## Annual Report 2010



**%NB**% NORGES BANK



### Contents

#### PART I. Highlights in 2010 Norges Bank's Executive Board Annual Report of the Executive Board 2010

Monetary policy and financial stability
Investment management 9
Organisation and personnel
Use of resources and restructuring
Gender equality and diversity
Health, environment and safety
Internal control and risk management
Ethical rules
Norges Bank's financial statements
Distribution of profit

#### PART II. Financial statements Norges Bank 2010

Profit and loss account	19
Balance sheet at 31 December 2010	20
Notes	22
Auditor's report 2010	86
Report on the financial statements	86
Report on other legal and regulatory requirements	87
Resolution of the Supervisory Council on the	
financial statements for 2010	88
The Supervisory Council's statement on the	
minutes of the meetings of the Executive Board	
and its supervision of the Bank in 2010	88

#### PART III. Norges Bank's activities

Chapter 1. Organisation, management	
and use of resources	92
Promoting economic stability in Norway	92
Organisation of activities	92

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Values
Focus on core functions 94
Distribution of costs by main function94
Norges Bank – a specialist enterprise97
Communications activities
Speeches
Website
Other publications
Chapter 2. Monetary policy
MONETARY POLICY IN 2010100
Turbulence in the wake of the financial crisis $\ldots100$
Modest upturn
Renewed turbulence
Low inflation
LIQUIDITY POLICY IN 2010106
Norges Bank adopted a new liquidity
management system106
Supply of NOK liquidity107
The swap arrangement
Money market premiums
EVALUATION – USE OF INSTRUMENTS 110
Minor fluctuations in the money market
Historical response patterns
Monetary growth and inflation
EVALUATION – PERFORMANCE OVER TIME 113
Inflation is low and stable
$EVALUATION-INFLATION\ EXPECTATIONS\ .\ 114$
Confidence in the inflation target
Chapter 3. Financial stability
WORK ON FINANCIAL STABILITY116
New regulation of bank capital and liquidity 116
FINANCIAL INSTITUTIONS AND
FINANCIAL MARKETS
The state of the Norwegian financial system118
Norges Bank's recommendations for measures . 118
Participation in international supervisory bodies $\dots 121$
PAYMENT SYSTEMS
Norges Bank's responsibility and role in
monitoring the Norwegian payment system122
No disturbances in Norges Bank's
settlement system

Collateral for loans from Norges Bank	124
Centralised securities settlement in Europe	125
Government accounts in Norges Bank	125
NOTES AND COINS	126
No change in cash circulation in 2010	126
Low seizure of counterfeit Norwegian notes	126
Organisation of cash distribution	127
Chapter 4. Investment management	128
Foreign exchange reserves and claims	
on the IMF	128
Government Pension Fund Global	131
Government Petroleum Insurance Fund	131
Chapter 5. International cooperation	132
Loans and support in connection with	
the international financial crisis	132
Loan agreements with the International	
Monetary Fund (IMF)	132
Loan agreement with Seðlabanki Íslands	132
Regular contact and cooperation with other central	l
banks and international organisations	132
Technical assistance to the Reserve Bank	
of Malawi	135
Chapter 6. Other functions	136
Foreign exchange transactions	136
Government debt 2010	136
Research in 2010	139
Participation in the research community	139
Support for economic research	139
Norges Bank's bicentenary project	
Appendix	141
Norges Bank's governing bodies, management	
and organisation	141

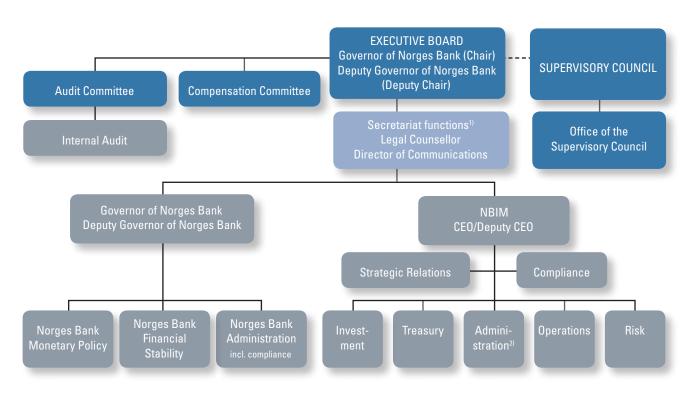


## Norges Bank is Norway's central bank. The Bank is a separate legal entity owned by the state.

#### The Bank's activities are regulated by the Norges Bank Act.

The Bank shall promote economic stability in Norway. Norges Bank has executive and advisory responsibilities in the area of monetary policy and is responsible for promoting robust and efficient payment systems and financial markets. Norges Bank manages Norway's foreign exchange reserves and the Government Pension Fund Global (GPFG). Norges Bank is to be an efficient organisation while maintaining high professional and ethical standards.

The objectives of the Bank's core activities are price stability, financial stability and added value in investment management.



