credit growth. Strong money growth might indicate that inflation would pick up after a period. Inflation edged up through 2007 and 2008 and monetary policy continued to be tightened up to last summer. Towards the end of the year, trend money growth slowed again. Inflation was also slowing.

Evaluation – performance over time

Evaluation of inflation and the output gap over time

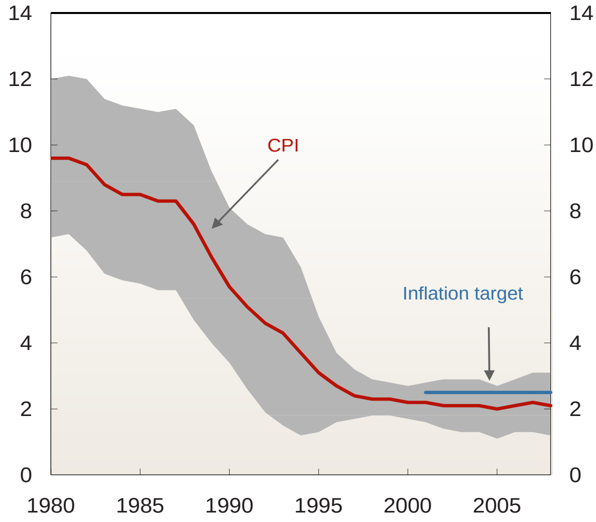
In accordance with the mandate for monetary policy, Norges Bank will set interest rates with a view to achieving an inflation rate of 2½% over time. The level of consumer price inflation over a short period does not provide an adequate basis for assessing whether long-term monetary policy objectives have been achieved. Chart 30 shows a ten-year moving average for annual consumer price inflation. Inflation stabilised in the early 1990s after falling from a high level in the previous decade. In the ten-year period 1999-2008, average inflation was 2.1%, measured by the consumer price index.

Under a flexible inflation targeting regime, monetary policy also gives weight to the objective of stability in output and employment. Chart 31 shows developments in the output gap since 1980. Measured in this way, cyclical fluctuations have been somewhat less pronounced over the past ten years than the substantial fluctuations in the Norwegian economy around 1990.

The band around average inflation in Chart 30 shows inflation variability. Variability is calculated as the standard deviation over a ten-year period, seven years back and two years ahead. Over a longer time horizon, inflation variability has been lower. Variability in the output gap, shown in Chart 31, seems to have been diminishing since the end of the 1990s.

Viewed over time, inflation has been low and stable and remained somewhat below, but fairly close to, 2.5%.

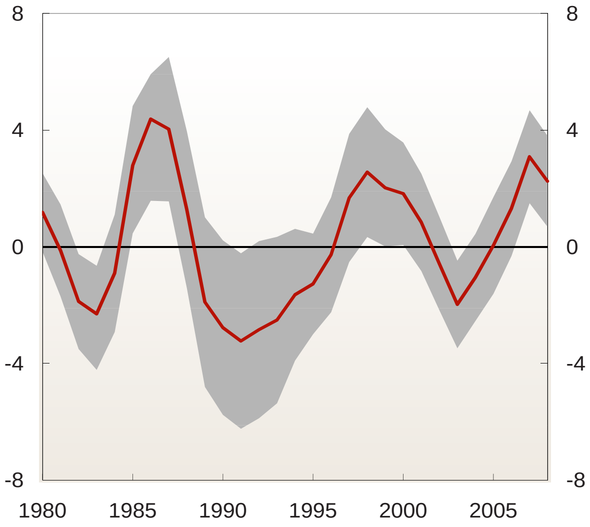
Chart 30 Inflation. Moving 10-year average[1] and variation[2] in CPI[3]. Per cent. 1980–2008



1) The moving average is estimated 7 years back and 2 years ahead.
2) The band around the CPI is the variation in the CPI adjusted for tax changes and excluding energy products in the average period, measured by +/- one standard deviation.
3) Projections for 2008–2010 in *Monetary Policy Report* 3/08 form the basis for this estimate.

Sources: Statistics Norway and Norges Bank

Chart 31 Output gap estimates. Level[1] and variation[2]. Per cent. 1980–2008[3]



1) The output gap measures the difference between actual and estimated potential mainland GDP.
2) The band shows the variation in the output gap measured by ± one standard deviation. The variation is calculated as the average standard deviation over a ten-year period, seven years back and two years ahead.
3) Projections in MPR 3/08 form the basis for this estimate.

Source: Norges Bank

The deviation probably reflects the influence in recent years of a number of favourable supply-side shocks, including strong growth in productivity, an ample supply of labour from other countries and a low rise in prices for imported goods. This is expressed in strong growth in the Norwegian economy with a long period of lower-than-expected inflation.

Inflation expectations

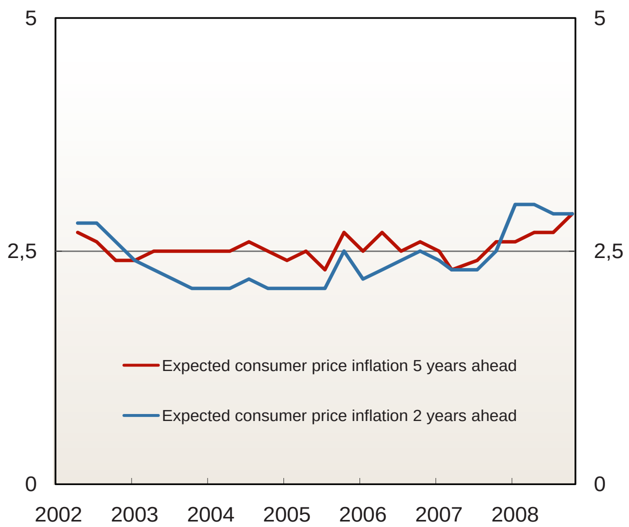
For monetary policy to contribute to stabilising developments in output and employment, economic agents must be confident that the inflation target will be reached. Experience indicates that inflation expectations may remain stable even if inflation varies somewhat as long as the interest rate is used actively to moderate the effects and monetary policy is oriented towards achieving the inflation target over time. Inflation will not be on target at all times, but with confidence in monetary policy, expected inflation in the long term will be close to target. This in itself contributes to stabilising inflation.

TNS Gallup has been commissioned by Norges Bank to carry out quarterly surveys on inflation expectations. The surveys in the fourth quarter of 2008 indicate that inflation expectations among the social partners and financial industry and academic experts are fairly close to, but somewhat above the target (see Chart 32). Annual inflation is expected to be 2.9% at both the 2-year and 5-year horizon.

Figures from Consensus Forecast Inc. compare different institutions' forecasts for consumer price inflation in Norway twice a year (April and October). At the 5-year horizon, consumer price inflation is expected to be approximately 2.5%, while a rise of 2.4% is expected at the 10-year horizon.

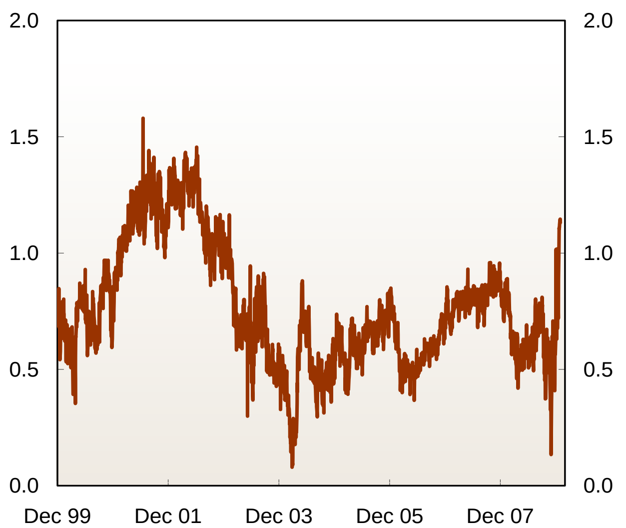
The yield curve in fixed income markets also provides information about inflation expectations. Long forward rates can – under certain conditions – give an indication of expected inflation.[10] Chart 33 shows the spread in long forward rates between Norway and the euro area. As the inflation target is higher in Norway, the differential should be in the range ½ -1 percentage point, depending on risk premiums in fixed income markets. A wider spread can be an indication that inflation expectations in Norway are higher than implied by the inflation target. After September 2008, the spread varied between below ½ to above 1 percentage point, reflecting the international financial crisis and the problems that arose in money markets. Overall, these indicators suggest that there is confidence in the inflation target.

Chart 32 Expected consumer price inflation 2 and 5 years ahead.[1)] Per cent. 02 Q2– 08 Q4



1) Average of expectations of employer/employee organisations and experts (financial industry employees, macro analysts and academics).
Source: TNS Gallup

Chart 33 Spread in long forward rates between Norway and the euro area. Percentage points. 1 December 1999 – 31 December 08



Sources: Thomson Reuters and Norges Bank

[10] See Kloster, A. «Estimating and interpreting interest rate expectations », Economic Bulletin 2000/3, Norges Bank.

Chapter 2
Financial stability

Work on financial stability

Norges Bank shall contribute to maintaining a financial system that operates as intended. The financial system includes the financial institutions, the financial markets and the payment system. The objective of financial stability requires the system to be sufficiently robust to function satisfactorily even if it is exposed to internal or external shocks. The system must be able to channel capital, execute payments and redistribute risk efficiently. Norges Bank's work on financial stability consists of four major components:

- monitoring the risk of shocks in the financial system;
- preventing instability by seeking to keep the risk of shocks at a low level;
- promoting confidence in the means of payment;
- maintaining contingencies for crisis management.

Norges Bank monitors closely the financial strength and profitability of the most important financial institutions and how well the most important financial markets function. Norges Bank publishes its assessments in the form of semi-annual reports. In addition, the bank holds meetings with Kredittilsynet (Financial Supervisory Authority of Norway) and the Ministry of Finance to discuss the status of the financial system and the need for government measures. In 2008, this cooperation played a particularly important role in dealing with the problems that arose. The most important matters raised were the provision of liquidity to banks, Norway's approach to the Icelandic banks that experienced difficulties in 2008 and measures to prevent shortages of credit from banks.

Under the Norges Bank Act, Norges Bank has a general responsibility for promoting an efficient payment system. Norges Bank settles interbank payments through Norges Bank's settlement system. This settlement system functioned as required even when one bank and some brokerage firms suspended payments in 2008. Norges Bank is also responsible for the cash supply.

The statutory basis for work on financial stability

The primary basis for the responsibilities of Norges Bank, including its responsibility for the stability of the financial system, is in Sections 1 and 3 of the Norges Bank Act. Section 1 states that the Bank shall issue banknotes and coin, promote an efficient payment system domestically as well as vis-à-vis other countries and monitor developments in the money, credit and foreign exchange markets. Section 3 states that the bank shall inform the ministry when, in the opinion of the Bank, there is a need for measures to be taken by others than the Bank in the field of monetary, credit or foreign exchange policy. The Bank shall inform the public about the monetary, credit and foreign exchange situation. Three other sections of the Norges Bank Act are also relevant: Section 13 grants Norges Bank the sole right to issue Norwegian banknotes and coin. Pursuant to section 17, Norges Bank carries out banking transactions for the government. Section 19 provides that Norges Bank may grant loans and make deposits with commercial banks and savings banks. This entails a special responsibility for ensuring that the banking sector functions according to intentions. The Act relating to Payment Systems charges Norges Bank with the responsibility for authorising the banks' clearing and settlement systems and for supervising these systems.

The outlook for financial institutions and financial markets

What happened in 2008?

The international financial crisis

Up to summer 2007, the global economy had enjoyed a period of very strong growth that had lasted for many years. Interest rates were low, loan losses were low, and risk appetite in the financial markets was high. Asset prices increased sharply, as did many market participants' debts. The turnaround in 2007 was triggered by increasing losses on loans and securities associated with a limited segment of the US residential mortgage market. Since the various markets are so closely interwoven throughout the world, the problems soon spread to other markets and countries.

The turbulence in financial markets continued and intensified in 2008. After the collapse of the major US investment bank Lehman Brothers in September, interbank interest rates rose sharply, the market for long-term funding dried up, and banks in many countries experienced acute funding problems. A number of major US and European banks are no longer independent, and many more received government bailouts in order to be able to maintain operations. In Iceland, the banking system broke down completely, and all of the largest banks were placed in receivership. The International Monetary Fund (IMF) organised loans to Iceland and several other countries that experienced difficulties due to the financial crisis.

In October, a number of countries announced a series of measures to address the crisis on the advice of the G7 countries and the IMF. These included state guarantees for banks' borrowing and arrangements for state capital injections. The G7 countries stated that they would not allow systemically important institutions to fail. Financial market conditions improved somewhat after this, and government measures seem to have relieved concerns about the future of financial institutions.

How Norwegian financial institutions were affected

Norwegian financial markets and financial institutions were also affected by the international financial crisis in 2008. Banks owned by Icelandic banks experienced acute liquidity problems on the collapse of the parent banks. Other Norwegian banks were not hit as hard as banks in many other countries. However, the banks experienced greater difficulty in obtaining liquidity. Risk premiums on interest rates in US and European securities markets spread rapidly to Norwegian rates, since Norwegian banks raise loans in international markets. The spread between Norwegian money market rates and the Norwegian key rate was periodically very wide. Long-term borrowing also became more expensive for banks (see Chart 34).

The banks have several years of good profitability behind them, and have succeeded in maintaining their financial strength. The results in 2008 show that banks' profitability is still satisfactory. To date, the primary effects of the financial crisis on banks have been a sharp increase in funding costs and substantial losses on securities. Loan losses also increased sharply in the fourth quarter.

A number of Norwegian banks belong to corporate groups that own mortgage companies, finance companies or life insurance companies. Life insurance companies are more exposed to market risk than banks because a larger share of their total assets is in equities and bonds. Life insurance companies recorded a value-adjusted loss, including a reduction in the Adjustment Fund of NOK 17bn, of NOK 20bn. This corresponds to an annualised loss of almost 3% of average total assets. Buffer capital is the sum of Tier 1 capital above the statutory required minimum, the Adjustment Fund, supplementary provisions with an upper limit of one year and unallocated funds. This buffer fell from 6.7% of total assets at the end of 2007 to approximately 4% at the end of 2008.

Mortgage companies' results were better in 2008 than in 2007. Finance companies, which are a diverse group working in a number of different markets, achieved solid results in 2008, but losses have increased.

Lower household debt growth

Most Norwegian households have sound finances, but they have a high debt-to-income ratio. Most Norwegian mortgages carry floating rates of interest, and the proportion of loans at fixed rates has fallen in recent years. Money market rates are therefore very important for Norwegian households. High money market rates resulted in high interest rates on mortgages in parts of 2008.

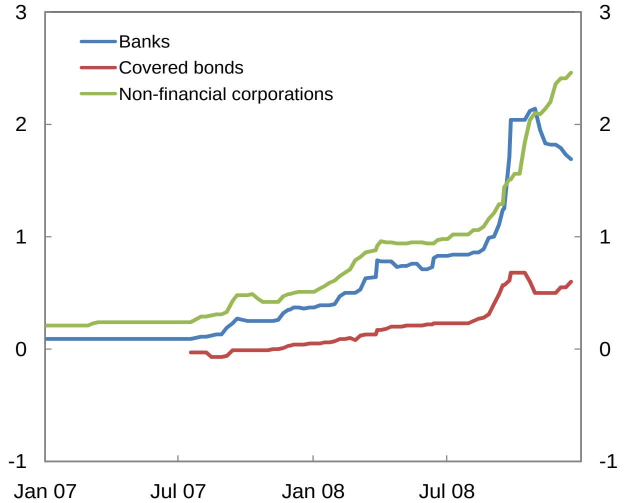
During the final months of 2008, total household debt growth slowed markedly. Approximately 80% of total household debt is secured on housing. The fall in house prices and lower sales in the housing market, together with higher interest rates and tighter credit standards in banks, have probably been the most important reasons for the decline in debt growth. The debt-to-income ratio varies considerably across the various groups of households (see Chart 35 and the boxes about the residential and commercial property markets in 2008).

Figures for individual households for 2006 show that most indebted households had debt that was lower than three times their income. However, approximately 12% of households had debt of more than five times their income, and these accounted for over 30% of total debt. At the same time, many households have interest-only loans, the saving ratio has been low for a long period and some households have stretched their finances to the limit.

Enterprises' debt-servicing capacity has been reduced

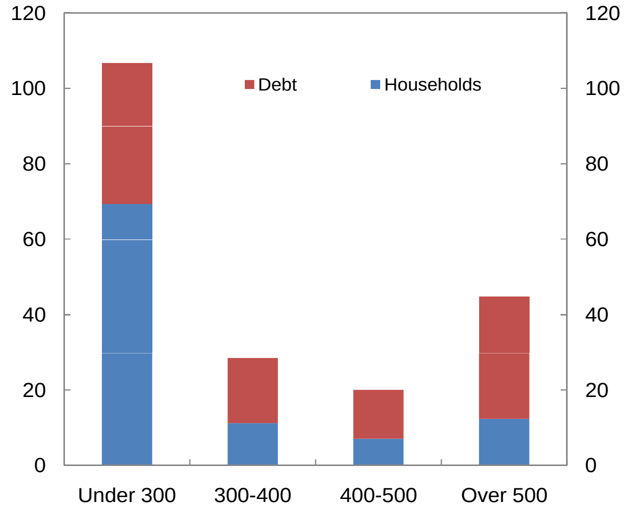
Total corporate debt growth showed signs of falling some-

Chart 34 Risk premiums[1] on 5-year Norwegian bonds. Indicative price in percentage points. 3 January 2007 – 17 December 2008



1) Distance to mid-swap in market for interest rate swaps
Source: DnB NOR Markets

Chart 35 Indebted households by debt burden[1]. Debt by household debt burden. Per cent. 2006



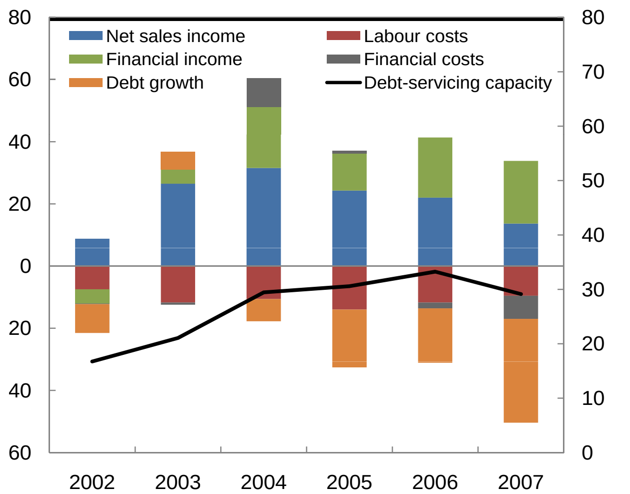
1) Debt as a percentage of disposable income. Disposable income is income less interest and taxes. Total debt was NOK 1 590bn. The number of households was 1.8m
Sources: Statistics Norway and Norges Bank

what in 2008 after rising sharply for several years with high capacity utilisation and investment activity. At the end of August 2008, credit growth was nevertheless still high. An increasing share of this credit has been raised by drawing on unutilised borrowing facilities, such as overdraft facilities. Credit growth has also been high for industries with a high level of debt in relation to earnings.

Debt-servicing capacity can be measured in terms of net earnings as a percentage of interest-bearing debt, calculated before tax and write-downs and depreciation. After several years of very high earnings, developments for enterprises as a whole were weaker in 2008 than in 2007. Enterprises' debt-servicing capacity was reduced in 2007 because the rate of debt accumulation increased at the same time as interest rates increased and growth in net sales revenues slowed (see Chart 36). Weak earnings growth in 2008 has probably reduced enterprises' debt-servicing capacity still further.

Equity capital in enterprises constituted approximately 40% of total capital in 2007. Equity capital probably maintained a high level because of a large number of emissions and because surplus was retained in the enterprises. However, in 2008 the share of equity capital fell by almost 15 percentage points for companies in the OBX index, which is composed of the 25 most liquid equities listed on the Oslo Stock Exchange. The share of equity capital probably also fell for the majority of other companies in 2008.

Chart 36 Debt-servicing capacity[1]. Levels (right-hand scale) and contribution to relative changes (left-hand scale) from growth in debt, income and costs[2]. Per cent. 2002–2007



1) Results before tax, write-downs and depreciation as a percentage of bank and bond debt. Non-financial corporations, mainland Norway. Intragroup financing is not included.
2) Net sales income is defined as sales income less the cost of goods sold, operating costs and changes in inventories.

Source: Norges Bank

Outlook for financial institutions and financial markets

The accounts for 2008 Q4 showed a marked increase in loan losses at several banks, albeit from a very low level. Financial strength has maintained a high level at Norwegian banks, and most banks are well equipped to withstand a period of somewhat higher loan losses. Defaults and loan losses are expected to increase in the period ahead. Money and credit markets are still characterised by unrest, but the authorities' liquidity measures have made it easier for banks to obtain funding. Banks' liquidity risk has nevertheless increased.

Banks' surplus as a percentage of total assets has fallen in recent years despite a relative reduction in costs. We anticipate that banks will further reduce their costs in order to curb the decline in profit. They can achieve this both by rationalising operations and by merging to form larger units. However, banks' earnings will probably fall ahead, and the results after tax in the coming years are likely to be lower than in 2008.

Banks' response to these negative prospects has been to tighten their credit standards in relation to enterprises and households (see the box on Norges Bank's Survey of Bank Lending). A key question at the end of 2008 is whether banks will tighten their lending standards to such an extent that this will have a negative effect on the activity level in the Norwegian economy. Lending growth was still high at the end of the year, although it was lower than it had been earlier in the year. Many borrowers have accumulated considerable debt in recent years, and continued debt growth at the current rate is not desirable. Lending growth ahead should therefore be lower. This will be achieved both because demand for loans will be lower and because fewer loan projects will be profitable when economic growth slows.

However, Norges Bank's Survey of Bank Lending for the end of 2008 showed that Norwegian banks will in addition adopt more stringent credit assessments in the time ahead. Reports from Norges Bank's regional network give the same indications. One of the reasons for this is that many of the larger banks have too little equity capital. This is partly because banks are now expecting higher loan losses and partly because capital adequacy standards have been raised. Many of the larger international banks now have approximately 10% Tier 1 capital or more, calculated as a share of risk-weighted assets.

Life insurance companies are less well equipped to cover further losses following a weakening of their results and buffer capital in 2008. Several life insurance companies have therefore reduced their risk of losses by selling equities. Some life insurance companies have succeeded in raising fresh capital.

Equity prices in both industrialised and emerging market economies around the world have fallen sharply as a result of the prospects for lower economic growth. In addition, prices dropped when major operators such as banks, hedge funds, pension funds and insurance companies were forced to sell in order to reduce their debt or their risk exposure. Equity values on the Oslo Stock Exchange were more than halved in the course of the year. Although all sectors experienced the fall on the stock exchange, the financial sector was particularly hard hit.

What did Norges Bank do in 2008?

Analysis work

Norges Bank's monitoring aims to identify developments that may lead to reduced earnings by financial institutions and growing imbalances that may threaten the stability of the financial system. Norges Bank attaches particular importance to assessing systemic risk in the financial sector. Banks play a key role in credit provision and payment services. They differ from other financial institutions in that they rely on customer deposits for funding. Developments in the banking sector are thus important to financial stability.

Norges Bank uses broad-based underlying data to monitor the financial system. This includes both statistical material and information obtained directly from financial market participants. (See the boxes on Norges Bank's surveys of bank lending and liquidity). Regular meetings with banks are also held in order to discuss their current problems. All this information provides a basis for our assessments in the *Financial Stability* report.

Norges Bank has developed models that are used in work on analysing and evaluating financial stability. In 2008, both of the *Financial Stability* reports contained stress tests. These analyses focused on the consequences of a marked fall in household expectations and a subsequent turnaround in the housing market in combination with other negative developments.

Norges Bank provides an assessment of stability in the financial system in semi-annual submissions to the Ministry of Finance. The submissions are based on the *Financial Stability* reports and are submitted in connection with the publication of the reports.

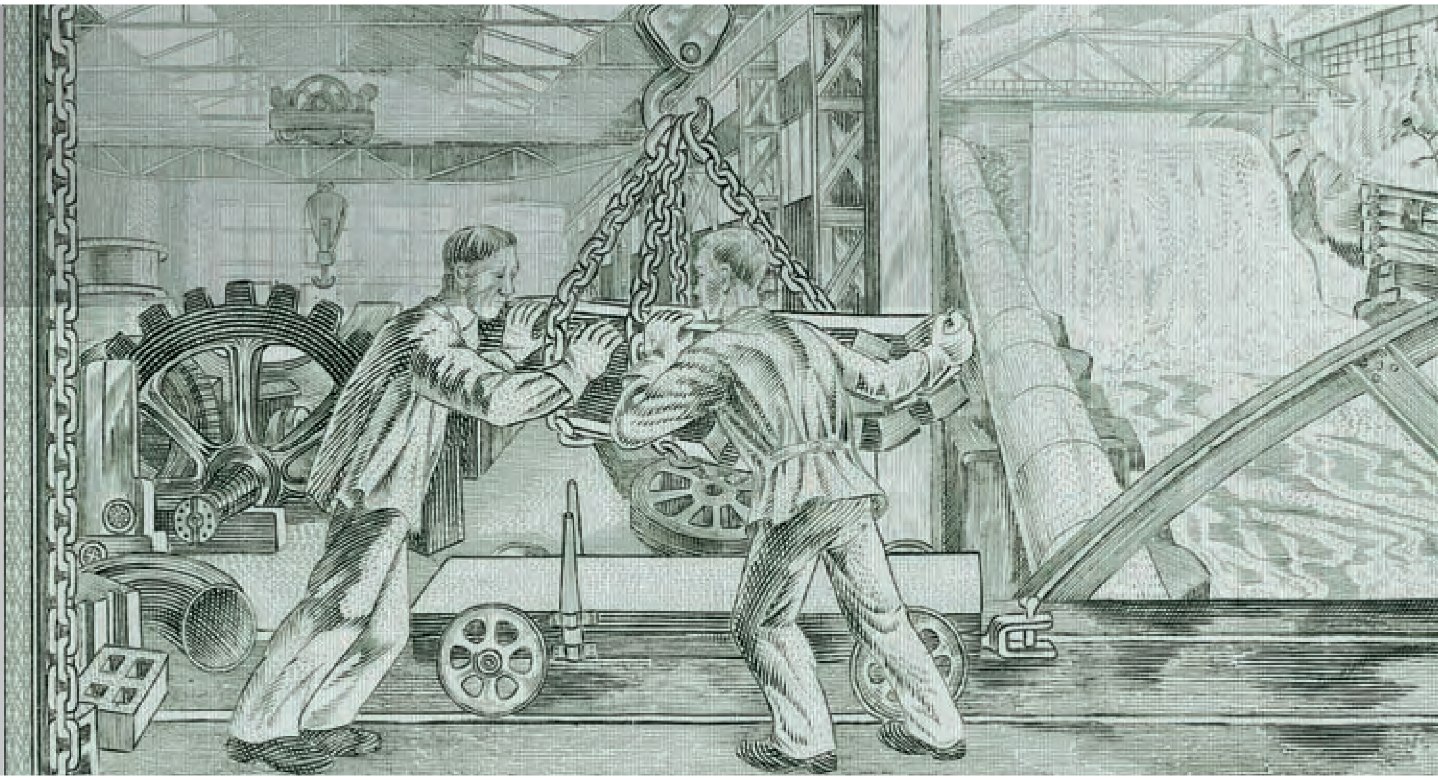
In its submission of 27 May, the Bank called attention to four risk factors for financial stability:

I) The turmoil in money and credit markets is a challenge to banks' liquidity management.
II) A global downturn will result in higher loan losses.
III) A high level of debt and uncertainty in the housing market entails a risk that the saving ratio will rise too abruptly and too sharply.
IV) Weaker price developments in the commercial property market increase banks' credit risk.

The second submission to the Ministry of Finance was sent on 1 December. It stated that all four risk factors had shown negative developments in the course of autumn: the turmoil in money and credit markets had increased, expected growth among Norway's trading partners had been revised down considerably, and residential and commercial property prices had fallen.

Norges Bank holds meetings with the Ministry of Finance and Kredittilsynet on the conclusions of the *Financial Stability* reports. Matters relating to stability and crisis management are also the subject of regular tripartite meetings attended by the Ministry of Finance, Kredittilsynet and Norges Bank.

The *Financial Stability* report is presented at a press conference. The report is discussed at bilateral meetings with the Norwegian Savings Banks' Association and the Norwegian Financial Services Association, among others. The report is presented to individual banks and in open lectures. Norges Bank also attaches importance to communicating financial stability analyses to the general public. One important purpose of the reports is to increase the general level of knowledge and promote public debate on matters of importance to financial stability. The analyses also aim to influence financial market participants by providing them with a more informed basis for risk reduction measures.



Contingency arrangements and crisis management

Norges Bank has contingency arrangements for coping with crises in the Norwegian financial system. The events of the past 18 months have taught us that failure in markets where banks borrow money (liquidity risk) is a major threat to financial stability. Although the turbulence was triggered by loan losses in the US mortgage market (credit risk), there is a close connection between failure in the market for banks' funding and credit risk.

Large banks fund their operations in a number of countries and currencies, and are thus exposed to events in other countries. Almost half of Norwegian banks' funding is in foreign currency. Turbulence also spreads across countries because banks operate in several countries. Cross-border banking activities have increased in recent years. Crisis management in such banks is a particular challenge for the authorities.

When a situation arises where financial stability is threatened, Norges Bank and other government authorities have the possibility of taking a range of measures. Both in Norway and in other countries, 2008 was marked by crisis management. Norges Bank and other Norwegian government authorities implemented a number of measures to limit the damaging effects of the financial crisis and strengthen the financial system.

In 2008, particularly towards the end of the year, Norges Bank supplied banks with more liquidity, by extending Norges Bank's lending facilities and other measures. Collateral requirements for loans were eased somewhat so that banks could borrow more. In addition, longer loans were granted with terms of up to two years (see section on liquidity policy). Norges Bank also facilitated a swap arrangement between the government and banks whereby banks receive government securities in exchange for covered bonds (OMF). Together, these measures gave the banks

Norges Bank´s Survey of Bank Lending

Norges Bank now conducts a quarterly survey of banks' credit standards. The main purpose of the survey is to obtain information on the demand for, supply of and conditions for new loans. This information is not covered by other statistics. Norges Bank's Survey of Bank Lending covers two main areas – lending to households and lending to non-financial corporations. We ask banks to assess developments in credit standards and credit demand since the previous quarter and expected developments in the next quarter.

The Survey of Bank Lending showed that demand from both households and non-financial corporations fell throughout 2008 and that banks tightened their credit standards as the international financial crisis developed in 2008. The tightening of credit standards for the commercial property sector was particularly marked.

much better access to liquidity than was available to them earlier in autumn 2008.

Norwegian banks have so far managed well. However, one subsidiary, one branch and two brokerage firms owned by Icelandic banks were sold or wound up (see the box on the Icelandic banks in Norway). Norges Bank took an active part in managing these acute crisis situations.

In Norway, the prospects for financial stability and contingency arrangements to cope with crises in the financial sector are regularly assessed in the tripartite meetings between the Ministry of Finance, Kredittilsynet and Norges Bank. Owing to the financial crisis, there were more meetings than usual in 2008. Norges Bank has also taken part in the EU's work on financial crisis management. As a result of the EEA Agreement and the close integration between the banking systems in EU and EEA countries, Norges Bank and Kredittilsynet have been observers on the Committee of European Banking Supervisors (CEBS) since 2004. From 2006, the two institutions have also been invited to attend meetings of the Banking and Supervision Committee (BSC).

Liquidity survey

Norges Bank began to conduct monthly surveys of banks' liquidity in March 2008. From October, liquidity surveys were conducted twice a month. The purpose of the surveys is to obtain regular information on banks' liquidity situation. The liquidity surveys have a qualitative and a quantitative section. In the qualitative section, banks respond to questions on the funding situation, while the quantitative section consists of questions concerning due dates for banks' loans and liquidity in relation to their internal limits.

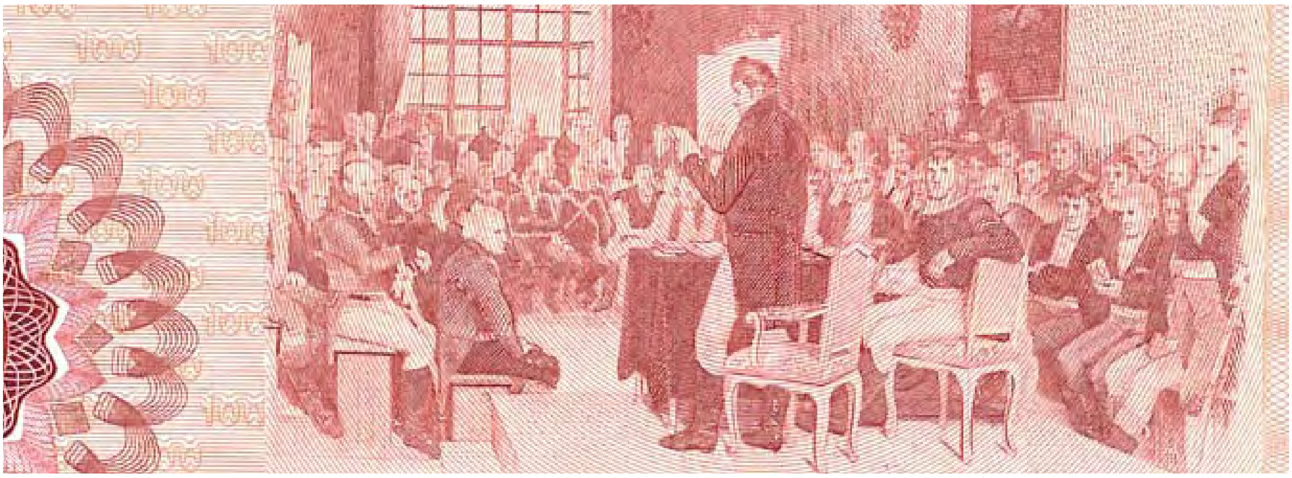
The responses to the surveys show that banks' funding situation deteriorated sharply when the international markets collapsed in September. The supply of funding in both NOK and foreign currency fell sharply. Since then, banks have reported some improvement, but their situation is still viewed as difficult.

The Icelandic banks in Norway

In Norway, Glitnir owned a subsidiary with the same name, Kaupthing had a branch and a brokerage firm, while Landsbanki had only a brokerage firm. For several years, the Icelandic banks have paid higher interest on market loans than other banks. This is partly due to the banks' strong lending growth.

Norges Bank increased its monitoring of Glitnir's funding situation through spring and summer 2008. In October, the Icelandic banks lost access to international funding and were placed into receivership in Iceland. At the same time, the Icelandic banks in Norway lost funding from their owners.

Glitnir's subsidiary in Norway received a short-term loan from the Banks' Guarantee Fund and was subsequently sold. Since the funds in the Guarantee Fund were not sufficiently liquid, Norges Bank, as part of the rescue operation, granted a loan on special terms to the Banks' Guarantee Fund. The loan was repaid on 28 November. Kaupthing held loans from Norges Bank when the bank was placed into receivership in Iceland. It would also have been possible for the bank to increase the loans on the basis of its collateral in Norges Bank. Under current law, the Norwegian authorities could not place the Norwegian branch into receivership. In order to prevent the bank from continuing operations on the basis of increased loans from Norges Bank, the bank's borrowing facility at the central bank was suspended on 9 October. On the basis of a new provision from the Ministry of Finance, the branch was placed into receivership on 13 October and has now been wound up. The value of the collateral was greater than the loans from Norges Bank and these funds were transferred to the bankruptcy estate.



The housing market in 2008

The rise in house prices had slowed before the start of the financial turbulence, but the housing market declined in earnest in 2008. From December 2007 to December 2008, house prices fell by 9.2%.

Several factors, on both the demand and the supply side, contributed to the fall in residential property prices during the last year. A marked increase in interest on mortgages and tighter credit standards in banks led to subdued demand. Lower expectations regarding the rise in house prices and exceptionally high uncertainty concerning economic developments probably also resulted in many people postponing home purchases, and many have wished to sell their homes before buying new ones. Sales of resale homes have fallen, and the supply of resale homes for sale has been very high in recent months.

Housing starts have fallen markedly. The supply side has thus responded rapidly to the fall in demand. This appears to have mitigated the risk of a prolonged fall in prices. However, it is important that, over time, residential construction is high enough to meet the demand for new housing as a result of population growth and the natural wastage of houses.

For a time, parts of the residential property market were characterised by euphoria, with expectations that a long period of rising prices would simply continue. Lines of credit and interest-only loans have been widely utilised, and have made it possible to service higher debt with a given income. This may have contributed to upward pressure on house prices. Favourable housing taxation* encourages households to make considerable investments in housing wealth. This pushes up house prices up during periods of expansion. At the same time, higher standards and new building regulations have made residential construction more expensive. Land prices have also increased, particularly in areas close to urban centres. These factors on the supply side of the market have fuelled house price inflation.

The further house prices rise relative to their long-term equilibrium level, the further the housing market has to fall. At the end of 2008, house prices are still high compared to historical figures where prices are deflated by consumer prices, building costs, rents or household income.

* Taxation of the advantage of owning one's own home was discontinued in 2005, while tax deduction for interest on loans was maintained.

Commercial property developments in 2008

Commercial property is the largest sector for corporate loans from Norwegian financial institutions, accounting for 45% of non-financial enterprises' total debt to banks and mortgage companies in 2008. Property companies' operations include both letting and buying and selling of commercial property.

Both rents and market prices of commercial property vary in response to cyclical conditions. Office rents levelled off in 2008 following a long period of price rises. Market participants expect falls of up to 20% in the more expensive city centre areas of Oslo, and a less pronounced fall in other central areas of Oslo up to 2010. The market price of office premises in central Oslo fell by 20% from the second half of 2007 to the second half of 2008. As rents continue to fall, at the same time as banks' credit standards are tightened and interest margins rise, market prices will probably also fall in 2009.

Commercial property sales fell by approximately half in the period from 2007 to 2008. A substantial portion of the sales in the first half of 2008 were related to sales processes initiated in 2007, when conditions were more favourable.

As a result of the above conditions, values in excess of NOK 6.7bn were written down in Norwegian listed commercial property companies in 2008. The total balance sheet value of commercial property held by these enterprises was approximately NOK 62bn at the end of 2008.

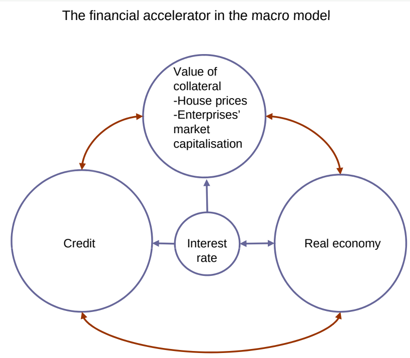
Stress testing of banks

Norges Bank operates a development programme for stress testing of Norwegian banks. The purpose is to estimate how well the banks tolerate turbulence affecting their borrowers' debt-servicing capacity and the banks' own earnings and cost developments. The suite of models consists of a macro model that is used to develop macro paths and three models based on detailed information from micro data; one corporate model, one household model and one model for the most important banks.