Performs secretariat functions for the Executive Board, the Compensation Committee, Audit Committee, safeguards the legal framework for central bank activities and the Executive Board's external communication

### Highlights in 2010

- Norges Bank's key policy rate was raised by 0.25 percentage point in May and thereafter kept unchanged at 2% to end-2010. Underlying inflation was below the inflation target in 2010 and decreased through the year.
- Renewed turbulence arose in international financial markets due to uncertainty about government finances in some European countries. Government bond yields for these countries rose sharply. After arranging a rescue package for Greece in May, the EU and IMF quickly established a loan scheme that could also include other countries. In November Ireland had to request assistance from the EU and the IMF, making it the first country to receive funds from the European Financial Stability Facility (ESFS), a crisis fund established by the euro area countries.
- A third daily gross clearing (primarily card payments and Internet bank transfers) was introduced for settlement in Norges Bank. This increases time efficiency in the Norwegian payment system.
- To dampen demand for central bank liquidity and promote greater interbank market activity, on 15 December 2010, Norges Bank's Executive Board approved an amendment to the Regulation on the Access of Banks to Borrowing and Deposit Facilities in Norges Bank etc. The amendment allows for a new liquidity management system in which only a certain amount of banks' deposits a quota will bear interest at the key policy rate. Deposits in excess of this quota will bear a lower interest rate. The system will be introduced on 3 October 2011.
- A broad-based rise in global equity and fixed income markets provided the Government Pension Fund Global (GPFG) with a return of 9.6% in 2010. The market value of the GPFG passed NOK 3tn, after increasing by more than NOK 1tn in three years.

- The GPFG announced its first investment in real estate. A final agreement and completion of the transaction to purchase 25% of a portfolio of properties in Regent Street in London is expected in spring 2011. Real estate is a new investment area that is intended to make the most of the GPFG's long-term profile and size.
- The Supervisory Council implemented changes in its oversight and control tasks for the Bank on the basis of amendments to Sections 5 and 30 and a new Section 30a of the Norges Bank Act. The Central Bank Auditor has been replaced by an external auditor for the Bank chosen by the Supervisory Council. An engagement contract was signed with Deloitte AS for the next six years. A separate secretariat, the Office of the Supervisory Council, has been established to assist the Supervisory Council with professional and administrative tasks. The Supervisory Council issued a separate annual report to the Storting on its oversight of the Bank for the first time in 2010.
- Øystein Olsen was appointed the new governor of Norges Bank in October to succeed Svein Gjedrem, who stepped down at the end of December.



### Norges Bank's Executive Board

The Executive Board supervises the executive and advisory activities of the Bank and consists of seven members, all appointed by the King. Employees have two members who participate in meetings when the Executive Board deals with administrative matters.

#### Members of the Executive Board

#### **Øystein Olsen**

(Appointed governor of Norges Bank as from 1 January 2011 for a term of 6 vears)

Postgraduate degree in economics (Cand. oecon) from the University of Oslo (1977). His work experience includes positions as director general, Economic Policy Department, Ministry of Finance, and director general, Statistics Norway. He was also professor II at BI Norwegian School of Management.

#### Jan F. Qvigstad

(Appointed deputy governor of Norges Bank from 1 April 2008 for a term of 6 years)

Postgraduate degree in economics (Cand. oecon) from the University of Oslo (1975). His work experience includes posts as principal officer and assistant director, Economics Department at the Ministry of Finance and as executive director of Norges Bank Monetary Policy.

#### **Brit K. Rugland**

(Appointed 1 January 2004 - 31 December 2005. Reappointed 1 January 2006 - 31 December 2009 and 1 January 2010 - 31 December 2013)

Manager and owner of investment company Rugland Invest. Chair, board of directors of the new, state-owned gas company Gassco AS. Has broad experience from the petroleum, financial and shipping industries.

#### **Liselott Kilaas**

(Appointed 1 January 2004 - 31 December 2007. Reappointed 1 January 2008 - 31 December 2011)

Managing director, Aleris Norge. Graduate of University of Oslo and Institute for Management Development (IMD) in Lausanne. Member of the board of directors at Telenor and has broad experience from the ICT sector, petroleum industry and consultancy

#### Asbjørn Rødseth

(Appointed 1 January 2004 - 31 December 2007. Reappointed1 January 2008 - 31 December 2011)

Professor of economics of the Faculty of Social Sciences, University of Oslo. Has long experience as a researcher, including in fiscal and monetary policy. Has been member of various committees, i.a. the Royal Commission on Pensions. He has also held the post of vice chair of the board of directors at Kredittilsynet.

#### Ida Helliesen

(Appointed 1 January 2010 - 31 December 2013)

Retired. Helliesen has held several executive positions in Norsk Hydro, including CFO. She is a business economist and has been a member of several government commissions, such as "Energilovutvalget" and "Teleutvalget". She has also held directorships at Aker-Solutions, Skagerak Energi, Statistics Norway, Storebrand Bank and served as a member of the Norwegian Ministry of Finance's Investment Strategy Council.

#### **Eirik Wærness**

(Appointed 1 January 2010 - 31 December 2013)

Managing director, Econ Pöyry. Has work experience from the Norwegian Ministry of Finance, Total E&P Norge and Statoil. Wærness is an economist with Norwegian and international qualifications and research experience.

#### Jan Erik Martinsen

(Appointed 1 January 2001 - 31 December 2012)

Employee of Norges Bank since 1975. Chief safety delegate in the period 1 January 1994 - 31 December 2000. Represents the employees. Served as deputy chairman of Norges Bank's Staff Association from 2001 to 2006, and has been chairman since 1 January 2007.