During the last year, we have concentrated our efforts on acquiring a more complete picture of the financial accelerator. This is a relationship between trends in collateral values, bank loans and growth in the real economy (see chart). Bank loans are largely granted on the basis of security in the value of residential and commercial property. Bank loans are used for investments and consumption, which result in higher growth in employment and production. Growth in the real economy provides a basis for growth in collateral values, thus setting the spiral in motion. A negative spiral has the opposite effect. There is a danger that this side of the accelerator will be more prominent in the period ahead.

The stress tests conducted in 2008 focused on the consequences of weaker household expectations regarding the future, particularly future house prices, more stringent requirements for bank loan applicants, higher inflation and continued turmoil in international and domestic credit markets. The results indicate that Norwegian banks are still robust, but also that they have become more exposed to risk in 2008.

The financial accelerator in the macro model



Framework conditions for financial institutions and financial markets

What happened in 2008?

Capital adequacy rules for banks

The new capital adequacy rules (Basel II) entered into force on 1 January 2007. Ten Norwegian banks estimated their capital requirements according to Basel II in 2007, while the other banks used a transitional arrangement involving estimation of capital requirements according to the old capital adequacy rules (Basel I). From 1 January 2008, all banks and finance companies were required to use Basel II. Kredittilsynet has evaluated the banks' capital appraisal process.

The European Commission submitted its proposed amendments to the Capital Adequacy Directive in autumn 2008. The proposal embraces five key areas: large exposures, hybrid capital, liquidity risk management, changed requirements regarding securitised products and cooperation on supervision of cross-border financial institutions. The Directive is planned to be adopted by April 2009. EU/EEA countries have until 31 January 2010 to implement the Directive in national legislation.

Solvency rules for insurance companies

In 2008, after several years of preparation, the European Commission proposed a new Solvency Directive for insurance companies (Solvency II). The Directive is planned to be finally adopted in April 2009. Like the banks' capital adequacy requirements, the proposal is founded on three pillars. Assuming that the time frame holds, EU/EEA countries will be able to apply the Solvency II Rules for the first time to the 2013 accounting year.

Reclassifying fixed income securities

With effect from 2008 Q3, banks are permitted to reclassify fixed income securities from the "fair value" category to the "held to maturity" category. The permission to make such reclassifications was adopted as an EEA regulation by the EU and subsequently introduced in Norway. It means that banks no longer have to recognise unrealised losses on these securities in their accounts.

New rules following from the Markets in Financial Instruments Directive (MiFID)

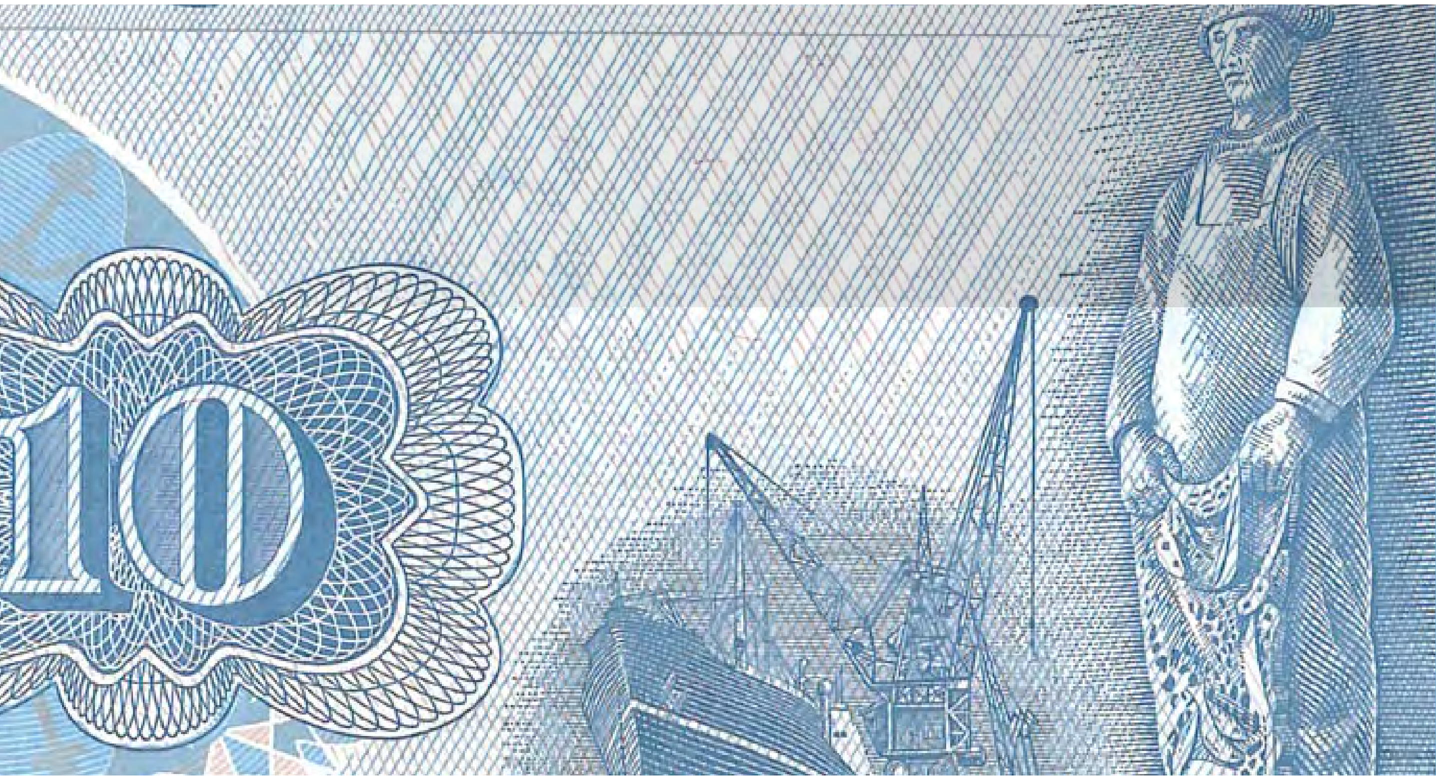
On 1 January 2008, the new rules principally based on the new EU Markets in Financial Instruments Directive (MiFID) were fully implemented in Norwegian law. There is thus now greater similarity between the rights and obligations of market participants within the EEA area. This will facilitate cross-border activity and improve market integration and functionality. The rules provide better protection of small investors, for example through more stringent regulation of mandatory bids. Advising on investment in financial instruments has also become a service that requires authorisation and is subject to supervision. The rules increase the requirements regarding advisors' qualifications and require that advisors shall be independent of financial institutions. Kredittilsynet has adopted amendments to the rules for the sale of complex products. The amendments entered into force on 1 March 2008 and have resulted in a number of new requirements regarding financial institutions. Among other things, institutions are warned against selling complex products to customers who are not professional investors.

Adaptations to the Savings Banks Act to include exchange of covered bonds for government securities

The government bank rescue package in connection with the financial turbulence in autumn 2008 entailed that banks were able to exchange covered bonds for government securities. Section 23 of the Savings Banks Act prevented savings banks from benefiting from these schemes to the same extent as commercial banks. Kredittilsynet therefore issued regulations in November 2008 allowing savings banks to use government securities as collateral for their own debt and use their assets as collateral for their own debt to the government.

What did Norges Bank do in 2008?

Norges Bank works to ensure that financial institutions and financial markets are able to fulfil their tasks in the Norwegian economy. Framework conditions for financial institutions and other financial market participants shall as far as possible provide incentives to do what is most profitable for the economy. Whereas Norges Bank has a direct responsibility for the rules for the payment system, the Bank is primarily responsible for advising the Minis-



try of Finance and Kredittilsynet regarding the rules applying to financial institutions and financial markets.

In 2008, Norges Bank submitted proposals for amendments to the rules concerning the Banks' Guarantee Fund. Norges Bank pointed out that membership of the Guarantee Fund is particularly attractive to banks experiencing a deterioration of their financial situation. This can be counteracted by reducing the high guarantee amount and by ensuring that the membership fee, to a greater extent than it does today, reflects the risk that a member bank will draw on these funds.

Norges Bank provided comments on 21 proposed amendments circulated for public comment, primarily by the Ministry of Finance. This included comments on measures to improve and stabilise the relationship between rights associated with equity capital and with the capital of the owners of primary capital certificates in the savings banks, and on draft provisions concerning the use of names by financial institutions and concerning hedge funds. Norges Bank mainly concurred with the proposals, but submitted comments on some of the matters.

The payment systems

What happened in 2008?

The financial turbulence

It is particularly important that the financial infrastructure functions satisfactorily during periods of market turbulence. At such times, financial institutions are exposed to shocks and are uncertain of counterparties' ability to fulfil their obligations. In 2008, the infrastructure was put to the test by the global financial crisis.

Norwegian banks have been provided with more liquidity by Norges Bank during 2008. The primary aim of these measures has been to ensure the continued ability of the financial system to provide credit to enterprises and households. However, the measures have also been important for ensuring that the settlement and payment systems function well. Problems in such functions could reinforce the effects of the financial turmoil. Through the measures implemented, the banks in Norway have had sufficient liquidity to ensure that interbank payment settlements were carried out without significant delays. Customers' payments in shops and by giro have also been undisturbed by the financial turmoil.

The Norwegian branch of the Icelandic bank Kaupthing experienced serious liquidity problems on 9 October, and Norges Bank suspended the branch's borrowing facility. The banks' clearing system Norwegian Interbank Clearing System (NICS) implemented measures to ensure that new transactions from the bank would not be accepted by the system. As a result of this, payments by card and giro could not be carried out for Kaupthing's customers. Clearing between the other banks and settlement in Norges Bank were only slightly delayed.

Lehman Brothers International participated as a remote broker on the Oslo Stock Exchange until its bankruptcy on 15 September 2008. Following the bankruptcy, there proved to be various different interpretations of the rules of the Norwegian Central Securities Depository (VPS) in the event that a remote broker filed for bankruptcy and lacked securities cover for settlement. The VPS is now collaborating with the banking and brokerage sector on drafting amendments to the rules in order to clarify the obligations of the participants.

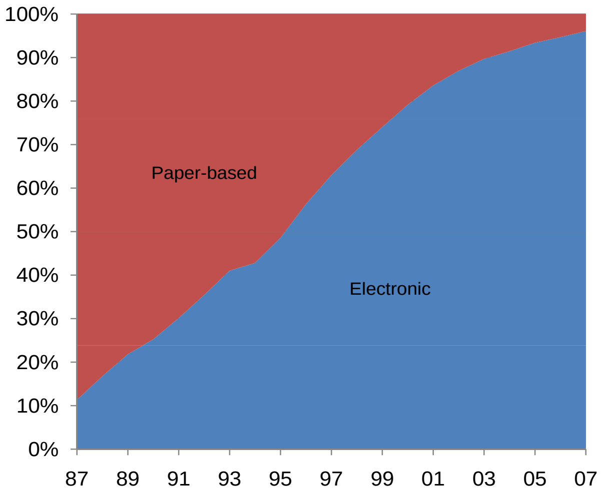
A centralised system for securities settlements in Europe

On 17 July 2008, the Governing Council of the ECB decided to launch a centralised securities settlement system for euro settlement, known as TARGET2-Securities (T2S), in 2013. The ECB believes that a common system will result in considerable savings for the participants. If Norwegian participants so wish, settling Norwegian securities trades in this system may be considered in the future. Norges Bank chairs a Norwegian advisory group that has followed the project and taken part in several open consultations.

Payment services

Norway has an efficient payment system. Almost all payments using deposits are now made electronically (see Chart 37). Cards and Internet banking have not only replaced cheques and paper-based giros; cash is also relatively less used. In Norway, more payments per inhabitant are made by using deposits than in most other countries.

Chart 37 Use of paper-based and electronic payment instruments 1987–2007. Transactions in per cent



Source: Norges Bank

Each inhabitant of Norway paid by card an average of 207 times in 2007. This is 13% more than in 2006. The use of Internet banking has shown vigorous growth since the service was introduced. Giro payments initiated by the payee (direct debiting, known as Avtalegiro and Autogiro) are used less in Norway than in other countries. However, the use of such instruments has increased steadily in Norway too. The extent of electronic invoicing is increasing.

The Norwegian Interbank Clearing System (NICS) is a payment clearing system and the most important channel for payments to be settled individually in Norges Bank. The turnover in NICS was high in 2008. By value, the bulk of transactions are received in SWIFT format and transferred individually (gross) to the interbank system NBO. NICS operated smoothly in 2008. The number of disruptions was low compared with previous years.

Prices for electronic payment services have long been much lower than prices for paper-based services. This has resulted in increased use of electronic payment services, and has laid the basis for an efficient payment system in Norway. Banks must price their payment services in order to cover their costs. There are now signs that prices for many such services are being reduced or completely abolished. Decline in income may reduce banks' ability and willingness to invest in better infrastructure. If the costs are not covered, income from other services must be used to fund payment services. Such cross-subsidisation gives the wrong signals to customers and may result in inefficient use of resources.

What did Norges Bank do in 2008?

Oversight and supervision

Pursuant to the Norges Bank Act, Norges Bank is responsible for promoting an efficient payment system, i.e. a system whereby users are able to execute payments in a rapid, secure and cost-effective manner. A modern economy with many payment transactions places considerable demands on the efficiency of the payment system. Participation in the payment system may expose the banks to risk. This particularly applies to the interbank systems, where banks clear and settle large amounts among themselves.

The Act relating to Payment Systems assigns Norges Bank responsibility for the authorisation and supervision of the Norwegian interbank systems. The purpose of the Act is to ensure that the interbank systems are organised to safeguard financial stability, and the Act therefore imposes requirements on the design of these systems. By supervising the authorised systems, Norges Bank ensures compliance with the requirements of the Act. The Act entitles Norges Bank to require changes in the systems. Norges Bank also ensures compliance with international recommendations concerning interbank systems.

Two interbank systems are authorised and are under the supervision of Norges Bank. These are the Norwegian Interbank Clearing System (NICS) and DnB NOR's interbank system. In 2008, supervision of NICS and DnB NOR continued along the same lines as in earlier years. The two system owners report major changes in conditions concerning ownership, organisation and operations. The stability of the systems is followed up by means of operating reports. In addition to regular contact, regular supervisory meetings are held.

In 2008, as part of its oversight, Norges Bank held meetings with key operators in financial instrument settlement. Norges Bank takes part in work on assessing changes in the Norwegian system for securities settlement (VPO). In 2008, Norges Bank chaired a working group with representatives from the brokerage and banking sectors, VPS and Oslo Clearing. The group prepared a report proposing ways of improving the VPO's compliance with international recommendations. The report will be circulated for comment in early 2009.

Norges Bank will continue to monitor major developments in the payment systems used by bank customers. In Norway, these systems are highly efficient, partly because electronic payment instruments are increasingly taking over from paper-based instruments. Prices play an important role in giving the users incentives to choose the most efficient instrument.

Each year, Norges Bank issues the Annual Report on Payment Systems, which describes major developmental trends in payment services. The report is an important component in Norges Bank's oversight of the payment system. The report for 2008 primarily emphasised conditions of importance for an efficient payment system. The report also provided assessments of the interbank systems, and gave an account of major risks in these systems. Norges Bank attaches importance to communicating the analyses of payment systems to the general public and financial market participants. The analyses also aim to influence financial market participants by providing a better basis for measures to increase efficiency and reduce risk in the payment system. The Annual Report on Payment Systems is presented at a press conference. The report is discussed at bilateral meetings with various government agencies, individual banks, the Norwegian Savings Banks' Association and the Norwegian Financial Services Association. The report is also presented in open lectures with broad participation from the financial industry.

Banking services for the government

Pursuant to the Norges Bank Act, Norges Bank performs tasks relating to the management of the central government's liquid assets and debt in Norwegian kroner. A primary consideration is to pool government liquidity each day in the government's sight deposit account in Norges Bank. This is done by the banks that perform payment services for the central government, i.e. DnB NOR Bank ASA, Nordea Bank Norge ASA and SpareBank 1 Gruppen. Norges Bank has separate agreements with the Ministry of Finance and with the banks concerning the performance of these services. These agreements were revised in 2007 and 2008.

Banking services for the government are carried out by means of a separate account system that is part of the government's financial management. Operating services for this account system are provided by EDB Business Partner ASA on the basis of an agreement with Norges Bank. The day-to-day management of these accounts takes place in Norges Bank.

The government receives interest on its sight deposits in Norges Bank. The interest rate is set quarterly, and the rates in the four quarters of 2008 were respectively 4.75, 3.50, 3.75 and 3.75% p.a. The Ministry of Finance sets special internal interest rates for certain government funds and deposits. The central government, represented by the Ministry of Finance, pays an annual fee that covers the costs of the banking services performed by Norges Bank for the government.

Interbank payment settlement

Norges Bank is the settlement bank at the highest level for interbank payments in Norway. This function is associated with Norges Bank's responsibility pursuant to the Norges Bank Act for promoting an efficient payment system both in Norway and vis-à-vis other countries, and to banks' need to maintain accounts and raise loans in Norges Bank.

Because the central bank is the issuer of money, deposits in the central bank are without credit or liquidity risk. Therefore, the interest rate on central bank money provides the basis for interest rates in the economy as a whole.

A well functioning settlement system is important in promoting financial stability. Interbank claims and liabilities arise as a result of banks' financial transactions, payment services and customers' positions in cash settlement of securities transactions. Final settlement of these positions is made through entries in the banks' accounts in Norges Bank.

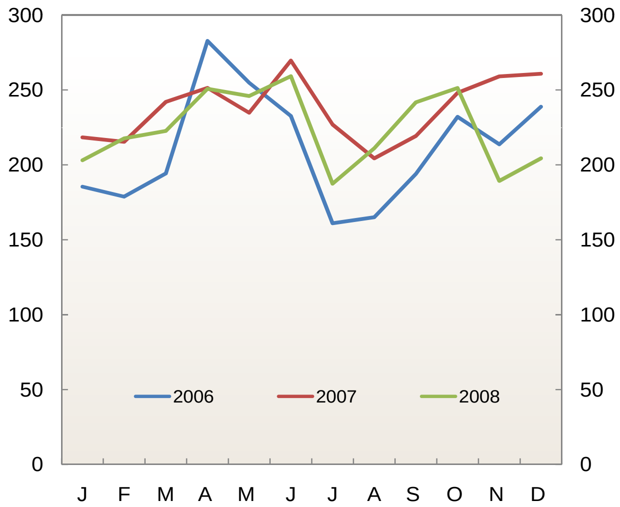
At the end of 2008, 143 banks had an account in Norges Bank. Of these, 22 banks settled their payments on a daily basis in Norges Bank, either in the form of individual payments or as net positions in clearings. Most banks only occasionally conduct transactions on their accounts in Norges Bank, for example, in connection with loans or deposits and withdrawals of cash in the central bank. However, since all of the largest banks settle their payments daily in Norges Bank, most payments are settled in the central bank. Daily settlements in Norges Bank amount to NOK 150–250bn. Chart 38 shows the turnover of Norges Bank's settlement system in recent years.

Norges Bank extends loans to the banks against collateral in the form of securities. Such loans contribute to more efficient implementation of monetary policy and payment settlements. Access to borrowing facilities is provided for in a separate regulation and in more detailed guidelines drawn up by Norges Bank. In connection with the measures for improving banks' liquidity in autumn 2008, the requirements regarding the securing of the banks' loans from Norges Bank were temporarily eased. Private Norwegian issuers of bonds are no longer required to be listed on the stock exchange or to be subject to credit rating. In the case of covered bonds, the requirement regarding listing and credit rating has also been lifted for foreign issuers, but a plan must exist for future credit rating. The requirement of a minimum outstanding volume of NOK 300m for securities issued in NOK by private issuers was also lifted. Other adjustments to collateral requirements have also been made, and provision has been made for greater use of assessment of individual securities.

These measures enable the banks to borrow more than before from Norges Bank. Chart 39 shows banks' collateral for loans from Norges Bank in recent years.

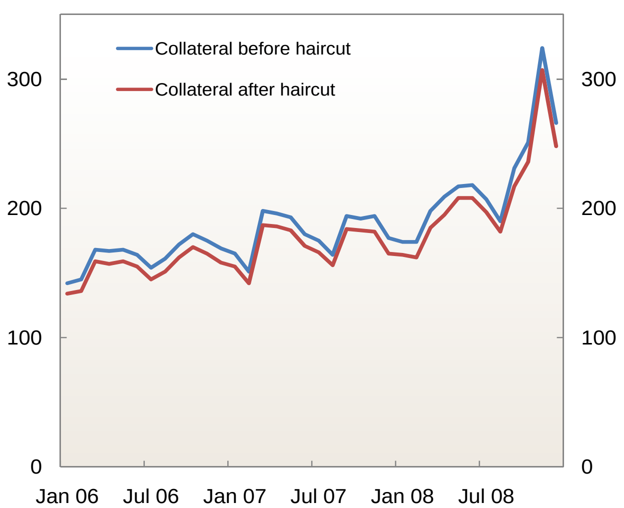
The central banks of Denmark, Sweden and Norway permit banks to use deposits in one of the central banks as collateral for loans from one of the other central banks. The arrangement, known as the Scandinavian Cash Pool, can only be used to obtain intraday liquidity. In this way,

Chart 38. Daily turnover in NBO 2006–2008. Monthly average. In billions of NOK



Source: Norges Bank

Chart 39. Value of collateral pledged with Norges Bank. Last day of each month. In billions of NOK. 2006 – 2008



Source: Norges Bank

the banks are better able to utilise their liquidity across national borders.

Banks pay for the account maintenance and settlement services provided by Norges Bank. The price structure consists of an access fee for new participants, annual fees for participation in the various parts of the settlement system and a unit price for transactions. Prices are set each year and announced in a circular from Norges Bank. The income shall cover Norges Bank's costs related to the provision of account maintenance and settlement services. In 2008, Norges Bank initiated a dialogue with the banks concerning prices for settlement services at Norges Bank when a new settlement system is operative.

The operation and system administration of the account maintenance and settlement services for Norges Bank is provided by ErgoGroup AS by agreement with Norges Bank. In 2008, the stability of the operation of the settlement system was somewhat lower than in 2007, but was nevertheless at a satisfactory level for the year as a whole.

Renewal of the payment infrastructure

In 2008, Norges Bank continued to prepare a new settlement system for operation. This was described in a box in Norges Bank's *Annual Report* for 2007 (page 74). At the end of 2008, the new settlement system was scheduled to commence operations in the course of 2009.

The Norwegian Banks' Payment and Central Clearing House (BBS), which is the operations centre for NICS, plans to change the technological platform for its entire operation. Functional changes will also be made in NICS. One important change is that the size of the payment rather than the payment format will determine whether the transaction is sent for individual settlement in Norges Bank (gross) or whether it is settled as part of a netting transaction.

Implementation of the EU Directive on payment services in Norwegian law

The EU Directive on payment services was adopted on 13 November 2007, and made part of the EEA Agreement on 7 November 2008 (subject to the approval of the Storting). A working group started work in January 2008 to prepare proposals for implementation of the Directive in Norwegian law. The working group is chaired by Norges Bank, and has members both from the authorities and from the parties in the payment service market. 1 November 2009 is the joint deadline for national implementation of the Directive in the EEA area.

The working group will propose amendments to the Financial Contracts Act, which defines rights and obligations for users and suppliers of payment services. In the Financial Institutions Act, provisions will be made for a new type of institution, "payment enterprises", which will be able to offer payment services to the general public in competition with the banks. The statutory provisions concerning interbank and securities settlement systems in the Payment System Act will not be amended as a result of the Directive.

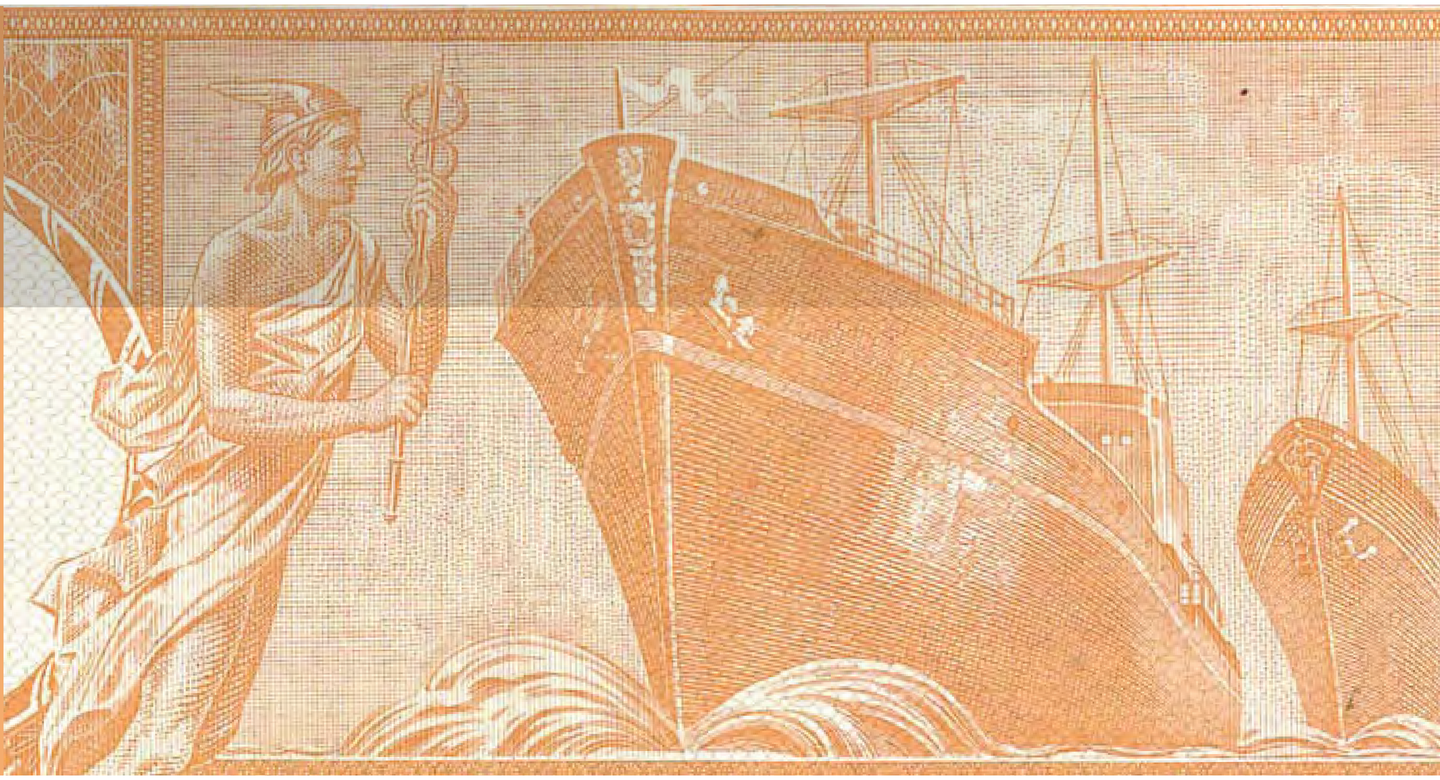
Survey of the costs of the payment system

Norges Bank conducted an analysis of the costs of the payment system in 2007. The survey is based on and continues the surveys conducted in 1989, 1994 and 2001. Norges Bank examined the costs associated with various types of payment card, giro services and cash services. The costs of using payment services arise at several levels. The analysis therefore consisted of three separate surveys: one for the costs in banks and finance companies, one for the costs in the retail sector, and one for the payment behaviour of the general public.

The results so far indicate that the efficiency of the Norwegian payment system has improved since the previous survey. Banks' costs associated with the most popular payment instruments have fallen, and coverage of the banks' costs for payment services has increased. The economic costs of using and producing the payment services cards, giros and cash was calculated to be NOK 11.16bn in 2007. This corresponds to 0.49% of the gross national product. The calculated costs cover the activities of the banks and their subcontractors, Norges Bank, households and points of sale. In 2008, the results were published in two *Staff Memo*s and were presented at a research conference on payment systems organised by Norges Bank. The bank will use the results in its work on improving the efficiency of the payment system.

Contingency work

Norges Bank has responsibility for promoting an efficient and robust payment system. This responsibility involves working to achieve stable operational solutions and sound



back-up and contingency arrangements in the financial infrastructure. The Contingency Committee for Financial Infrastructure has been established to ensure the best possible coordination of contingency work in the financial infrastructure. The Committee is also responsible for following up the Civil Emergency Planning System in the financial sector. The most important actors in the financial infrastructure participate in the Committee. Norges Bank chairs the Committee, and provides the secretariat. Exercises are held regularly to discuss the management of various crises that may affect the financial infrastructure.

The Contingency Committee held four meetings in 2008, and discussed matters concerning operational stability, risk and vulnerability in the financial infrastructure. From 2008, Kredittilsynet reports on operational disruptions notified by banks, and Norges Bank reports on disruptions of the settlement system (NBO). Kredittilsynet's analyses of risk and vulnerability associated with IT systems in the financial industry in 2007 were presented to the Committee. The Committee also reviewed experience of situations involving disruption, tests of backup solutions and contingency exercises.

There have been operational disruptions in ATMs on several occasions. There are various reasons for this. ATM systems consist of many different components that function together, and technical upgrades have often resulted in operating problems in components not directly part of the upgrade.

In 2008, the Contingency Committee was not directly involved in dealing with specific problem situations, but some disruption situations were discussed in the ordinary meetings.

In connection with the Committee's meeting in June, an exercise was held in which the whole Committee took part. The point of departure for the exercise was a failure in Norges Bank's settlement system (NBO) and a subsequent failure in the NBO's backup computer. The exercise revealed procedural weaknesses and efforts were later made to correct these. In December, the secretariat and other members of the Committee took part in the exercise IKT 08, a national exercise where the financial sector was only one of the exercise areas. In this exercise too, weaknesses were revealed in the distribution of responsibilities between the secretariat and market participants and in relation to the other participants in the Committee.

In 2008, the Committee received a report on the amended rules for handling labour disputes in the financial industry following the abandonment of the "shutdown policy", according to which the banks would close if labour disputes became extensive. In the course of the year, the secretariat held meetings with representatives of the Directorate for Civil Protection and Emergency Planning, and provided information on the responsibilities of the Contingency Committee.

The financial infrastructure is dependent on a continuous supply of electric power and telecommunications for IT systems to function. Failure of IT systems can create problems for the use of payment services and for the interbank transfer of money. In 2008 too, there were examples of power cuts with major local consequences. These problems did not result in disruptions of key components of the financial infrastructure. The infrastructure also coped with the increased burden in many markets associated with a larger trading

The arrangement for the exchange of government securities for covered bonds

As part of the efforts to improve banks' funding situation, the Storting authorised the Ministry of Finance on 24 October 2008 to implement an arrangement whereby the government and banks could exchange Treasury bills for covered bonds. A covered bond is a bond issued by a mortgage company pursuant to the Financial Institutions Act or corresponding legislation in another state within the EEA. The owner of a covered bond has a preferential right to the cash flow from a loan portfolio owned by the mortgage company. Because Treasury bills are easier to sell than covered bonds, such an exchange results in an improvement in banks' liquidity. The swap arrangement is administered by Norges Bank.

The arrangement has a total upper limit of NOK 350bn. It was originally only open to banks, but mortgage companies have been included in the arrangement since 12 January 2009. Individual participants can gain access to Treasury bills by bidding at auctions held by Norges Bank two to three times a month. The bills are allotted to the institutions that submit the highest bids. The bidders must also state the duration of the swap agreement. On expiry of the swap period, each institution repurchases the covered bonds for the same price they sold them to the government for.

The Ministry of Finance wishes to ensure that the government shall have a low risk of losses associated with the swap arrangement. Losses may occur if a financial institution files for bankruptcy or is placed under public administration, and the bonds received by the government have a lower value than the Treasury bills provided in exchange. A number of factors minimise the risk of loss by the government:

Covered bonds have low risk partly because they are secured by the assets of the mortgage companies issuing such bonds. This entails that the owners of the bonds have a preferential right to these assets if the mortgage company files for bankruptcy. The Financial Institutions Act imposes requirements on which assets that can be used as collateral. One of these requirements is that mortgages can only be used as collateral within 75% of market value. In the swap arrangement, only covered bonds secured by Norwegian loan portfolios are approved.

Norges Bank stipulates a market price for covered bonds used in the swap arrangement. Here, emphasis is placed on the prices covered bonds with Norwegian issuers achieve in the market. In the swap, the value of each covered bond is subject to a haircut in relation to the market price. This is because the value of covered bonds exchanged by the banks shall be higher than the Treasury bills they receive in exchange. The haircut rate lies between 2% and 8% depending on the time remaining to the next interest rate adjustment for each covered bond. Covered bonds issued in foreign currency will be reduced by an additional 10 percentage points. In the case of mortgage companies, there will be an additional haircut of between 1 and 3 percentage points, depending on the duration of the swap agreement entered into by the mortgage company.

Participants may choose swap agreements with top-up of collateral. This entails that the government, with four days' notice, may demand top-up of a covered bond or a cash amount if the value of the covered bond falls. Financial institutions may also choose an arrangement without top-up, but the value of the covered bonds will then receive an additional haircut of between 2 and 5 percentage points, depending on the remaining duration of the swap agreement. Most banks have chosen an arrangement with top-up.

volume and greater price fluctuations than usual.

Notes and coins

Developments in the use of notes and coins in 2008

The value of banknotes and coins in circulation has increased each year in the period from 2003 to 2007. In 2008, the value of cash in circulation fell marginally and the average for the year was approximately NOK 50.4bn (see Chart 40). Calculated as a share of the total means of payment used by the public (M1), the value of notes and coins in circulation has continued to fall.

The value of notes in circulation averaged NOK 45.8bn in 2008. In the case of coins, the value was NOK 4.6bn.

Counterfeiting

In the second half of the 1990s, the number of counterfeit Norwegian notes seized increased, and reached a peak in 2000 of over 3700 counterfeit notes. The increase in the period to 2000 resulted from the widespread availability of colour photocopiers, PC scanners and printers. In the period from 2002 to 2004, Norges Bank inserted a new holographic feature in the 100-krone and 200-krone notes. These are easy to see for the general public and difficult to imitate. The security of the 50-krone note was also improved in 2004. Following this, the number of counterfeit Norwegian notes has been at a very low level (see Chart 41).

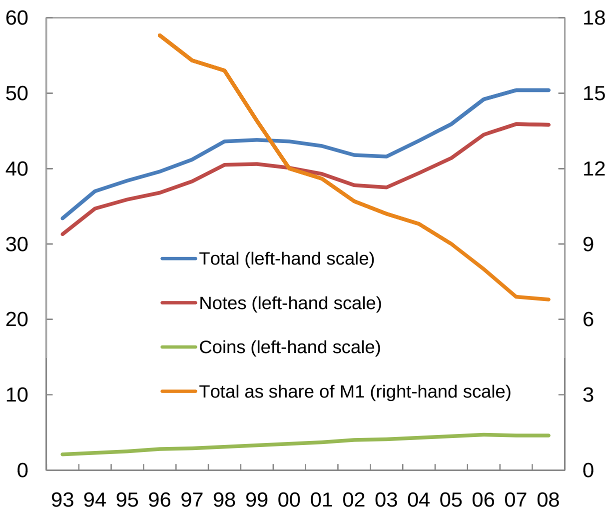
What did Norges Bank do in 2008?

The Norges Bank Act assigns Norges Bank the sole right to issue banknotes and coins. Norges Bank must therefore function as debtor for these means of payment. Production, destruction and distribution may be performed by others, but Norges Bank must ensure that these tasks are carried out in accordance with the central bank's requirements. Norges Bank must ensure that a sufficient quantity of notes and coins is produced to meet the general public's cash requirements and to ensure that this cash is available in a manner that promotes an efficient overall payment system.

Norges Bank supplies the banks with cash, and the banks are responsible for distribution to the general public. The central bank is responsible for maintaining the quality of notes and coins in circulation by seeing to it that worn and damaged notes and coins are withdrawn from circulation and destroyed. The central bank is also responsible for ensuring that cash functions efficiently as a means of payment. This implies, for example, that the public is confident that the notes in circulation are genuine. Notes and coins must therefore be equipped with security features that are difficult to copy and that make it easy for the public to differentiate between genuine and counterfeit notes and coins.

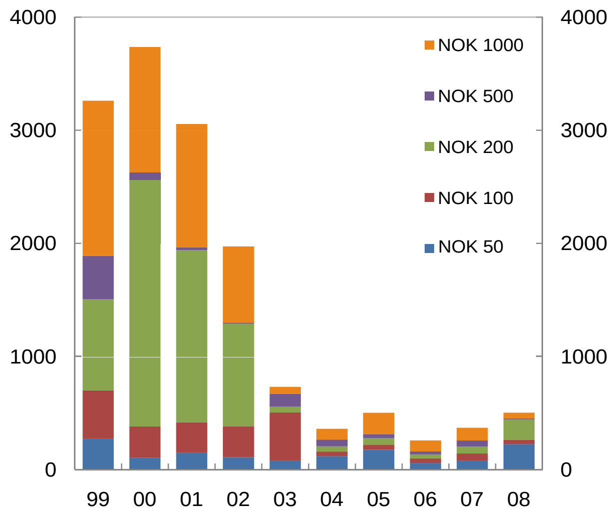
An important objective of Norges Bank's activities in the area of cash handling is to promote the efficiency of cash distribution and of the payment system as a whole.

Chart 40 Cash in circulation. Notes and coins in billions of NOK (left-hand scale) and total as share of M1 (right-hand scale). 1999–2008



Source: Norges Bank

Chart 41 Counterfeit Norwegian banknotes. 1999 –2008



Source: National Criminal Investigation Service (NCIS)

Table 2 Norges Bank's cash handling costs

Figures in millions of NOK

	2004	2005	2006	2007	2008
Costs for purchase of notes *	48.7	48.1	50.7	24.5	9.4
Costs for purchase of coins	26.4	26.2	53.1	60.3	58.6
Total production costs	**75.1**	**74.3**	**103.8**	**84.8**	**68.0**
Costs for central administration and transport **	17.6	16.6	20.3	21.6	23.5
Purchase of external depot and processing services	49.1	49.2	30.6	27.3	27.0
Handling fees related to banks' deposits and withdrawal of cash ***		-23.7	-7.9	-6.2	-5.1
Total distribution costs	**66.7**	**42.1**	**43.0**	**42.7**	**45.4**
Total costs	**141.8**	**116.4**	**146.8**	**127.5**	**113.4**

* Norges Bank has purchased notes from abroad since 2008. Production in the printing works was discontinued on 30 June 2007.
** The figures in the table do not include rent of premises or share of joint overheads.
*** Changes in practices for billing of handling fees from 2005.