#### **Gøril Bjerkhol Havro**

(Appointed 1 January 2011 - 31 December 2012).

Employee of Norges Bank since 2008. Has a BA in political science, philosophy and economics from the University of Oxford, a master's degree in development studies from Nelson Mandela Metropolitan University in South Africa, and a business economics degree from HEC Paris with specialisation in economics and finance. Worked from 2006 to 2008 in the area of emerging economies at the OECD Development Centre i Paris, with particular emphasis on natural resource management and Latin America.



## Annual Report of the Executive Board 2010

# Annual Report of the Executive Board 2010

Under the Norges Bank Act, executive and advisory authority in Norges Bank is vested in the Executive Board. The Board is in charge of the Bank's operations and the management of its resources.

The Executive Board has seven members, all appointed by the King-in-Council. The governor and deputy governor are chairman and deputy chairman respectively of the Executive Board. The other five members are not permanent employees of the Bank. As from 2010, in accordance with an amendment to the Norges Bank Act, two alternates were appointed for the five external members of the Board. They attend Executive Board meetings on a regular basis with the right to be present and to speak and to participate in the Board's seminars and study visits in addition to the regular meetings. Two employee representatives supplement the Executive Board when administrative matters are discussed. These matters primarily concern the Bank's internal operations and conditions for the staff.

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

It is important to the Executive Board that internal control and risk management at the Bank should be effective in all areas of the Bank's operations. The amendments to the Norges Bank Act regarding audit and oversight adopted by the Storting in 2009 have strengthened the legal basis for these functions. The Act now specifically provides that "the Executive Board shall ensure sound organisation of, and establish satisfactory frameworks, objectives and principles for, the Bank's operations. The Executive Board shall ensure that the Bank's operations, including accounts and asset management, are subject to adequate management and control". The Ministry of Finance has also laid down a Regulation on risk management and internal control at Norges Bank. For more details, see 'Internal control and risk management', below.

The Executive Board held 15 meetings in 2010 and dealt with 163 matters compared with 188 in 2009. The decrease was mainly due to changes in reporting procedures and to delegation of decision-making authority in certain matters to the governor of Norges Bank and the head of Norges Bank Investment Management (NBIM).

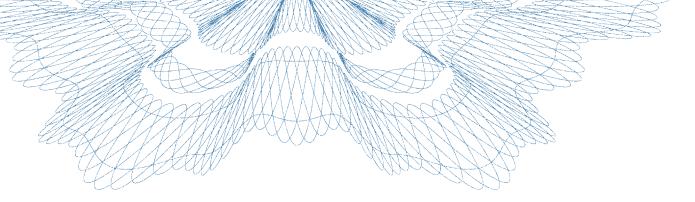
## Monetary policy and financial stability

The continuing global impact of the aftermath of the financial crisis was reflected in the conduct of monetary policy and work on financial stability in Norway in 2010. High and rising government debt in many countries led to financial market turbulence and uncertainty with regard to the strength of the recovery in Europe. However, the downturn in the Norwegian economy proved to be mild. It became clear at the beginning of 2010 that the recovery both in Norway and abroad would be more subdued than expected towards the end of 2009. Growth in the Norwegian economy gained a firm footing through summer and autumn, even though the level of capacity utilisation was below normal throughout 2010.

The operational target of monetary policy is annual consumer price inflation of approximately 2.5% over time. Viewed over time, inflation has been low and stable, remaining somewhat below, but fairly close to 2.5%. Consumer price inflation varies considerably from year to year and from month to month, partly as a result of short-term fluctuations in energy prices. Excluding energy prices, the underlying rise in consumer prices slowed through 2010 to around 1.5% at the end of the year, which was lower than expected despite a marked pickup in energy prices towards year-end. There were prospects that the rise in consumer prices could stabilise in early 2011 and pick up again gradually thereafter.

Norges Bank's key policy rate was raised by 0.25 percentage point in May, but was then kept unchanged at 2% to the end of the year. In the March *Monetary Policy Report*, the forecast for the key policy rate was revised down and the Executive Board signalled in both June and October that a rise in the key policy rate would probably be further postponed.

A high supply of liquidity to the banking system was necessary to keep short-term money market rates close to the key policy rate. Premiums in longer money market rates were nonetheless still higher in Norway than in other countries. To curb demand for central bank liquidity and promote liquidity distribution in the interbank money market, the Executive Board decided to change the system for liquidity management in the banking system.



In view of favourable results and increased capital adequacy among banks, Norges Bank considered that the financial stability outlook had improved at end-2010 compared with 2009. Risk for banks ahead was related in particular to the uncertainty surrounding international economic and financial market developments and to the vulnerability associated with the high household debt burden in Norway.

The main measures for restraining the buildup of imbalances are long-term framework conditions that raise the cost of rapid debt growth among financial institutions and induce them to increase equity-based funding. Norges Bank has proposed that the new international capital and liquidity standards for banks should be introduced more rapidly in Norway than implied by the international schedule.

Norges Bank has also announced that the Bank will regularly assess whether the situation in the Norwegian economy warrants discretionary use of countercyclical measures aimed at the financial sector. In periods when credit growth in Norway is high enough for potential imbalances to build up, a requirement to vary capital requirements according to economic conditions may be imposed to ensure that all banks in Norway build up larger buffers against future losses.

It is important to design a crisis resolution system that ensures continued operation of key banking services and ensures that owners and unsecured creditors take losses when a bank encounters problems and is subject to government measures. This requires a new toolkit that can quickly be deployed to minimise adverse impacts on the economy. Norges Bank has for example proposed that it should be possible to split up crisis banks to ensure continued operation of key banking services.

The Norwegian payment system functioned effectively in 2010. There were no interruptions in the settlement system's technical operations.

#### Investment Management

At end-2010 Norges Bank managed assets totalling NOK 3 342bn in international capital markets. The assets consisted mainly of the Government Pension Fund Global (GPFG), which is managed by Norges Bank on behalf of the Ministry of Finance. The Bank also manages its own international reserves. The Government Petroleum Insurance Fund, which the Bank managed on behalf of the Ministry of Petroleum and Energy, was closed on 31 December 2010, and the assets of NOK 20bn were transferred to the GPFG.

Equity and bond prices rose through 2010, yielding solid results in investment management. The return on the GPFG was 9.6% in 2010. The return on the Government Petroleum Insurance Fund was 2.9%, while the return on the foreign exchange reserves investment portfolio was 8.7%.

The favourable results in 2009 and 2010 followed weak results in 2008. The valuation of many securities during the financial crisis implied expectations of a deep and long-lasting recession in the world economy. Expectations have improved through the past two years following extensive government measures in many countries. This has also resulted in a rise in the value of assets under management.

The market value of foreign exchange reserves in the accounts, less borrowing in foreign currency, stood at NOK 259bn at the end of 2010. The reserves are managed partly as a money market portfolio, with short-term fixed income investments, and partly as an investment portfolio, with an investment strategy in line with the GPFG.

Norges Bank's Executive Board issued new investment guidelines for the foreign exchange reserves in 2010. The experience of the financial crisis had shown that the degree of liquidity had to be improved. The benchmark index for bonds was restructured to include only government securities and securities issued by international organisations with the highest credit rating, denominated in four currencies (USD, JPY, EUR and GBP). The allocation to equities was kept at 40%, but the least liquid markets were removed and the regional weights were replaced with global market weights.



At end-2010, the market value of the GPFG was NOK 3 077bn, an increase of NOK 437bn on the previous year. Of this increase, NOK 264bn was the return in international currency, while NOK 182bn was new capital transferred by the Ministry of Finance. A stronger krone resulted in isolation in a fall in the value of the GPFG of NOK 8bn.

Active management yielded positive results again in 2010: the return in 2010 was 1.06 percentage points higher than the return on the benchmark portfolio. Excess return in active management has averaged 0.31 percentage point annually since 1998, which is somewhat higher than the target.

In March 2010, Norges Bank was assigned a mandate to invest in real estate in connection with the management of the GPFG. The first investment was publicly announced towards the end of 2010. The transaction is expected to be completed on 1 April 2011 and confers rights in a portfolio of Regent Street properties in London. This is the first investment in unlisted assets and this type of investment will probably become more important in the years ahead.

In autumn 2010, Norges Bank's Executive Board adopted a new strategic plan for NBIM for the period 2011–2013. The plan outlines an investment strategy in which Norges Bank is assigned more responsibility for the return on the GPFG, not only for the excess return in relation to the benchmark portfolio. Support functions for investment activities will be simplified, including sharing support systems among the various asset classes.

The Ministry of Finance issued a new mandate for NBIM towards the end of 2010.

Norges Bank practices active management in order to safeguard and build up financial assets for future generations. The Bank promotes shareholder rights and works to improve social and environmental conditions in the companies in its investment portfolio. The exercise of ownership rights in Norges Bank is based on the principles expressed in the UN Global Compact and the OECD Principles of Corporate Governance and Guidelines for Multinational Enterprises. Norges Bank votes at the general meetings of about 90% of the companies in the portfolio.

The Executive Board also refers to the annual report on the Government Pension Fund Global, published by Norges Bank.

#### Organisation and personnel

#### Use of resources and restructuring

The Executive Board attaches importance to high standards and low costs in the Bank's performance of its responsibilities. Operations must be well managed, reflect a strong ethical awareness and seek to set a standard for international best practice for small central banks. The Bank must be transparent in its operations, continue to build on its good reputation and show willingness and the capacity to adapt to change.

In recent years, the Bank has concentrated its operations on the core areas of monetary policy, financial stability and investment management and the operational and support responsibilities associated with these functions. This has resulted in considerable restructuring over the past ten years.

Norges Bank's human resource policy objective is to ensure that the Bank attracts, develops and retains qualified staff. Achieving this objective depends on the application of appropriate human resource policy instruments that are used according to intentions and that achieve the desired results.

At end-2010, Norges Bank had a total of 589 permanent employees, the same number as at the end of 2009. The number of employees has been reduced by about 600 since the latter half of the 1990s. This has been accompanied by an increase in the use of resources in the Bank's core areas. In NBIM, there has been a marked increase in the number of employees in recent years. This is particularly due to the strong growth in total GPFG assets. The number of permanent employees in NBIM at end-2010 was 278, an increase of about 30 since 2009. The number employed in this area of the Bank's activities will also be increased in the years ahead.