Various measures have been implemented in recent years in order to ensure the optimal division of responsibilities and duties between participants and a clearer distinction between different types of service. In 2008, changes were made in banks' conditions for making deliveries to and withdrawing cash from the central bank's depots. This resulted in a reduction of the banks' deposits and withdrawals of cash at Norges Bank. The central bank has thus assumed a more clearly defined role as wholesaler, and banks have taken more responsibility for the redistribution of cash among themselves.

Operations in Norges Bank's Printing Works were discontinued in summer 2007, and we now purchase banknotes from other printers. Agreements have been made with De La Rue International Limited in England and Oberthur Technologies in France. These agreements will run for the period 2007–2012, and the first delivery of Norwegian notes printed abroad was made in summer 2008.

The current agreement between Norges Bank and Det Norske Myntverket AS for production of coins expires on 31 December 2009. In autumn 2008, a framework agreement was entered into with Det Norske Myntverket for deliveries for four more years from 2010 (see box).

Norges Bank's cash handling cost

The costs associated with Norges Bank's role as issuer consist of the production costs for new notes and coins, the costs of maintaining the quality of notes and coins in circulation and the costs of distribution. Quality maintenance costs are related to the replacement of worn notes as well as the destruction of damaged, worn and invalid notes and coins. Distribution involves transport to the central bank's depots, storage and provision of services in connection with delivery to and receipt from banks. Norges Bank purchases management services for its own depots and banknote destruction services from Norsk Kontantservice AS (NOKAS).

Table 2 shows developments in Norges Bank's cash handling costs from 2004 to 2008. Production costs vary from year to year, partly as a result of fluctuations in volume and denominations.

The table shows a reduction in total costs of NOK 14.2m from 2007 to 2008. This reduction is mainly due to the purchase of fewer notes in 2008 than in 2007.

The table does not include interest compensation paid for cash holdings in private depots. NOK 63.8m in compensation was paid in 2008. Without this arrangement, it is likely that a large portion of this cash would have been deposited in Norges Bank

Continued production of Norwegian coins at Det Norske Myntverket AS

The agreement between Norges Bank and Det Norske Myntverket AS for production of coins expires on 31 December 2009. In order to decide who shall produce Norwegian coins from 2010, Norges Bank has conducted a tender process in accordance with the provisions of the Public Procurements Act.

Following announcement of the competition and prequalification of the applicants, a total of six mints from various countries submitted tenders. The tenders were assessed on the basis of price and functional requirements, which were weighted at 80 and 20%, respectively. On the basis of these criteria, the tender from Det Norske Myntverket AS was assessed to be the best. In October 2008, a framework agreement was therefore concluded with Det Norske Myntverket AS for deliveries for a further four years from 2010.

Commemorative coins

Pursuant to sections 13 and 16 of the Norges Bank Act, Norges Bank issues commemorative coins to mark important national events. In 2008, it was 200 years since the birth of Norway's national poet, Henrik Wergeland. To mark this occasion, Norges Bank issued a 10-krone special edition circulation coin and a silver commemorative coin with a face value of NOK 200. In connection with the issue of these coins, Norges Bank collaborated with "Wergeland 2008", a joint project between the National Library of Norway, the National Archives of Norway and Eidsvoll 1814. The project was launched at the request of the Ministry of Culture and Church Affairs to plan and carry out the official Wergeland bicentenary celebration.

Norges Bank needed a contractor to be responsible for the distribution and sale of commemorative coins in silver and gold. Following competitive tendering, an agreement was entered into in 2008 between Norges Bank and Granada AS for services associated with distribution and sale of commemorative coins.

Chapter 3 Investment management

At the end of 2008, Norges Bank managed assets amounting to NOK 2 544bn in international capital markets. The bulk of this was the Government Pension Fund – Global, which is managed on behalf of the Ministry of Finance, and the Bank's international reserves. The Bank also manages the Government Petroleum Insurance Fund on behalf of the Ministry of Petroleum and Energy.

Foreign exchange reserves and claims on the IMF

Norges Bank's international reserves comprise foreign exchange reserves and claims on the International Monetary Fund (IMF). The foreign exchange reserves accounted for more than 98% of the total international reserves. Guidelines for management and performance reports for the foreign exchange reserves and the various funds managed by the Bank are published on Norges Bank's website.

The market value of the foreign exchange reserves in the accounts, less borrowing in foreign currency, stood at NOK 234.4bn at the end of 2008. The foreign exchange reserves are to be available for interventions in the foreign exchange market in connection with the implementation of monetary policy or to promote financial stability.

Norges Bank's Executive Board lays down guidelines for the management of the foreign exchange reserves and has delegated responsibility to the Governor for issuing supplementary rules. 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 transfers to the Government Pension Fund – Global.

The money market portfolio and buffer portfolio consist entirely of fixed income investments, while the investment portfolio has a 40% allocation to equities and a 60% allocation to fixed income. Towards the end of 2008, the equity portion of the investment portfolio was so low that it was necessary to rebalance the portfolio in order to return the equity portion to the strategic allocation of 40%.

The main strategy for both the investment portfolio and the money market portfolio is defined by means of benchmark portfolios. These are constructed portfolios with a given country or currency distribution and with specific securities or fixed income indices in various submarkets or currencies. The benchmark portfolio provides the basis for managing and monitoring risk exposure and for evaluating the actual return Norges Bank achieves in its reserves management.

The investment portfolio accounts for the largest portion of the foreign exchange reserves and amounted to NOK 178.9bn at end-2008. The objective of management of the investment portfolio is a high return in the long term, but it should also be possible to use the portfolio for monetary policy purposes or to promote financial stability if this is considered necessary. The management strategy for the investment portfolio has two main components. It consists partly of the long-term strategy, which is reflected in the benchmark portfolio defined by the Executive Board, and partly of active management designed to outperform the benchmark.

The Executive Board has decided that the maximum ownership interest in a single company is to be 5% of the voting shares. Ownership interest refers to investments in equity instruments that allow the owner or a proxy to exercise voting rights in companies. It also refers to contracts that entitle the holder to achieve such an ownership position. Norges Bank's investments are not strategic but are purely financial. The Executive Board has laid down common guidelines for the exercise of ownership rights for the foreign exchange reserves and the Government Pension Fund – Global.

The entire equity portion and approximately 86% of the fixed income portion of the investment portfolio are managed internally in Norges Bank. The remainder of the fixed income portfolio is managed externally.

An upper limit has been set for the actual portfolio's deviation from the benchmark. A measure of overall risk (expected tracking error) is the limit set for the investment portfolio. In practice, this means that the difference between the return on the actual portfolio and the return on the benchmark portfolio will normally be small. The upper limit for expected tracking error is 1.5 percentage points. In 2008, an average 0.6 percentage point of this risk limit was used. If the risk remained constant at this level, the actual difference between the returns on the benchmark and the actual portfolio could be expected to average between +0.6 and -0.6 percentage point in two out of three years.

The return on the investment portfolio for 2008 was -17.5% measured in terms of the currency basket that corresponds to the composition of the benchmark portfolio. Measured in NOK, the return was 0.7%. The difference is due to the depreciation of the Norwegian krone in relation to the benchmark's currency basket. The portfolio underperformed the benchmark by 3.96 percentage points. There was a negative excess return on the fixed income portfolio of 6.6 percentage points, while the equity portfolio underperformed the benchmark portfolio by 0.4 percentage point.

The money market portfolio is invested in short-term money market instruments, primarily secured lending to approved international banks. It is to be invested in such a way that it can be used at short notice as a monetary policy instrument or to promote financial stability. The money market portfolio is also used to execute transactions on behalf of the IMF and to carry out foreign exchange transactions on behalf of the Government Petroleum Insurance Fund.

At the end of August, the return on the portfolio was 2.3% measured in the benchmark portfolio's currency basket. The return was also 2.3% measured in NOK. The portfolio had outperformed the benchmark by almost 0.1 percentage point.

Due to the turmoil in global financial markets, it was decided in autumn 2008 to increase the size of the money market portfolio through transfers from the investment portfolio. At the end of September, an agreement was also reached with the Federal Reserve on a credit facility of up to USD 5bn. This facility was expanded in mid-October to a maximum of USD 15bn. In addition, parts of the money market portfolio were invested as short term deposits in other countries' central banks in preparation for Norges Bank's market operations. The money market portfolio amounted to NOK 44.7bn at the end of 2008, compared with NOK 8bn at the end of 2007.

In periods during the fourth quarter of 2008, the currency composition of the money market portfolio was very different from that of the benchmark portfolio, as the need for market operations was greatest in USD. From mid-September onwards, market operations were given priority over generating an excess return on this portfolio.

The buffer portfolio receives capital when the State's Direct Financial Interest in petroleum activities (SDFI) transfers gross income in foreign currency to Norges Bank. Norges Bank may also purchase foreign currency directly in the market in order to cover the amount that is to be allocated to the Government Pension Fund – Global. The routines for these transactions are described in Chapter 5. Since only cash is transferred to the Government Pension Fund – Global, the buffer portfolio is invested exclusively in money market instruments. At the end of 2008, the size of the portfolio was NOK 23.7bn. Capital is normally transferred from the buffer portfolio to the Government Pension Fund – Global each month, except in December when no transfer is made. This means that at year-end the portfolio will normally be larger than the average value at other month-ends (after transfers). The return on the buffer portfolio, measured in NOK, was 13.0% in 2008.

Claims on the IMF now consist of two components: SDR (Special Drawing Rights) and reserve positions. Norges Bank's aim is to keep the SDR reserves at between SDR 200m and SDR 300m. At end-2008, holdings amounted to SDR 283m, equivalent to NOK 3 060m. The reserve position in the IMF amounted to NOK 2 635m.

Government Pension Fund – Global

Norges Bank is responsible for the operational management of the Government Pension Fund – Global on behalf of the Ministry of Finance. The mandate is set out in a regulation and a separate management agreement between Norges Bank and the Ministry of Finance. The agreement stipulates that the Ministry of Finance covers the Bank's management costs.

At the end of 2008, the market value of the Government Pension Fund – Global was NOK 2 275bn, before deduction of Norges Bank's management fees. In 2008, the Ministry of Finance transferred a total of NOK 384bn to the Fund. The Ministry of Finance has established a stra-

tegic benchmark portfolio of equities and fixed income instruments. The benchmark portfolio consists of equity indices for 46 countries and fixed income indices in the currencies of 21 countries. The benchmark embodies the principal's investment strategy for the Government Pension Fund – Global. The strategy is an important basis for managing the risk associated with the operational management of the Fund and for evaluating Norges Bank's management performance. The Ministry of Finance has set an upper limit for the actual portfolio's deviation from the benchmark.

In 2007, the Ministry of Finance decided to increase the allocation to equities in the Government Pension Fund – Global to 60%. The allocation to equities in the Fund's benchmark portfolio had been set at 40% since 1998. Norges Bank has agreed on a schedule for implementing this change with the Ministry. The Ministry also decided in 2007 to increase the number of companies by including the small-cap segment in the benchmark portfolio, and in 2008 by including more emerging markets. These changes were completed in 2008.

In 2008, the return on the Fund was -23.3% measured in terms of the benchmark portfolio's basket of currencies. It is this measure of return that best describes developments in the Fund's international purchasing power. Measured in NOK, the return was -6.6%. Measured in terms of the Fund's currency basket, the return on the equity portfolio was -40.7%, while the return on the fixed income portfolio was -0.5%.

Since 1998, the annual nominal return has been 2.9% measured in terms of the Fund's currency basket. The annual net real return after management costs has been 1.0%. The return in 2008 was 3.4 percentage points lower than the return on the benchmark portfolio. There was a negative excess return on the fixed income portfolio of 6.6 percentage points, while the equity portfolio underperformed the benchmark portfolio by 1.1 percentage point.

A separate annual report for the Government Pension Fund – Global presents the management of the Fund in 2008 in more detail.

Government Petroleum Insurance Fund

The market value of the Government Petroleum Insurance Fund was NOK 21bn at end-2008. The Fund is owned by the Ministry of Petroleum and Energy and its purpose is to support the government's role as self-insurer of ownership interests in petroleum activities. The Fund is managed by Norges Bank. In 2008, the return was 9.1% measured in terms of the currency basket corresponding to the composition of the Fund's benchmark portfolio. Measured in NOK, the return was 31.6%. This was 0.07 percentage point higher than the return on the benchmark portfolio.

Chapter 4 Research and international cooperation

Research in 2008

Research at Norges Bank provides part of the basis for the Bank's decisions. The research focuses on the fields of monetary policy and financial stability. Monetary policy research focuses in particular on the functioning of the Norwegian economy and on the properties of the monetary policy regime. Financial stability research concentrates on equity markets and the behaviour of financial institutions. Research activities at Norges Bank are presented on the Bank's website.[1]

The research is expected to maintain the standard required for publication in international and national journals where researchers' articles are reviewed by their peers in the field. In 2008, nine articles were published in peer-refereed journals.

Publication of articles is often a lengthy process, and the list of publications therefore includes articles on research carried out several years ago. Ongoing research activity is documented in the Bank's *Working Papers* series. In 2008, 25 papers were published in this series. The research topics are diverse and include monetary policy communication, liquidity in financial markets and forecasting. *Norges Bank Working Papers* is also distributed through the Bank's website, the internet portals Research Papers in Economics (RepEc) and BIS Central Bank Research Hub.

Outreach

A number of research projects have been presented at Norwegian and international conferences and seminars, at which Norges Bank's researchers have also contributed comments on the work of other researchers. The Bank's researchers also participate in student guidance and teaching, and act as referees for national and international journals. Four workshops were also organised by the Bank's researchers in 2008, on bubbles and asset price dynamics, globalisation and monetary policy (Jarle Bergo colloquium), payment systems and on optimal monetary policy. All four topics were highly relevant and of current interest. Programmes and papers are available on Norges Bank's website.[2]

As part of an international research environment, Norges Bank has extensive contact with researchers at universities and other central banks. A total of 13 researchers and 2 PhD students from schools of economics in Norway and abroad worked at Norges Bank on part-term contracts. These researchers contribute to and enhance the research community provided by the permanent staff of Norges Bank.

Norges Bank hosts research seminars with guest lecturers, which are announced online. Scholars visiting Norges Bank present their work and take part in seminars and workshops.

Support for economic research

Norges Bank supports economic research activities in a number of ways. The Bank promotes focus on macroeconomics and monetary policy issues through a sponsored professorship at the University of Oslo. Norges Bank's Economic Research Fund provides financial support for researchers studying abroad, for researchers to attend international conferences and present their research work and for the arrangement of research conferences in Norway.

International cooperation

In addition to international cooperation in the field of research, there is extensive contact and cooperation between Norges Bank and other central banks and international organisations.

Norges Bank is one of the owners of the Bank for International Settlements (BIS), whose task is to foster cooperation between central banks. In addition to providing banking services to central banks, the BIS is a research body and serves as a discussion forum for member banks. The governor of Norges Bank regularly attends meetings at the BIS.

Pursuant to Section 25 of the Norges Bank Act, Norges Bank shall administer Norway's financial rights and fulfil

[11] www.norges-bank.no/research/
[12] www.norges-bank.no/conferences/.

Norges Bank's bicentenary project

In connection with Norges Bank's 200th anniversary in 2016, the Executive Board decided in December 2007 to launch a large--scale research project in two phases to be published in book form as part of the anniversary celebrations. Norges Bank´s bicentenary project 1816 – 2016 will be a joint project with contributions from the Norwegian and international research community. The steering committee for the project comprises the international experts Professor Michael Bordo from Rutgers University, New Jersey and Professor Marc Flandreau from the Graduate Institute in Geneva, Deputy Governor of Norges Bank Jan F. Qvigstad and Director of Research Øyvind Eitrheim.

The first phase will encompass various research projects that will also provide material for the books. The goal is to produce three books dealing with various aspects of Norges Bank's activities over the past 200 years by the beginning of 2016. The project will also serve to highlight Norges Bank's role as a public institution from a historical perspective.

The three books have the following working titles:

The History of Norges Bank / Norges Banks historie 1816-2016

The Monetary History of Norway / Norsk pengehistorie 1816-2016

Topics in Central Banking

The books are also intended to meet the required standards of an internationally recognised academic publisher. While the first two books will be published in Norwegian and English, the third book will only be published in English. The idea is that the third book project will boost the quality of the first two books through extensive collaboration with international research communities in the fields of central bank and monetary history.

A number of research projects were launched in 2008 by the various Norwegian research communities at the Norwegian School of Economics and Business Administration, the University of Oslo og BI Norwegian School of Management. Research topics included the history of Norges Bank in Oslo in the period 1940-45, the Bank's role in financial crises and the Bank's governance structure in different periods.

In October, an international workshop was held in collaboration with the Graduate Institute in Geneva with broad participation from all the above research communities in Norway and attended by a number of international experts on the writing of central bank and monetary history. More details on the workshop and downloadable presentations are available on Norges Bank's website (http://www.norges-bank.no/conferences). A home page for Norges Bank bicentenary project 1816-2016 is also available on (http://www.norges-bank.no/bicentenary). An outline of the various subprojects that have been launched and documentation of research papers published in the series *Norges Bank Working Papers* and *Staff Memos* will be made available on this page. Two such papers were published in 2008.

the obligations ensuing from participation in the International Monetary Fund (IMF). Norges Bank has been commissioned by the Ministry of Finance to be responsible for day-to-day IMF work in Norway. In consultation with the Ministry, the Bank formulates proposals for Norwegian viewpoints on issues to be brought before the IMF Executive Board. The Ministry of Finance has the ultimate responsibility. The division of responsibilities between the Ministry and Norges Bank is set out in a written agreement.

The Government's annual Credit Report to the Storting provides a detailed account of IMF activities.

The highest decision-making body of the IMF is the Board of Governors. Norway is represented by the Governor of Norges Bank, Svein Gjedrem, and the Secretary General of the Ministry of Finance, Tore Eriksen, is his alternate. The Board normally meets once a year at the Annual Meeting of the IMF. Apart from at this meeting, the Board of Governors takes decisions by ballot. An Executive Board consisting of 24 executive directors is responsible for day-to-day business. The five Nordic and three Baltic countries comprise one constituency with a joint representative on the board.

The countries in the Nordic-Baltic constituency primarily coordinate their views in important IMF matters through the Nordic-Baltic Monetary and Financial Committee (NBMFC). The Norwegian members are the Secretary General of the Ministry of Finance and the Deputy Governor of Norges Bank. The other countries are represented at a comparable level. The NBMFC normally meets twice a year.

The aim is for the countries in the constituency to arrive at a common stance, which the chairperson, representing the group, then presents to the IMF Executive Board. The position of chairperson is rotated among the Nordic countries and the chairperson is replaced every other year. This position is held by Sweden in 2008 and 2009.

The International Monetary and Financial Committee (IMFC) has an important function as an advisory body for the Executive Board. The Committee provides political guidelines for the IMF's activities. The IMFC's members are ministers or central bank governors who either represent a country or a constituency of countries. In 2008-2009, the Swedish Minister of Finance is the Nordic-Baltic constituency's member in the IMFC.

An important part of IMF activities involves monitoring economic developments in member countries, with particular emphasis on economic conditions and financial stability. The primary emphasis is on bilateral surveillance through the Article IV consultations, which take place annually for most countries. Norway has a two-year interval between these consultations, provided that there are no special circumstances that call for annual consultations. In the intervening years, the IMF conducts a shorter consultation and no written report is submitted to the Executive Board of the IMF. The most recent Article IV consultation was conducted 15–26 March 2007.