Norges Bank uses human resource policy programmes to facilitate employees' adaptation to restructuring at the Bank. Since 1998 a total of 348 termination agreements have been concluded. Ten new agreements were concluded in 2010. NOK 71m has been set aside in the accounts to cover future payments related to restructuring.

"The Executive Board attaches importance to high standards and low costs in the Bank's performance of its responsibilities"



#### Gender equality and diversity

Norges Bank aims to have a sound and inclusive working environment characterised by good cooperation. At end-2010, the Bank had employees from 25 nations, with the greatest ethnic diversity in NBIM. The Bank provides language training and assistance for new employees. It is important to the Executive Board that the Bank pursues a human resource policy consistent with its international recruitment profile.

Female staff at Norges Bank accounted for 37% of the total number of employees at end-2010. The target of 40% for the defined occupational categories has been met for both the lowest and the highest occupational categories at the Bank except in NBIM. In NBIM, there is still some way to go before the targets of 33% for the lowest occupational categories and 25% for the highest have been reached. Efforts are being made to increase the proportion of women in managerial posts by actively seeking female candidates for vacant managerial posts, both externally and internally. The Bank finds it important to offer both women and men opportunities for development and managerial training. As far as practically possible, provisions are made for flexible working conditions.

#### Health, environment and safety

Norges Bank is an inclusive workplace enterprise and conducts a systematic analysis of the working environment through an annual survey. The employees are also offered an annual occupational health interview.

The Executive Board attaches considerable importance to ensuring adequate safety in all areas of the Bank's operations. The objective is to protect the lives and health of employees and associates, while securing the considerable assets managed by the Bank. No serious injuries or accidents were recorded in connection with the Bank's operations in 2010. Norges Bank has no significant impact on the external environment.

The Working Environment and Works Council at Norges Bank assesses the working environment in general as good and refers to the low rate of sickness absence at the Bank. The physical working environment seems to be particularly well adapted to employees' needs and facilities and equipment are adjusted as necessary. In 2010, 2.7% of employees were absent from work due to illness, com-

pared with 3.0% in 2009. Of this, long-term sickness absence (16 days or more) stood at 1.4%, compared with 1.5% in 2009. The Committee receives regular reports on the results of health, environment and safety surveys conducted by the Bank.

## Internal control and risk management

Risk management and internal control are essential to the Bank's operations and are an integral part of line management responsibilities and the management system at the Bank. The Executive Board has also adopted principles for risk management. Systematic measures have been put in place to identify, measure and follow up the most important risks to which Norges Bank is exposed.

The Bank reports to the Executive Board on the risk situation as an integral part of management. The Executive Board is informed of substantial changes in the risk situation and an overall assessment is submitted to the Board each year. The Board receives quarterly reports from NBIM.

Changes in the management of the GPFG in particular, but also in the Bank's other core functions, entail higher operational risk and reputational risk. This presents challenges to the Bank and its governing bodies.

Norges Bank is primarily exposed to financial risk in the form of market risk, credit risk, counterparty risk and currency risk through its management of the investment portfolio and the money market portfolio. In addition, the Bank is exposed to credit risk associated with lending to banks. Market risk is the risk that the value of a portfolio will change due to a change in interest rates or equity prices. The composition of the investment and money market portfolios and the associated risk is primarily determined by the benchmark portfolio defined by the Executive Board. The Executive Board's management mandate for the portfolios specifies a number of limits and constraints. These constraints regulate the degree of active management that may be conducted in addition to rulesbased capital allocation. The portfolios primarily comprise equities, government bonds and government-

guaranteed bonds, but also corporate bonds and securitised bonds. The portfolios also include forward exchange contracts, futures contracts and equity swaps. Norges Bank measures both absolute and relative market risk associated with the management of the portfolios. Credit risk is the risk of incurring a loss as a result of default on the part of the issuer of an interest-bearing instrument or a bank. Norges Bank conducts credit assessments of interestbearing securities and counterparties. Loans to banks are provided against collateral in the form of approved securities. Counterparty risk is the risk of incurring loss if a counterparty is declared bankrupt or cannot otherwise perform its contractual obligations. Counterparty risk includes the risk of bankruptcy on the part of counterparties, settlement risk and custody risk. Counterparty risk is controlled and counteracted as far as possible given the investment strategies. Currency risk is the risk of changes in exchange rates. Norges Bank does not hedge against exchange rate fluctuations. Norges Bank is not exposed to financial risk within the management of the GPFG.

Norges Bank established an Audit Committee in 2006 and an Internal Audit unit in 2007. Three of the external members of the Executive Board are members of the Audit Committee, which is a preparatory body for the Executive Board in matters particularly associated with oversight functions and the responsibility of the Executive Board for risk management and control. The role of the Internal Audit unit is to support the Executive Board in this work by providing independent assessments and advice on risk management and internal control in the Bank. The Executive Board established a Remuneration Committee in 2009, including two of the external members of the Executive Board. Like the Audit Committee, the Remuneration Committee is a preparatory body, responsible for helping to ensure thorough and independent treatment of matters concerning pay and remuneration arrangements at the Bank.