Norges Bank collaborates extensively with the other Nordic central banks. The annual meeting of Nordic central banks was held in Iceland, hosted by Sedlabanki Islands (central bank of Iceland). One of the topics discussed was experience gained from the joint Nordic crisis simulation exercise in autumn 2007. Staff from various departments in the central banks meet at regular intervals to discuss issues relating to economic analysis, monetary policy, financial stability, payment systems, legal matters concerning central banks, human resource policy, etc.

Norges Bank has regular contact with the European Central Bank (ECB) and other central banks in EU countries. Norges Bank has established an arrangement with the ECB, the Bank of England and some other central banks which affords staff members the opportunity to work at these institutions for periods of up to 12 months.

Swap arrangement with Sedlabanki Islands

On 16 May 2008, Norges Bank and Sedlabanki Islands entered into a swap agreement providing access to up to EUR 500m that would mature at end-2008. The aim of the swap agreement was to support the Icelandic government in its efforts to stabilise economic developments in Iceland. Norges Bank requested the Ministry of Finance's approval of the agreement in its submission of 8 May 2008, cf Section 26 of the Norges Bank Act. The Ministry of Finance gave its approval in a letter of 14 May 2008 and authorised Norges Bank to extend the agreement. Sedlabanki Islands entered into similar swap agreements with the central banks of Denmark and Sweden.

On 24 October 2008, Iceland and the IMF reached preliminary agreement on an economic stabilisation programme.

To support the programme, a two-year USD 2bn Stand-By Arrangement for Iceland was approved by the IMF Executive Board on 19 November 2008. The programme presupposes additional external funding totalling USD 3bn.

On request from Sedlabanki Islands, the swap agreement with Norges Bank of EUR 500m concluded at the beginning of November was extended by one year to the end of 2009. Iceland's swap agreements with the central banks of Denmark and Sweden were also extended.

Sedlabanki Islands also requested a long-term loan of EUR 500m with a maturity of 4-5 years from Norges Bank. In a submission of 3 November 2008, Norges Bank requested the Ministry of Finance's approval to extend a state-guaranteeed loan of EUR 500m to Sedlabanki Islands with a maturity of up to five years, cf Section 26 of the Norges Bank Act. In a press release of 3 November 2008 from the Ministry of Finance, the finance minister stated that the Government would submit a proposal to the Storting for a state guarantee for such a loan as soon as possible. This loan will be part of the total medium-term financing of USD 2.5bn agreed to by Denmark, Finland, Norway and Sweden in connection with the IMF-supported programme.

Technical assistance to the Reserve Bank of Malawi

Norges Bank has provided technical assistance of various kinds to central banks in developing countries for many years. In order to promote a more efficient and performance-oriented programme of assistance to central banks in developing countries, Norges Bank has agreed to assume responsibility for assisting the Reserve Bank of Malawi for a three to five year period. In the light of the IMF's extensive activity and wide knowledge in this area, Norges Bank's assistance is closely coordinated with IMF assistance. In September 2006, the Ministry of Foreign Affairs (represented by the Norwegian Embassy in Malawi) and the IMF entered into an agreement under which Norges Bank assumed responsibility for managing the bulk of the assistance agreed upon between the Reserve Bank of Malawi and the IMF. The agreement initially covered the period from September 2006 to January 2008. In 2008, the agreement was extended until end-2009. Norges Bank's assistance to the Reserve Bank of Malawi is formally administered by the IMF, but financed by the Norwegian Ministry of Foreign Affairs.

Norges Bank will place up to 2 person-years annually at the disposal of the Reserve Bank of Malawi, consisting of 1 person-year in the form of a long-term assignment as adviser to the Reserve Bank and up to 1 person-year in the form of short-term assignments. Short-term assignments cover a broad range of central bank tasks.

A total of 13 short assignments of about 2 weeks each were completed in 2008 within the fields of market operations and foreign exchange policy, macroeconomic analysis and models, payment systems, accounting systems, risk management, strategic planning and management processes, and evaluation of the Reserve Bank of Malawi's organisational structure. Executive Director Jon A. Solheim has held the post of "Monetary and Central Bank Operations Adviser" to the Reserve Bank of Malawi since January 2007, when he was appointed to the position by the IMF. The IMF has performed an evaluation of the technical assistance provided to the Reserve Bank of Malawi in the period from October 2006 to December 2008. Norges Bank's technical assistance was assessed in general as performance-oriented and successful, and this was attributed to the positive institutional collaboration established between the two central banks by the IMF. The combination of a permanent adviser located at the Reserve Bank and short-term advisers who mainly came from the same central bank was emphasised as an important factor in the success of the project.

Chapter 5
Other responsibilities

Foreign exchange transactions

In 2008, Norges Bank's commercial foreign exchange transactions mainly comprised foreign exchange purchases for building up the Government Pension Fund – Global (hereafter referred to as the Pension Fund). In addition, Norges Bank executed some transactions on behalf of the Government Petroleum Insurance Fund.

The Pension Fund is built up through transfers of foreign exchange income from the state's direct financial interest in petroleum activities (SDFI) and through Norges Bank's purchases of foreign exchange in the market.

The system for transferring foreign exchange from SDFI and calculating Norges Bank's foreign exchange purchases was most recently changed in 2004. The daily foreign exchange purchases are fixed for one month at a time and are announced on the last business day of the previous month. The Ministry of Finance stipulates the monthly allocation to the Fund. Transfers to the Pension Fund are primarily covered by foreign exchange from SDFI. If the foreign exchange income from SDFI is not sufficient, Norges Bank purchases the balance of the foreign exchange in the market. Norges Bank's foreign exchange purchases are calculated on the basis of estimates of both allocations to the Fund and SDFI's foreign exchange income. The actual transfers may differ from the estimates. Adjustments are made for the differences when the foreign exchange purchases for the following month are made. As a result, Norges Bank's foreign exchange purchases may vary considerably from month to month.

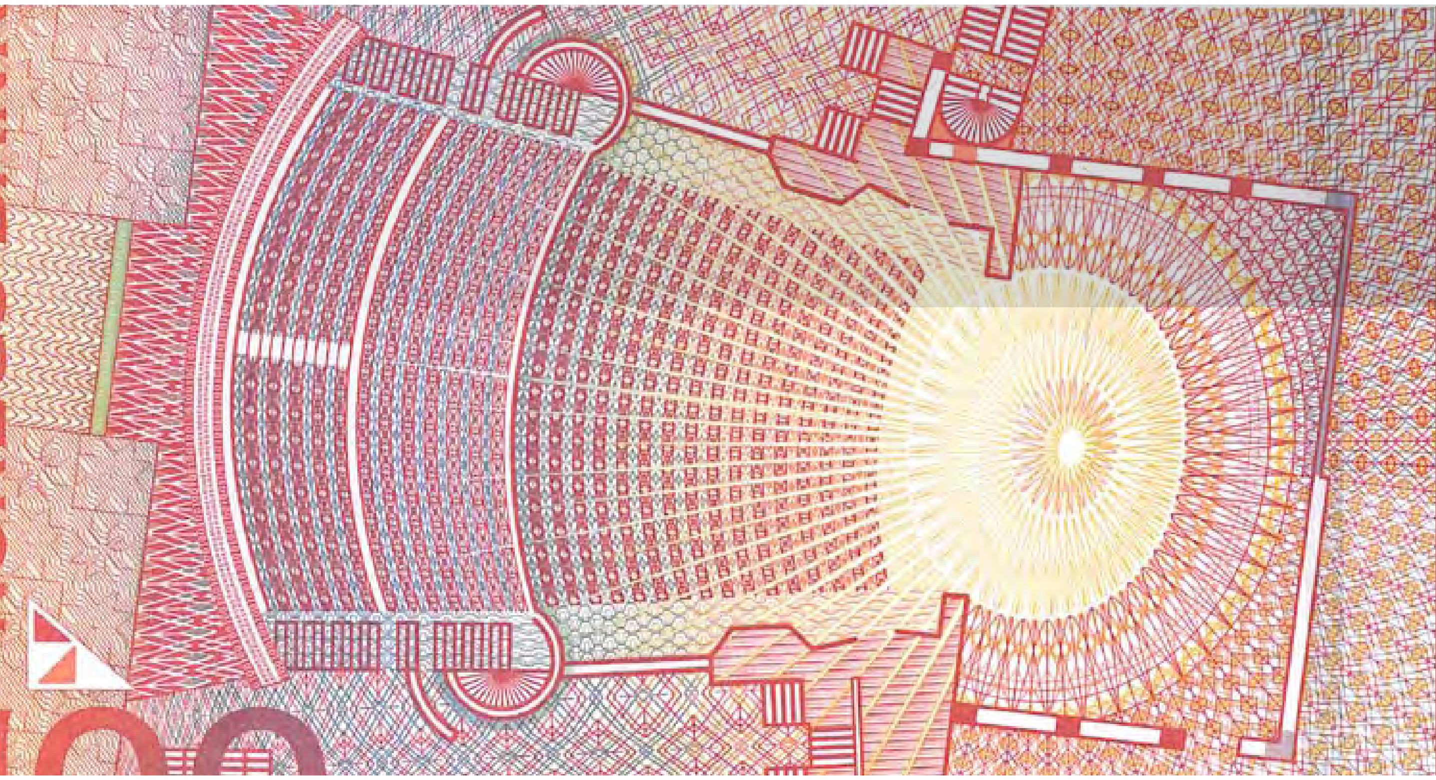
Capital is not normally transferred to the Pension Fund in December. It is therefore improbable that foreign exchange will be purchased by Norges Bank in December. Foreign exchange income from SDFI may nevertheless be transferred in order to minimise the government's exchange costs. The December transfers from SDFI cause the foreign exchange reserves to increase. The reserves are reduced again through the monthly transfers to the Fund in the first quarter of the following year.

In 2008, Norges Bank purchased foreign exchange for NOK 175.4.9bn in the market (see Table 3). Transfers from SDFI were equivalent to NOK 212.1.6bn.

Table 3. Norges Bank's daily foreign exchange purchases for the Pension Fund in 2008

In millions of NOK

Month	Daily amount	Total
January	420	9 240
February	600	12 600
March	460	7 820
April	450	9 900
May	500	10 000
June	800	16 800
July	960	22 080
August	970	20 370
September	1 540	33 880
1.-22. October	1 400	22 400
23.–31. October	620	4 340
November	300	6 000
December	0	0
2008		**175 430**



Government debt 2008

According to an agreement between the Ministry of Finance and Norges Bank, the Bank shall provide services as adviser, organiser and payment agent in connection with raising and managing domestic government loans. The Ministry of Finance pays for bank-related services provided by Norges Bank to the Ministry in connection with government debt and liquidity management, and for variable costs incurred by Norges Bank in its capacity as provider of services for the Ministry of Finance.

The government's schedule for the issue of short- and long-term securities in 2008 was published in an auction calendar in December 2007. Seven auctions of government bonds and 11 auctions of short-term government paper (Treasury bills) were held in 2008. One Treasury bill auction was cancelled. No ad hoc auctions were held. The total volume issued, excluding the government's own purchases in the primary market, amounted to NOK 18bn in government bonds and NOK 54bn in Treasury bills.

The long-term strategy for long-term government borrowing is based on maintaining a yield curve for government bonds with maturities of up to approximately 10 years. The pattern for government bond borrowing has been to issue a new 11-year bond every second year. A new 11-year bond was issued in May 2008. No government bonds matured in 2008.

According to the issue programme for short government paper, new Treasury bills are issued on IMM dates[13], and mature on the IMM date one year later. The loans are increased through subsequent auctions.

The government paper auctions have been held via the Oslo Stock Exchange trading system. The bid-to-cover ratio, which is the volume of bids in relation to the volume allocated in the auction, was 3.04 for government bonds and 2.50 for Treasury bills.

Norges Bank has entered into agreements with six primary dealers who are obligated to furnish binding bid and offer prices for agreed minimum amounts of government bonds and Treasury bills on the Oslo Stock Exchange. In return for furnishing these binding bid and offer prices, the primary dealers may borrow government paper for a limited period. During the financial crisis in autumn 2008, demand for safe investments in government paper increased. Demand for short-term paper was particularly high. Lending limits for Treasury bills were therefore doubled in October 2008 and the total lending limit for each bill is now NOK 6bn. For government bonds, the total lending limit is NOK 5bn for the shortest bonds and NOK 3.7bn for each of the other loans.

Since June 2005, the government has used interest rate swaps in its domestic debt management. An interest rate swap is an agreement between two parties to exchange future interest payments associated with a given principal. The use of interest rate swaps gives the government the flexibility to change the average period during which the interest rate on the debt portfolio is fixed without changing its borrowing strategy. The Ministry of Finance has entered into framework agreements with several counter-

[13] International Monetary Market dates: third Wednesday in March, June, September and December.

parties. Norges Bank carries out the operational functions in connection with entry into interest rate swap agreements on behalf of the Ministry of Finance. The commercial decisions are taken by the Ministry. At end-2005, the average fixed-rate period for government debt was 3.1 years. If existing interest rate swap agreements are taken into account, the fixed-rate period was 1.5 years.

Total government domestic securities debt registered in the VPS at end-2005 amounted to NOK 208bn, calculated at face value. Foreign investors own approximately 45%, while life insurance companies and private pension funds own around 20% of the government's domestic securities debt. Ownership stakes held by foreign investors, life insurance companies and private pension funds edged down in 2008. Government domestic securities debt was equivalent to about 12% of GDP in 2008.

Communications activities

Pursuant to the Norges Bank Act, Norges Bank is obliged to "inform the public of developments in monetary, credit and foreign exchange conditions". In addition, the Bank seeks through active communications activities to achieve the broadest possible understanding of its conduct of monetary policy, the mechanisms contributing to financial stability and its investment management activities.

The Bank places considerable emphasis on responding to growing interest with transparency and predictability. Press conferences are regularly webcast following the Executive Board's monetary policy meetings and in connection with the publication of the *Financial Stability* report, the *Monetary Policy Report* and the annual and quarterly reports of the Government Pension Fund - Global. In 2006, Norges Bank introduced podcasting and direct mobile video transmission of its press conferences. The public can also subscribe to text messaging of the interest rate decision. Sixteen press conferences were held in 2008. Speeches given by the Governor and Deputy Governor of Norges Bank are an important part of the Bank's external communications. In 2008, 51 speeches were given and 16 of them were published on Norges Bank's website at the time that they were given. Many of the unpublished speeches were similar to those that had already been published, and at the time of these speeches reference was made to the previously published speeches on the Bank´s website. Online information is an important part of the Bank's information strategy. The Bank's website is under continuous review and was redesigned in 2008. In addition to news and the publications mentioned above, the website contains extensive information about the Bank's responsibilities. Electronic versions of the Bank's publications are also available. The website also contains some statistics, although in 2007 Statistics Norway took over responsibility for a large portion of the statistics previously published by the Bank. User statistics show that Norges Bank's website has an average of 743 000 hits per month in 2008.

In addition to the *Annual Report*, online information and the other reports mentioned above, Norges Bank issues the following publications: the journals *Penger og Kreditt* and its English equivalent, *Economic Bulletin*, which are published biannually. No. 1/2008 was the last issue distributed by post to subscribers. This publication is now only available on the Bank´s website. A report on payment systems is published annually. Research projects are documented in the *Working Papers* series. Fifteen were published in 2007 and some of them have been or will be published as articles in external books and periodicals. *Staff Memos* contain other documentation or reports on the Bank's work on central issues, and seven were published on the Bank's website. In its monitoring of financial stability, Norges Bank makes use of extensive credit and financial market statistics. In order to expand its information base, Norges Bank conducts a survey of bank lending. The survey was published four times in 2008. All the publications were redesigned in 2008.

Chapter 6 Organisation, management and use of resources

Core responsibilities

The organisation of Norges Bank is based on clearly defined core responsibilities.

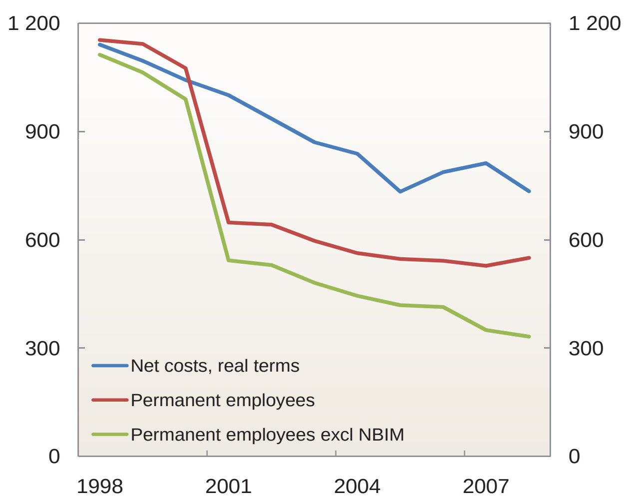
Norges Bank shall:

- promote price stability by means of monetary policy;
- promote financial stability and contribute to robust and efficient financial infrastructures and payment systems;
- manage the portfolios of the Government Pension Fund – Global, the Bank's own foreign exchange reserves and the Government Petroleum Insurance Fund in an efficient and confidence-inspiring manner.

Developments in the use of resources

Concentration on these three core responsibilities has directed the development of the Bank. As a result of the establishment of limited companies, outsourcing, discontinuation of tasks and generally increased efficiency, the number of permanent employees was reduced from 1 150 in 1998 to 549 at end-2008. At the same time, the number of employees engaged in the Bank's investment management activities was increased from approximately 40 to close to 220. Net real resources in this period, measured in relation to the price index for public expenditure, were reduced by 35%. Restructuring costs are not included. The costs of managing the Government Pension Fund - Global are covered by income from the Ministry of Finance. Norges Bank's objective is to be a lean and efficient specialist enterprise with a strong focus on its core responsibilities. The aim is to bring the use of resources into line with best practice for central banks by 2010.

Chart 42 Developments in net costs and permanent employees



Restructuring

- Norges Bank Investment Management (NBIM) has been expanded from 40 employees in 1998 to almost 220 in 2008.
- The Royal Norwegian Mint was established as a separate company in 2001 and sold in 2003.
- Cash handling was established as a separate company (NOKAS) in 2001. Norges Bank owned 33.5% of the shares until 2006, when they were sold.
- Norges Bank has concentrated on its role as wholesaler and reduced the number of depots for cash handling.
- Operation of Norges Bank's settlement system was outsourced in 2003.
- Norges Bank discontinued a range of banking services for public enterprises and its own employees in 2004.
- Banknote production was terminated in 2007. The first banknotes produced abroad were delivered in 2008.
- Statistics activities in Norges Bank were transferred to Statistics Norway in two stages, the last of which took place at the turn of the year 2006/2007.
- Norges Bank's central IT operations were outsourced in 2008.
- Staff and support functions will be dimensioned for the "new" Norges Bank by 2010.