In autumn 2010, the governor of Norges Bank established a separate function to ensure that Norges Bank complies with rules and guidelines for central bank operations, so as to prevent exposure to financial loss, sanctions or reputational loss. In addition, NBIM has its own compliance unit.

#### 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 attaches particular importance to ensuring that the Bank's employees always conduct themselves with the necessary ethical awareness. The Executive Board has therefore issued rules for ethical conduct in order to prevent its employees from exploiting their positions to achieve unfair advantages for themselves or others and to prevent disloyal conduct in relation to the Bank.

Rules on own-account trading in Chapter 8 of the Securities Trading Act apply to employees who normally have access to or work with investment services or management of financial instruments for the Bank or for the account of a bank customer. Ethical rules have also been laid down for the members of the Executive Board, cf. the "Regulations issued by the Ministry of Finance on 7 August 2000 concerning relationships with other credit institutions and companies for members of the Executive Board of Norges Bank", last amended in 2007.

The Executive Board has established principles for internal notification of censurable conditions at Norges Bank. The notification arrangement is intended to ensure that information is given concerning censurable conditions in cases where the usual reporting channels cannot be used.

In connection with follow-up of the rules concerning money laundering, seven cases were reported in 2010. As in 2009, these cases mainly concerned claims from abroad for compensation in connection with delivery of large quantities of damaged Norwegian coins.

#### Norges Bank's financial statements

Norges Bank's accounting policies have been adopted by the Supervisory Council. The annual financial statements have been prepared in accordance with these policies.

Net international reserves constitute Norges Bank's main asset, with the exclusion of the GPFG, which has no effect on 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 normally generates a positive return over time, particularly because the Bank holds equity capital in addition to its liabilities in the form of notes and coins in circulation. The Bank's assets consist primarily of investments that generate returns.

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 gains are the result of changes in exchange rates, equity prices and interest rates affecting bond prices. Norges Bank's results for the year are dependent on developments in these parameters, which may give rise to considerable annual fluctuations in the Bank's results.

Norges Bank's annual accounts for 2010 show a profit of NOK 12.6bn, compared with a loss of NOK 7.6bn in 2009. The appreciation of the Norwegian krone against most of the main currencies in the foreign exchange reserves resulted in an overall exchange loss, translated into NOK, of NOK 5.1bn in 2010, compared with NOK 53.1bn in 2009. Gains and losses resulting from changes in the krone exchange rate have no effect on the international purchasing power of the foreign exchange reserves.

Movements in international securities markets in 2010 resulted in a capital gain of NOK 9.4bn, compared with NOK 32.7bn in 2009. Interest income and dividends from foreign investments amounted to NOK 7.6bn, which is NOK 0.3bn more than in 2009.

Interest payments to the Treasury amounted to NOK 0.8bn in 2010, compared with a total of NOK 2.6bn in 2009.

The Adjustment Fund stood at NOK 51.3bn at end-2009. After year-end allocations for 2010, the Adjustment Fund amounted to NOK 64.0bn. 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 (see description under 'Distribution of profit', below). The size of the international reserves and the domestic assets at year-end provide a basis for allocation of up to NOK 106.5bn to the Adjustment Fund.

Norges Bank's total balance sheet amounted to NOK 3 460.2bn. The GPFG is integrated into Norges Bank's accounts and constitutes approximately 89% of the Bank's balance sheet. The NOK deposits in the GPFG are a liability item for Norges Bank and amounted to NOK 3074.5bn at year-end. 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 GPFG's NOK account. The costs incurred by Norges Bank in connection with the management of the GPFG are covered by the Ministry of Finance subject to an upper limit. See note 30 for detailed information on the financial reporting for the GPFG. For more details, see the annual financial statements for 2010, which include the profit and loss account, balance sheet and additional information in the notes.

#### **Distribution of profit**

Pursuant to the Norges Bank Act of 24 May 1985, guidelines for 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:

1. 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 that the Executive Board considers to involve a not insignificant exchange risk.

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 is 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 returned and recognised in profit or loss.

- 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 returned from the Transfer Fund to Norges Bank's accounts until the Adjustment Fund reaches full size according to point 1.
- Any profit after provisions for or transfers from the Adjustment Fund shall be allocated to the Transfer Fund.
- 4. Any loss following the allocations described in point 2 shall be covered by transfers from the Adjustment Fund.
- 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 37m is to be transferred from other capital to cover the impairment loss on previously revalued assets. The amount will be transferred to profit or loss for allocation.

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

In accordance with point 4, the profit for the year after allocations, NOK 12 686m, is transferred to the Adjustment Fund

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

Oslo, 2 March 2011

 Øystein Olsen
 Jan Fredrik Qvigstad
 Ida Helliesen

 (Chair)
 (Deputy Chair)

 Liselott Kilaas
 Brit K. Rugland
 Asbjørn Rødseth

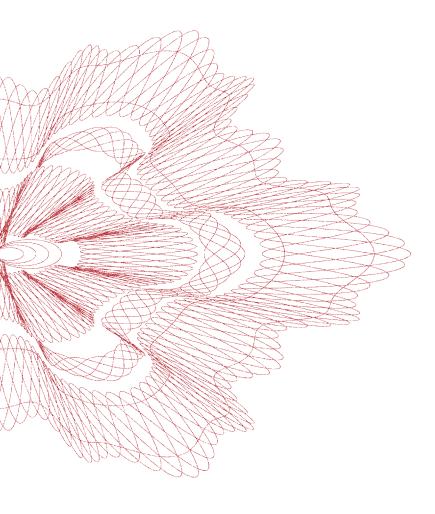
 Eirik Wærness
 Gøril Bjerkhol Havro
 Jan Erik Martinsen

 (Employee representative)
 (Employee representative)





## Financial statements and notes Norges Bank 2010



## Profit and loss account

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	Note	2010	2009
Interest income and dividends	1	7 580	7 328
Change in value financial instruments	2	9 449	32 734
Valuation adjustment of foreign exchange	3	-5 106	-53 089
Return on international reserves		11 923	-13 027
Share dividends, BIS	20	56	22
Gain/loss on other foreign financial instruments	4	146	8 854
Gain/loss on domestic financial instruments in foreign currency	5	-256	-3 609
Gain/loss on domestic financial instruments in NOK	6	1 282	3 131
Interest income/expense, Treasury, banks etc.	7	245	-2 054
Net other central bank financial activities		1 473	6 344
Total return financial activities		13 396	-6 683
Return on investments for Government Pension Fund Global (GPFG)	30	255 375	195 177
Transferred to krone account GPFG	30	-255 375	-195 177
Management fees GPFG	8	2 959	3 228
Other operating income	9	151	104
Total operating income		3 110	3 332
Personnel expenses	10	-799	-892
Depreciation and impairment losses	23	-114	-167
Other operating expenses	11	-2 944	-3 197
Total operating expenses		-3 857	-4 256
Net operating expenses		-747	-924
Profit/loss for the year		12 649	-7 607
Transferred from Adjustment Fund	28	0	7 567
T ( 1( Oil ): 1			
Transferred from Other capital	29	37	40
Allocated to Adjustment Fund	29 28	-12 686	40



### Balance sheet at 31 December 2010

rigures ii		s in millions of NON	
ASSETS	Note	2010	2009
FOREIGN FINANCIAL ASSETS			
Equities	12	92 324	74 618
Equities lent	12,14	1 566	8 445
Bonds and other fixed income instruments	12	117 412	107 392
Bonds lent	12,14	24 830	18 135
Deposits in foreign banks		897	4 345
Lending	13	53 764	50 437
Financial derivatives	15	26	364
Claims on the IMF	16	18 009	17 434
Total international reserves	17	308 829	281 170
Other assets in foreign currency	16,20	6 729	2 336
Total other foreign assets		6 729	2 336
Total foreign financial assets excl. GPFG		315 557	283 506
DOMESTIC FINANCIAL AND OTHER ASSETS			
Lending to banks etc.	21	60 543	75 929
Other assets in foreign currency		0	16
Other assets in NOK	22	7 848	6 876
Total domestic financial assets		68 391	82 821
Fixed assets	23	1 516	1 604
Gold		291	291
Total other domestic assets		1 807	1 895
Total domestic financial and other assets		70 197	84 716
Total assets excl. GPFG		385 754	368 222
Investments, GPFG	30	3 074 461	2 636 815
TOTAL ASSETS		3 460 215	3 005 037

		Figur	es in millions of NOK
LIABILITIES AND CAPITAL	Note	2010	2009
FOREIGN LIABILITIES			
Deposits banks		4	4
Borrowing in foreign currency	13	14 433	8 905
Cash collateral received	14	17 893	16 733
Bonds and other fixed income instruments	12	1 492	340
Financial derivatives	15	213	297
Other liabilities in foreign currency	24	1 357	2 197
Equivalent value of allocated Special Drawing Rights	16	14 176	14 156
Total foreign liabilities		49 567	42 632
DOMESTIC LIABILITIES			
Notes and coins in circulation	25	53 929	54 303
Treasury deposits		136 851	138 036
Deposits from banks etc.	26	79 894	80 308
Other liabilities in NOK	27	582	662
Total domestic liabilities		271 256	273 309
Total liabilities excl. GPFG		320 823	315 941
Deposits in krone account GPFG	30	3 074 461	2 636 815
Total liabilities		3 395 284	2 952 756
CAPITAL			
Adjustment Fund	28	63 985	51 298
Other capital	29	946	983
Total capital		64 931	52 281
TOTAL LIABILITIES AND CAPITAL		3 460 215	3 005 037

Oslo, 2 March 2011

Øystein Olsen (Chair)	Jan Fredrik Qvigstad (Deputy Chair)	Ida Helliesen	
Liselott Kilaas	Brit K. Rugland	Asbjørn Rødseth	
Eirik Wærness	Gøril Bjerkhol Havro (Employee representative)	Jan Erik Martinsen (Employee representative)	



## Accounting policies

The accounting policies at Norges Bank are adopted by the Supervisory Council. Pursuant to an agreement with the Ministry of Finance, Norges Bank's accounting policies are also applied to the financial reporting of the Government Pension Fund Global.