Chart 43a Qualifications

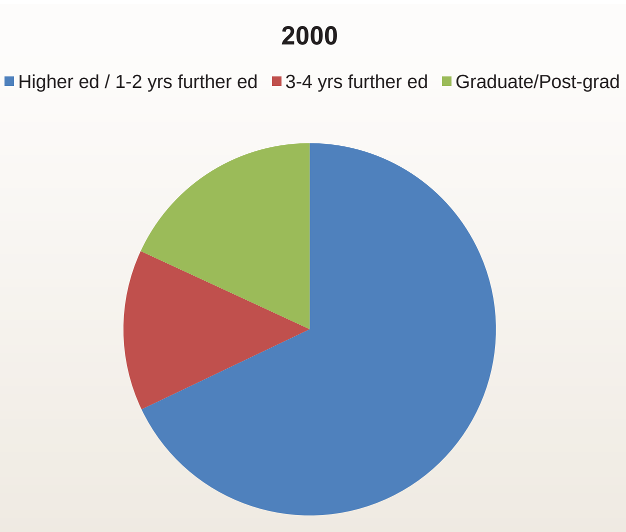


Chart 43b Qualifications

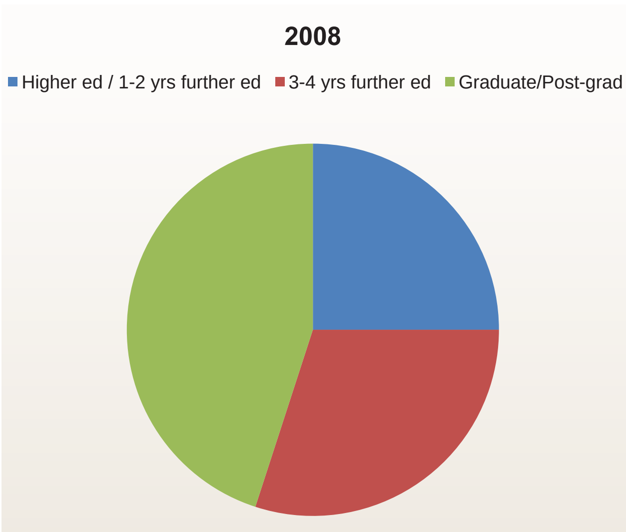
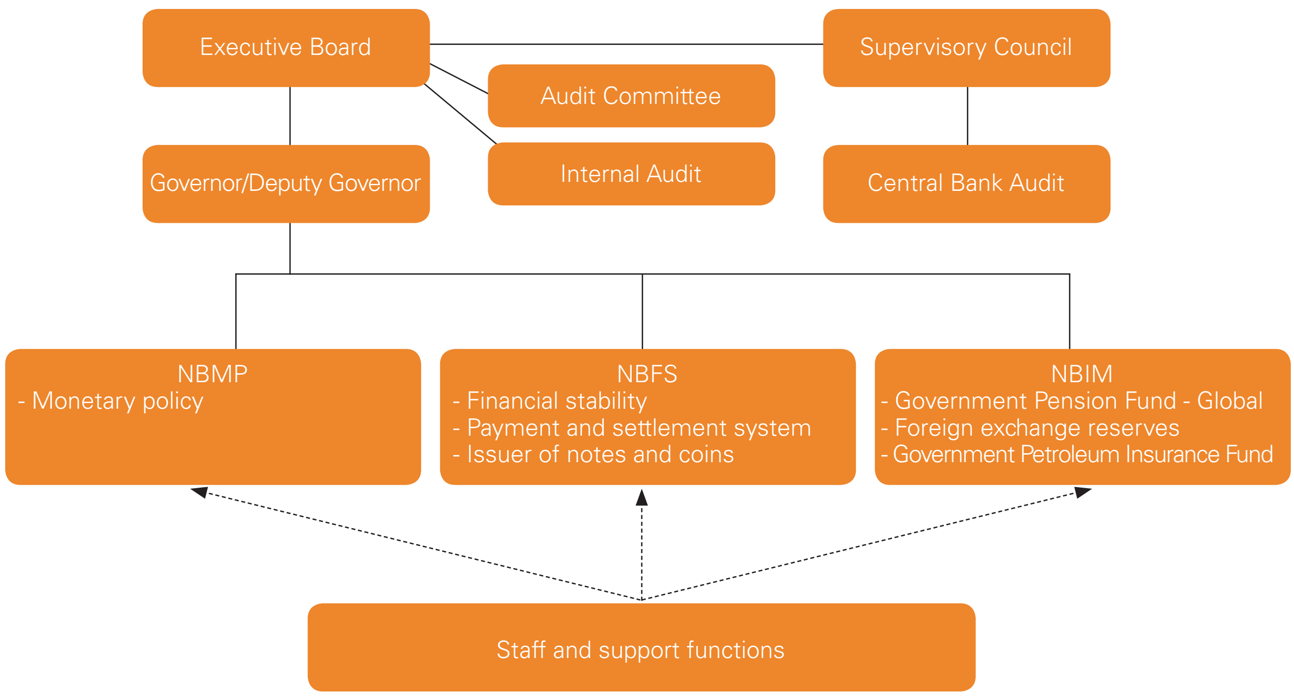


Chart 44 Organisation of Norges Bank



* Broken lines indicate delivery of services, while solid lines indicate reporting.

The box below provides an overview of changes since 1998, and Chart 42 shows developments in costs and staffing.

The restructuring of the Bank has further defined the Bank's profile as a knowledge-based organisation. Charts 43a and 43b show how the distribution of staff by qualifications has changed from 2000 to 2008.

Restructuring has had consequences for many employees. Norges Bank uses human resource policy programmes to facilitate restructuring. These include severance pay, study grants with termination agreements, redundancy pay and early retirement. In 2008, applications for termination from four employees were approved using human resource policy programmes. Between 1999 and the end of 2008, a total of 338 termination agreements were concluded[14]. Of these agreements, 212 expired at the end of 2008, and 11 will apply in the period 2009-2011.

Operational areas as core units

The Bank's activities are concentrated on the three operational areas: Norges Bank Monetary Policy (NBMP), Norges Bank Financial Stability (NBFS) and Norges Bank Investment Management (NBIM). An additional area provides staff and support services (see Chart 44).

The structure comprising a few, albeit relatively large units, provides an appropriate span of control for the governor and deputy governor. The areas have clearly defined interfaces with the other units and are currently staffed by about 80 to 220 employees.

High degree of delegation

The Supervisory Council is composed of fifteen members elected by the Storting (the Norwegian parliament). It adopts the budget, approves the accounts and supervises the Bank's activities to ensure compliance with the rules. The Bank's audit department, Central Bank Audit, reports to the Su-

[14] These include five early retirement agreements approved before 1999.

pervisory Council, which usually meets five times a year.

The Executive Board is composed of seven members appointed by the King in Council and is responsible for the Bank's executive and advisory activities. The governor and deputy governor of Norges Bank are chairman and deputy chairman, respectively, of the Executive Board. The employees are represented by two members who supplement the Executive Board when administrative matters are discussed. The Executive Board normally meets every three weeks. An audit committee and an internal audit unit were established under the Executive Board in 2007. The audit committee comprises three of the external members of the Executive Board.

The Executive Board has delegated a large share of the day-to-day operations to the governor of Norges Bank, who has further delegated a substantial portion of operations to the operational areas. Pursuant to the last paragraph of Section 5 of the Norges Bank Act, the governor is in charge of the "Bank's administration and the implementation of decisions".

Subject to annual person-year and budgetary limits, the areas have considerable independence with respect to human resource administration and budget allocations. Guidelines for the number of person-years are set for three-year periods for most activities.

The pay system is changing, with more emphasis on effort and performance for persons in management positions and for academics.

NBIM makes extensive use of performance-based pay.

Management and follow-up

The main management principle in Norges Bank is line management. The result is a clearly structured organisation with clear lines of responsibility. The organisational areas prepare annual action plans for activities with attendant performance goals, which are approved by the governor. In the course of the year, the governor follows up the performance of the individual areas by means of appraisal dialogues in spring and follow-up dialogues in autumn. During the year, there are shorter follow-up discussions between the governor/deputy governor and each executive director about every three weeks.

All managers have a clearly defined responsibility in accordance with the organisation of activities and the line management principle. Each year managers are assessed by their immediate superior and subordinate in the line. The assessment criteria are the ability to provide direction, effectiveness, personal skills and professional standards.

Fundamental values

Norges Bank's objective is to be an efficient and goal-oriented organisation as far as possible in line with best international practice. The Bank shall demonstrate the willingness and ability to change, and secure the confidence of the external community. Norges Bank shall be prudent in its use of resources.

In order to attain this objective, all employees shall:

- achieve results
- be committed
- show a high degree of ethical awareness
- seek to attain a high professional standard and integrity.

Distribution of costs by main function

The purpose of the distribution is to illustrate total costs for the various functions. The overview has also increased awareness with respect to achieving cost effectiveness. Costs were distributed among these categories in 2008:

- monetary policy
- management of the Government Pension Fund - Global
- management of the long-term foreign exchange reserves
- financial stability
- settlement services
- purchase, production and distribution of notes and coins
- other functions[15]

The point of departure is operating costs and operating income in the Bank's internal accounts, with the addition of depreciation and imputed pension costs.[16] Emphasis has been placed on including costs and income that provide a picture of what ordinary bank operations cost. Restructuring costs and extraordinary income are therefore excluded. At the same time, internal rent has been used instead of depreciation of the building in Oslo. As a result, operating expenses deviate from operating income in the annual accounts.

Costs in the executive areas are distributed by function. Moreover, all central staff and support expenses outside the operational areas are distributed by function.

The distribution is based on cost driver analysis. The proportions of the distribution keys are based on discretion and the results must be viewed accordingly. The analyses comprise both costs that the individual sections of the Bank can influence and more central bank-specific costs, which are generally fixed.

Gross costs in 2008 amounted to NOK 2 982m and net costs to NOK 734m. The corresponding figures for 2007 were NOK 2 631m and NOK 776m, respectively. Net use of resources has decreased by about NOK 40m. Costs related to statistics were lower as a result of the transfer of statistics activities to Statistics Norway. Costs were also somewhat lower for the items 'Notes and coin' and 'Other functions'.

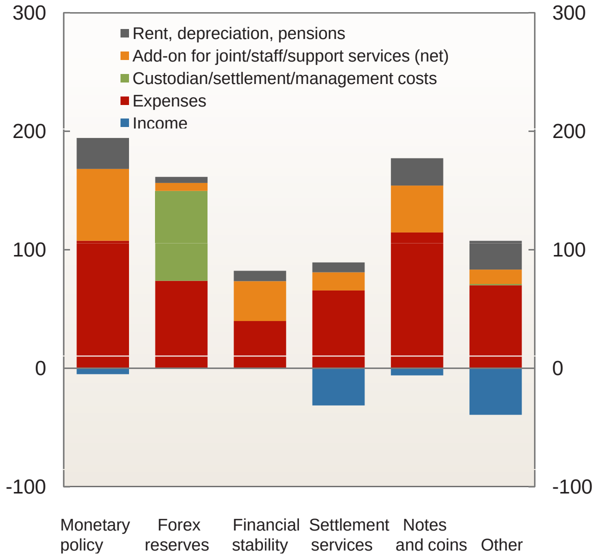
Management of the Government Pension Fund – Global is by far the most resource-intensive task. Gross costs were NOK 2 171m in 2008 and NOK 1 791m in 2007. Norges Bank's costs are covered by the Ministry of Finance according to the principle of full cost coverage.

Chart 45 shows the distribution of costs. The Government Pension Fund – Global is not included in the graphic presentation as the magnitude of the costs differs widely from those related to other responsibilities.

Apart from the management of the Government Pension Fund – Global, the tasks 'Monetary policy', 'Notes and coin' and 'Management of the investment portfolio in the foreign exchange reserves' are the most costly.

Costs for the purchase, production and distribution of notes and coins amounted to about NOK 175m. This is more than the amount shown in Table 2 in Chapter 2. The figure in Chart 45 is based on a distribution of the Bank's total costs, and not a selection of costs as in the table.

Chart 45 Use of resources by main function excl Government Pension Fund - Global (in millions of NOK)



[15] These include the organisation of historical archives, management of buildings, the Banking Law Commission, services for the government and the management of the Government Petroleum Insurance Fund.

[16] Return and interest resulting from the Bank's tasks relating to monetary policy and management of financial wealth are not included.

Working conditions

Norges Bank has consistently placed emphasis on the importance of providing good working conditions.

The Bank has a loan scheme for employees where the interest rate is equal to the norm interest rate.[17] The upper limit on housing loans is NOK 2 230 000 per employee.

The employee insurance programme covers personal guarantees (including compulsory occupational injury and occupational health insurance), group life insurance, group accident and illness insurance, business travel insurance and accident insurance for especially exposed occupations. These costs make up 1% of the Bank's total personnel expenses.

Norges Bank has its own pension fund for employees. Pension benefits are equal to 2/3 of the employee's salary, up to a ceiling of 12G*, at the time of retirement. A separate scheme funded through the Bank's operations has been established for those who earned more than this amount as of 31 December 2006. Benefits from the pension fund are coordinated with benefits from the National Insurance Scheme. Employees contribute 2% of their gross annual salary to the pension fund.

The Bank has 96 parking places at the head office which are used by employees at no cost. The Bank owns two conference and holiday facilities: Venastul, which is located in Ringebu municipality, near Lillehammer, recorded a total of 6 020 guest nights in 2008. Vindåsen, which is located in Tjøme, near Tønsberg, is only open during the summer and recorded 2 227 guest nights in 2008. Net operating grants to the holiday facilities in 2008 amounted to NOK 4.1m. Capital costs are not taken into account. In addition, Norges Bank owns a holiday cabin at Meheia near Kongsberg. The Bank also has agreements with central banks in Denmark, the Netherlands, the Czech Republic and Germany for reciprocal use of holiday facilities.

[17] The interest rate determined by the Ministry of Finance for use in the calculation of the taxable benefit on low–interest loans for employees

* G stands for 'grunnbeløp', the National Insurance Scheme's basic amount on which pensions and other benefits are based and which is adjusted each year by the Storting. As at 1 May 2008, G amounted to kr 70 256.

Appendices

Appendix A

Table 1. Norges Bank's balance sheet at 31 December 2007 and each month of 2008

	200712	200801	200802	200803	200804
FINANCIAL ASSETS					
FOREIGN ASSETS	**366 983**	**320 785**	**301 722**	**282 708**	**292 241**
International reserves	366 829	320 657	300 948	282 586	292 100
Other assets	154	128	774	122	141
Government Pension Fund - Global, investments	**2 016 955**	**2 000 238**	**1 970 540**	**1 945 389**	**2 017 407**
DOMESTIC ASSETS	**79 196**	**34 077**	**2 265**	**49 355**	**105 149**
Lending	75 627	30 490	460	38 541	102 822
Other assets	1 834	1 859	78	9 088	587
Fixed assets	1 444	1 437	1 436	1 435	1 449
Gold	291	291	291	291	291
TOTAL ASSETS	**2 463 134**	**2 355 100**	**2 274 527**	**2 277 452**	**2 414 797**
LIABILITIES AND CAPITAL					
FOREIGN LIABILITIES	**126 821**	**91 721**	**82 236**	**75 511**	**63 379**
Deposits	85	84	103	87	77
Borrowing	121 998	81 873	76 392	69 535	56 049
Other liabilities	3 296	8 303	4 323	4 475	5 851
Equivalent value of allocated Special Drawing Rights, IMF	1 442	1 461	1 418	1 414	1 402
Government Pension Fund - Global, deposits	**2 016 955**	**2 000 238**	**1 970 540**	**1 945 389**	**2 017 407**
DOMESTIC LIABILITIES	**262 810**	**211 041**	**177 502**	**216 310**	**291 760**
Notes and coins in circulation	55 685	50 657	49 799	49 994	49 322
Treasury deposits	148 494	136 952	112 281	131 007	204 345
Other deposits	53 517	18 680	14 950	35 139	28 017
Borrowing	0	0	0	0	0
Other liabilities	5 114	4 752	472	170	10 076
CAPITAL	**56 548**	**56 548**	**56 548**	**56 548**	**56 548**
PROFIT/LOSS	**0**	**-4 448**	**-12 299**	**-16 306**	**-14 297**
TOTAL LIABILITIES AND CAPITAL	**2 463 134**	**2 355 100**	**2 274 527**	**2 277 452**	**2 414 797**
Liabilities					
Allotted, unpaid shares in the BIS	253	253	253	253	253

[1] Cash collerateral received and reinvested is included in the balance sheet as from 31 Dec 2008 and is presented under International reserves and Borrowing. Balance sheet figures for 31 Dec 2007 have been restated accordingly.

Figures in millions of NOK

200805	200806	200807	200808	200809	200810	200811	200812
288 553	**256 855**	**254 411**	**257 872**	**270 268**	**313 841**	**357 938**	**413 282**
288 403	256 706	254 257	257 709	261 711	263 375	296 846	357 303
150	149	154	163	8 557	50 466	61 092	55 979
2 052 707	**1 990 598**	**2 019 137**	**2 112 710**	**2 118 580**	**2 090 915**	**2 149 074**	**2 273 289**
132 310	**97 614**	**53 512**	**45 274**	**79 180**	**107 502**	**145 114**	**141 961**
130 065	89 380	50 770	42 511	72 543	85 420	79 399	80 158
505	6 489	990	1 011	4 885	20 293	63 919	59 944
1 449	1 454	1 461	1 461	1 461	1 498	1 505	1 568
291	291	291	291	291	291	291	291
2 473 570	**2 345 067**	**2 327 060**	**2 415 856**	**2 468 028**	**2 512 258**	**2 652 126**	**2 828 532**
56 318	**50 501**	**45 833**	**46 765**	**44 874**	**109 373**	**165 517**	**175 070**
80	62	60	67	66	33 932	60 991	55 873
49 502	44 489	39 799	39 200	41 196	71 791	96 347	112 895
5 339	4 547	4 570	6 067	2 076	1 968	6 429	4 491
1 397	1 403	1 404	1 431	1 536	1 682	1 750	1 811
2 052 707	**1 990 598**	**2 019 137**	**2 112 710**	**2 118 580**	**2 090 915**	**2 149 074**	**2 273 289**
322 826	**268 854**	**227 716**	**217 219**	**263 090**	**268 082**	**290 180**	**320 286**
49 630	50 387	50 503	49 836	49 201	50 078	50 394	55 159
238 748	173 608	149 417	133 755	136 267	112 066	129 896	147 359
28 942	44 664	27 030	31 423	36 782	94 399	96 433	100 951
1	0	0	2	0	0	3	52
5 505	195	766	2 203	40 840	11 539	13 454	16 765
56 548	**56 548**	**56 548**	**56 548**	**56 548**	**56 548**	**56 548**	**59 887**
-14 829	**-21 434**	**-22 174**	**-17 386**	**-15 064**	**-12 660**	**-9 193**	**0**
2 473 570	**2 345 067**	**2 327 060**	**2 415 856**	**2 468 028**	**2 512 258**	**2 652 126**	**2 828 532**
253	253	253	253	253	253	253	324

Table 2. Norges Bank's profit and loss accounts at 31 December 2006-2008

Figures in millions of NOK

	2008	2007	2006
Interest income and dividends	12 599	15 506	13 025
Change in value financial instruments	-54 318	-3 692	6 604
Valuation adjustment of foreign exchange	63 522	-26 935	-4 985
Return on international reserves	**21 803**	**-15 121**	**14 644**
Share dividends, BIS	19	19	19
Gain/loss on other financial instruments	-16 379	3 877	-4 187
Gain/loss on domestic financial instruments in foreign currency	1 242	220	158
Gain/loss on domestic financial instruments in NOK	1 862	-233	-286
Interest expenses, Treasury, banks etc.	-4 614	-5 455	-4 241
Net other financial activities	**-17 870**	**-1 572**	**-8 537**
Total return financial activities	**3 933**	**-16 693**	**6 107**
Return on investments for Government Pension Fund - Global	**-127 046**	**-78 581**	**96 236**
Transferred from/to krone account Government Pension Fund - Global	**127 046**	**78 581**	**-96 236**
Management fees Government Pension Fund - Global	2 165	1 783	1 526
Other operating income	295	104	224
Total operating income	**2 460**	**1 887**	**1 750**
Personnel expenses	-745	-709	-580
Depreciation	-82	-79	-87
Other operating expenses	-2 227	-1 982	-1 688
Total operating expenses	**-3 054**	**-2 770**	**-2 355**
Net operating expenses	**-594**	**-883**	**-605**
Profit/loss for the year	**3 339**	**-17 576**	**5 502**
Transferred from Adjustment Fund	0	17 539	0
Transferred from 'Other capital'	37	37	37
Available for allocation	**3 376**	**0**	**5 539**
Allocated to Adjustment Fund	-3 376	0	-5 539
Allocated to Transfer Fund	0	0	0
Allocated to 'Other capital'	0	0	0
Total allocations	**-3 376**	**0**	**-5 539**

Table 3. Norges Bank's lending to and deposits from banks in 2008

	D-loans	Fixed-rate loans		Fixed-rate deposits		Sight deposits
Period	NOK bn[1]	NOK bn[1]	Nom. rate[2]	NOK bn[1]	Nom. rate[2]	NOK bn[1]
January	-	40.5	5.43	-	-	33.5
February	-	18.1	5.37	-	-	20.0
March	-	18.4	5.43	-	-	30.3
April	-	104.2	5.70	-	-	25.4
May	-	102.8	5.76	-	-	29.1
June	-	111.8	5.68	-	-	32.9
July	-	53.4	5.90	-	-	33.0
August	-	58.8	5.87	-	-	25.9
September	-	60.5	5.83	-	-	31.2
October	0.2	88	5.87	-	-	66.8
November	-	74.5	5.60	-	-	99.6
December	-	78.6	5.40	-	-	72.2

[1] Average of daily observations, in billlions of NOK
[2] Average allotment interest rate. Weighted average of all F-loans / F-deposits in the period

Table 4. Norges Bank's D-loan (overnight lending) and sight deposit rates

	D-loan rate		Sight deposit rate	
Period	Nominal	Effective	Nominal	Effective
14.12.06-24.01.07	5.50%	5.65%	3.50%	3.56%
25.01.07-15.03.07	5.75%	5.91%	3.75%	3.82%
16.03.07-30.05.07	5.00%	5.12%	4.00%	4.08%
31.05.07-27.06.07	5.25%	5.38%	4.25%	4.34%
28.06.07-15.08.07	5.50%	5.65%	4.50%	4.60%
16.08.07-26.09.07	5.75%	5.91%	4.75%	4.86%
27.09.07-12.12.07	6.00%	6.18%	5.00%	5.12%
13.12.07-23.04.08	6.25%	6.44%	5.25%	5.38%
24.04.08-25.06.08	6.50%	6.71%	5.50%	5.65%
26.06.08-15.10.08	6.75%	6.97%	5.75%	5.91%
16.10.08-29.10.08	6.25%	6.44%	5.25%	5.38%
30.10.08-17.12.08	5.75%	5.91%	4.75%	4.86%
18.12.08-	4.00%	4.08%	3.00%	3.04%

Table 5. Denominations of coins in circulation 2004-2008. Annual average and at end month in 2008

Figures in millions of NOK

	20-krone	10-krone	5-krone	1-krone	50-øre	10-øre [1)]	Total
2004	1 666.6	1 049.3	537.8	717.9	198.5	128.4	4 298.7
2005	1 778.2	1 076.2	562.9	752.6	207.6	128.4	4 505.8
2006	1 848.8	1 144.7	598.4	799.2	218.4	85.6	4 695.1
2007	1 664.5	1 213.7	630.0	844.7	228.4	-	4 581.3
2008	1 541.5	1 258.7	653.7	883.9	237.0	-	4 574.9
2008							
January	1 529.6	1 243.7	644.6	870.7	232.9		4 521.5
February	1 517.4	1 242.7	645.9	870.3	233.3		4 509.7
March	1 526.1	1 249.1	648.7	873.8	234.1		4 531.8
April	1 529.9	1 240.7	645.9	875.0	234.9		4 526.4
May	1 541.7	1 252.5	651.8	880.7	236.5		4 563.2
June	1 550.1	1 263.2	654.9	886.1	237.3		4 591.5
July	1 562.0	1 275.2	659.5	889.5	237.9		4 624.0
August	1 568.6	1 282.4	662.9	892.9	238.9		4 645.7
September	1 555.2	1 269.6	659.8	891.4	239.1		4 615.2
October	1 532.1	1 256.5	656.0	889.6	239.3		4 573.6
November	1 530.0	1 255.2	654.7	890.5	239.6		4 570.2
December	1 555.2	1 274.0	660.1	896.2	240.6		4 626.2

1) As of 1 March 2003, the 10-øre coin was no longer in use as legal tender and was redeemed by Norges Bank until 1 March 2003. The outstanding amount was recognised as income in Norges Bank's accounts in August 2006.

Table 6. Denominations of notes in circulation 2004-2008. Annual average and at end month in 2008

Figures in millions of NOK

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2004	23 555.0	8 277.5	4 792.3	2 012.0	792.5	39 429.4
2005	24 648.7	9 059.5	4 819.0	2 020.9	833.4	41 381.6
2006	25 817.5	10 373.5	5 296.3	2 119.3	916.2	44 522.8
2007	26 178.7	11 213.4	5 381.3	2 121.1	963.6	45 857.9
2008	25 371.2	11 882.2	5 522.4	2 083.0	979.7	45 838.5
2008						
January	26 294.7	11 515.4	5 308.4	2 053.0	964.5	46 136.0
February	25 609.4	11 408.6	5 285.9	2 034.3	951.3	45 289.5
March	25 354.0	11 576.6	5 529.4	2 044.4	957.4	45 461.9
April	24 938.2	11 403.2	5 442.8	2 052.8	958.6	44 795.6
May	24 822.8	11 587.3	5 537.5	2 132.8	986.3	45 066.7
June	25 129.3	11 874.4	5 593.1	2 188.3	1 010.2	45 795.3
July	24 986.6	12 009.9	5 646.7	2 205.1	1 030.2	45 878.5
August	24 574.7	11 926.6	5 587.4	2 100.6	1 001.4	45 190.7
September	24 455.3	11 697.8	5 418.5	2 038.3	975.9	44 585.8
October	25 295.5	11 871.0	5 384.8	1 997.5	955.5	45 504.2
November	25 385.6	11 985.4	5 465.5	2 021.0	965.9	45 823.4
December	27 608.3	13 730.6	6 069.2	2 127.9	998.5	50 534.5

Table 7. Banknotes destroyed 2004-2008

Figures in millions of notes

	1000-krone	500-krone	200-krone	100-krone [1)]	50-krone	Total
2004	2.7	7.8	12.5	11.6	12.3	46.8
2005	2.4	6.9	15.8	11.7	10.2	47.0
2006	2.6	7.8	16.5	12.2	10.5	49.6
2007	3.0	9.3	20.2	14.0	11.2	57.7
2008	3.1	7.7	17.9	13.1	10.6	52.3

The table shows the total number of banknotes destroyed excluding notes from older series (50- and 100-krone notes from Series III. IV and V and 500- and 1000-krone notes from Series II and IV). Banknotes are destroyed when they are worn or damaged, or when a series is replaced.

Table 8. Average life of banknotes 2004-2008

In years

	1000-krone	500-krone	200-krone	100-krone	50-krone
2004	8.7	2.1	1.9	1.7	1.3
2005	10.3	2.6	1.5	1.7	1.6
2006	9.9	2.7	1.6	1.7	1.7
2007	8.7	2.4	1.3	1.5	1.7
2008	8.2	3.1	1.5	1.6	1.9

The figures show the volume of notes in circulation compared with the number destroyed in the same year.

Table 9. Inflow of banknotes 2004-2008

Figures in millions of notes

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2004	32.4	104.9	230.1	90.2	33.1	490.7
2005	31.0	103.6	205.9	87.3	34.1	461.9
2006[1)]	15.7	46.6	84.0	38.7	16.4	201.5
2007	14.0	38.0	56.4	30.0	13.5	151.8
2008	13.2	33.4	47.7	26.3	12.3	132.9

The table shows the number of banknotes delivered to Norges Bank.

1) The substantial decline from 2005 to 2006 is due to changes in conditions for deposits and withdrawals of cash from Norges Bank and the establishment of private cash depots.

Table 10. Velocity of banknote circulation 2004-2008

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2004	1.37	6.33	9.60	4.48	2.09	4.91
2005	1.26	5.72	8.54	4.32	2.05	4.45
2006[1)]	0.61	2.25	3.17	1.83	0.89	1.79
2007	0.53	1.69	2.10	1.41	0.70	1.31
2008	0.52	1.41	1.73	1.26	0.63	1.13

The table shows the average number of times the notes pass through Norges Bank per year.

1) See footnote in Table 9.

Table 11. Inflow of coins to Norges Bank 2004-2008

In millions of coins

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2004[1)]	281.4	117.4	83.7	361.0	63.6	907.1
2005	107.3	155.1	123.6	349.2	90.7	826.0
2006[2)]	38.7	37.2	28.3	81.0	17.9	203.1
2007[3)]	25.4	13.5	9.0	16.6	3.9	68.4
2008	6.3	8.5	6.0	13.0	2.6	36.4

The table shows the number of coins delivered to Norges Bank.

1) The figures are estimates because of changes in the recording of coins in Norges Bank's books
2) See footnote in Table 9
3) The decline in 2007 and 2008 is primarily due to changes in the circulation pattern.
Developments for the 20-krone coin were also influenced by the ban on slot machines which came into force on 1 july 2007

Table 12. Velocity of coin circulation 2004-2008

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2004[1)]	3.38	1.12	0.78	0.50	0.16	0.64
2005	1.21	1.44	1.10	0.46	0.22	0.56
2006[2)]	0.42	0.32	0.24	0.10	0.04	0.13
2007[3)]	0.31	0.11	0.07	0.02	0.01	0.04
2008	0.08	0.07	0.05	0.01	0.01	0.02

The table shows the average number of times the coins pass through Norges Bank per year.

1) See footnote 1 in Table 11
2) See footnote in Table 9
3) See footnote 3 in Table 11

Table 13. Production of circulation coins at Det Norske Myntverket (Mint of Norway) 2004-2008[1)]

In thousands of coins

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2004	499	503	503	25 151	14 806	41 462
2005	553	466	503	25 648	4 963	32 133
2006	1 000	497	509	63 129	30 227	95 362
2007	493	474	9 152	47 108	20 117	77 345
2008	481	5 193[2)]	5 502	46 047	19 391	76 615

1) The table shows the number of coins minted in each year and inscribed with that year's date. All 20-krone coins minted in 2004 (150th anniversary of rail transport in Norway) and 2006 (the Ibsen Year) are special edition circulation coins.
2) In 2008, 4 628 000 10-krone special edition Henrik Wergeland coins were minted and 565 000 ordinary 10-krone coins.

Table 14. Banknote production 2004 - 2008.[1)]

In packets of 500 notes

	1000-krone	500-krone	200-krone	100-krone	50-krone
2004	24 700	0	70 380	54 556	1 584
2005	45 912	52 900	0	0	71 524
2006	0	26 882	30 200	127 027	0
2007	0	0	77 700	0	0
2008	0	0	0	0	51 200

The table shows figures for notes produced for Norges Bank and should not be used to indicate the number of notes printed with the date of each year.

1) Norges Bank's Printing Works was closed down on 30 June 2007

Tabell 15. Norges Bank's banknote series 1877 - 2008. Period of production

	Series I	Series II	Series III	Series IV	Series V	Series VI	Series VII
1000-krone notes	1877-98	1901-45	1945-47	1949-74	1975-89	1989-99	2001-
500-krone notes	1877-96	1901-44	-	1948-76	1978-85	1991-98	1999-
200-krone notes	-	-	-	-	-	-	1994-
100-krone notes	1877-98	1901-45	1945-49	1949-62	1962-77	1977-95	1995-
50-krone notes	1877-99	1901-45	1945-50	1950-65	1966-84	1984-96	1996-
10-krone notes	1877-99	1901-45	1945-53	1954-74	1972-85	-	-
5-krone notes	1877-99	1901-44	1945-54	1955-63	-	-	-
Low denomination banknotes							
1-krone notes	1917	1940-50					
2-krone notes	1918	1940-50					

Series I ceased to be legal tender on 13 July 1988. Series II notes were invalidated in connection with the monetary reform in 1945. Notes in Series III and IV and the10-,50- and 100-krone notes in Series V ceased to be legal tender on 13 July 1989. Notes in Series I, II and III are not redeemed by Norges Bank. The 1000-krone notes in Series V ceased to be legal tender on 1 August 1991, as did the 500-krone notes on 21 June 1992. The 50-krone notes in Series VI ceased to be legal tender on 28 January 1998, the 100-krone notes on 5 September 1998, the 500-krone notes on 17 April 2001 and the 1000-krone notes on 26 June 2002. The 1- and 2-krone notes from the period 1917-1918 are no longer legal tender and are not redeemed by Norges Bank. The 1- and 2-krone notes from the period 1940-1950 ceased to be legal tender on 13 July 1989 and are not redeemed by Norges Bank.

Appendix B
Norges Bank's management and organisation

The Bank's governing bodies

The governing bodies of the Bank are the Executive Board and the Supervisory Council.

Pursuant to the Act on Norges Bank and the Monetary System of 24 May 1985, the executive and advisory authority is vested in the Executive Board. It is in charge of the Bank's operations and manages its funds. The Executive Board consists of seven members, appointed by the King. The Governor and Deputy Governor are chairman and deputy chairman respectively of the Executive Board. They are appointed to full-time positions for a term of six years. The other five members are appointed for four-year terms. Two employee representatives supplement the Executive Board when administrative matters are discussed. The Executive Board normally meets every three weeks. Every second meeting is a monetary policy meeting.

The Executive Board has appointed an administration committee, which has decision-making authority in administrative matters (the internal management of Norges Bank). This committee is composed of the following members: the Governor of Norges Bank, the Deputy Governor of Norges Bank, the executive director of Norges Bank Staff and Group Services and the employee representatives on the Executive Board.

In accordance with the Norges Bank Act, the Governor of Norges Bank is in charge of the Bank's administration and the implementation of Executive Board decisions.

The Supervisory Council ensures that the rules governing the Bank's activities are observed, organises the auditing of the Bank, adopts the annual accounts and approves the budget on the recommendation of the Executive Board. The Supervisory Council consists of fifteen members elected by the Storting for four-year terms. From among the members, the Storting selects the chairman and deputy chairman for terms of two years. The Supervisory Council usually meets five times a year.

The composition of the Executive Board and Supervisory Council as at January 2009:

The Executive Board

Governor of Norges Bank **Svein Gjedrem**, Chairman. Appointed Governor of Norges Bank 1 January 1999 for a period of up to six years, reappointed 1 January 2005 for a second six-year period.

Deputy Governor of Norges Bank **Jan F. Qvigstad**, Deputy Chairman. Appointed Deputy Governor of Norges Bank 1 April 2008 for a term of up to six years.

Vivi Lassen (appointed 01.01.2002-31.12.2005. Reappointed 01.01.2004-31.12.2005 and 01.01.2005-31.12.2009)
Alternate: **Kari Broberg** (reappointed 01.01.2006-31.12.2009)

Brit K. Rugland (appointed 01.01.2004-31.12.2005. Reappointed 01.01.2006-31.12.2009)
Alternate: **Berit Tennbakk** (01.12.2006-31.12.2009)

Øystein Thøgersen (appointed 01.01.2004-31.12.2005. Reappointed 1.1.2006-31.12.2009)
Alternate: **Ingunn Myrtveit** (reappointed 01.01.2006-31.12.2009)

Liselott Kilaas (appointed 01.01.2004-31.12.2007. Reappointed 01.01.2008-31.12.2011)
Alternate: **Aage Thor Falkanger** (reappointed 01.01.2008-31.12.2011)

Asbjørn Rødseth (appointed 01.01.2004-31.12.2007. Reappointed 01.01.2008-31.12.2011)
Alternate: **Eirik Wærness** (reappointed 01.01.2008-31.12.2007)

Employee representatives:
Jan Erik Martinsen (appointed 01.01.2001 -)
Tore Vamraak (appointed 01.01.2008-31.12.2008. Reappointed 01.01.2009-31.12.2010)
Eigil Nyberg (alternate)
Gunnvald Grønvik (alternate)

Supervisory Council

Mary Kvidal, 2006-2009 (re-elected) (Chairman 2008-2009)
Alternate: **Lars Gjedebo**, 2006-2009
Frank Sve, 2006-2009 (Deputy Chairman 2008-2009)
Alternate: **Tone Liljeroth**, 2008-2009
Terje Ohnstad, 2008-2011 (re-elected)
Alternate: **Anne Grethe Kvernrød**, 2008-2011
Eva Karin Gråberg, 2008-2011 (re-elected)
Alternate: **Jan Elvheim**, 2008-2011 (re-elected)
Tom Thoresen, 2008-2011 (re-elected)
Alternate: **Hans Kolstad**, 2008-2011 (re-elected)
Runbjørg Bremset Hansen, 2008-2011 (re-elected)
Alternate: **Camilla Bakken Øvald**, 2008-2011 (re-elected)
Kåre Harila, 2008-2011 (re-elected)
Alternate: **Liv Sandven**, 2008-2011 (re-elected)
Anne Strifelt, 2006-2009
Alternate: **Inger Spangen**, 2006-2009
Reidar Åsgård, 2006-2009
Alternate: **Ola Røtvei**, 2006-2009
Oskar Grimstad, 2006-2009
Alternate: **Pål Morten Borgli**, 2006-2009
Terje Johansen, 2006-2009
Alternate: **Torhild Skogsholm**, 2006-2009
Erland Vestli, 2008-2009

Alternate: **Frode Klemp**, 2006-2009
Tormod Andreassen, 2008-2011
Alternate: **Bjørn Lødemel**, 2008-2011
Gunvor Ulstein, 2008-2011
Alternate: **Beate Bø Nilsen**, 2008-2011
Ivar B. Prestbakmo, 2008-2011
Alternate: **Torunn Hovde Kaasa**, 2008-2011

Audit
Svenn Erik Forsstrøm
State Authorised Public Accountant

Norges Bank's management and organisation

Management
Governor of Norges Bank Svein Gjedrem
Deputy Governor Jan F. Qvigstad

Norges Bank Monetary Policy
Executive Director Jon Nicolaisen

Research Department
Director Øyvind Eitrheim

International Department
Director Audun Grønn

Department for Market Operations and Analysis
Director Anders Svor (acting)

Monetary Policy Department
Director Kjetil Olsen (acting)

Human Resources and Administration
Director Ilse Bache

Economics Department
Director Ingvild Svendsen (acting)

Norges Bank Financial Stability
Executive Director Kristin Gulbrandsen
Deputy Executive Director Birger Vikøren

Financial Markets Department
Director Snorre Evjen (acting)

Payment Systems
Director Knut Sandal

Interbank Settlement Department
Director Kjetil Heltne

Cashier's Department
Director Trond Eklund

Contingency planning
Director Arild J. Lund

Research Department
Head of Research Farooq Akram (acting)

Shared Services
Director Inger-Johanne Sletner

Management Development
Director Kari Gjesteby

Norges Bank Investment Management
Executive Director Yngve Slyngstad

Investment
Executive Director Yngve Slyngstad
Director Dag Løtveit

Operations
Director Stephen A. Hirsch
Director Trond Grande

Control
Director Marius Nygaard Haug

Norges Bank Staff and Group Services
Executive Director Jannecke Ebbesen
Director Anne-Britt Nilsen

Staff Services
Director Nils T. Eide

Property Management Department
Director Marit Kristine Liverud

Security Department
Head of Security Arne Haugen

Shared Services
Director Torkel Fagerli

ICT Department
Director Øyvind Seljeseth

Communications Department
Director of Communications Siv Meisingseth

Legal Department
Executive Director Marius Ryel

Internal Audit
Head of Internal Audit Ingunn Valvatne