#### 1. GENERAL

#### 1.1 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 and is not required to comply with the Norwegian Accounting Act. The annual financial statements are, nevertheless, with only a few exceptions prepared in accordance with the Norwegian Accounting Act of 1998 and generally accepted accounting principles in Norway. The few reporting exceptions are due primarily to special conditions specific to a central bank and are listed below:

The reporting exceptions from the Accounting Act primarily are:

- The profit and loss account and balance sheet are presented in a manner appropriate to the Bank's activities.
- A cash flow statement has not been prepared.
- The information in the notes is presented in a manner appropriate to the Bank's activities.
- All equities, bonds and other fixed income instruments as well as financial derivatives are measured at fair value.

### 1.2 New financial reporting framework for Norges Bank beginning in 2011

Pursuant to an amendment to the Norges Bank Act, Norges Bank is required to comply with the Norwegian Accounting Act as from 1 January 2011. At the same time, the Ministry of Finance has issued a separate regulation relating to annual financial reporting for Norges Bank. The regulation applies as from the 2011 accounting year and requires Norges Bank to prepare its financial statements in accordance with the International Financial Reporting Standards (IFRSs) that have been endorsed by the EU. The regulation requires Norges Bank's financial statements to include the financial reporting of the Government Pension Fund Global, which shall also be prepared in accordance with IFRS. Norges Bank's interim financial statements from Q1 2011, which will only consist of quarterly financial reporting of the investment portfolio of the Government Pension Fund Global, will be presented in accordance with IAS 34 Interim Financial Reporting. Comparative amounts for the corresponding period will

be restated in accordance with IFRS. For Norges Bank's annual financial statements, the transition to IFRS entails changes to the items Fixed assets and Pension obligations. For the financial reporting of the Government Pension Fund Global's investment portfolio, the transition to IFRS will not entail changes to Owner's capital as at the opening IFRS balance sheet.

#### 1.3 Presentation of the Government Pension Fund Global

The Ministry of Finance has a krone account in Norges Bank relating to the Government Pension Fund Global. The corresponding value of the krone account is managed by Norges Bank and invested in foreign currency securities in a separately identified portfolio. The entire return on the portfolio is transferred to the krone account. Norges Bank bears no financial risk in connection with changes in the value of the Government Pension Fund Global. The performance of the Government Pension Fund Global does not therefore affect Norges Bank's profit and loss account or Norges Bank's capital. The Government Pension Fund Global's net investments are recognised as an asset on a separate line. The return on investments and amounts transferred to the krone account Government Pension Fund Global are presented separately in the profit and loss account before management fee. The Government Pension Fund Global's krone account is recognised as a liability in the same amount to the Ministry of Finance. Separate financial reporting is prepared for the Government Pension Fund Global and is included as a note in Norges Bank's annual financial statements.

#### 1.4 Identical disclosures in the financial reporting of the Government Pension Fund Global and Norges Bank's other investment management activity

The financial reporting of the Government Pension Fund Global comprises a profit and loss account, balance sheet and complete note disclosures. Norges Bank Investment Management (NBIM) manages the Government Pension Fund Global as well as portions of Norges Bank's foreign currency reserves. Consequently, the same qualitative disclosures regarding NBIM's internal management and control will appear in both the note disclosures regarding Norges Bank's foreign exchange reserves and in the separate financial reporting for the Government Pension Fund Global. This pertains especially to Note 13 Repurchase and reverse repurchase agreements, Note 14 Securities lending, Note 18 Fair value measurement of financial instruments and Note 19 Risk. The qualitative disclosures in these notes are identical.

#### 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 judgement 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. Even though the estimates are based on best judgement actual results may differ from the estimates. In the cases where estimates are used, these are covered in the respective notes.

#### 3. CURRENCY

Norges Bank's functional currency is the Norwegian krone (NOK). Transactions in foreign currency are recognised in the financial statements at the exchange rate prevailing on the transaction date. Assets and liabilities in foreign currencies are translated into Norwegian kroner 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 gains and losses on financial instruments is disaggregated and 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. At realisation the exchange rate at the transaction date is used.

#### 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. At derecognition average cost price is used.

Financial liabilities are derecognised from the balance sheet when the liability has been settled or no longer exists.

#### 4.2. Valuation

#### Initial measurement

A financial asset or liability is recognised at the purchase price including direct transaction costs. Direct transaction costs include commissions, stamp duties and commissions paid in connection with commission sharing agreements (CSA).

#### Subsequent measurement

All equities, bonds and other fixed income securities as well as financial derivatives are recognised at fair value as of the balance sheet date. Fair value is the estimated realisable value of an asset or the estimated cost of settling a liability in an arm's length transaction between well informed and willing parties.

The 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 estimate the 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 the current fair value of other similar and comparable instruments (if practicable), discounted cash flow calculations and option pricing models. If there is a valuation method that is commonly used by market participants to price the instrument, and this technique has provided reliable for estimates of prices achieved in actual market transactions, this valuation method is used. Market information is used in the valuation estimation 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 recognised in the profit and loss account.

#### 4.3. Securities lending

Securities lending transactions consist of a transfer of securities 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 to Norges Bank. The borrower is obligated to compensate the lender for various events relating to the securities, such as subscription rights or dividends. The borrower also pays a fee to the lender. The borrower takes over the voting rights attached to the securities during the lending period.



Securities lent are not derecognised from Norges Bank's balance sheet. During the lending period, accounting treatment of securities lent follows ordinary accounting rules for securities. Lending fees are accrued as interest income and are presented net in the profit and loss statement.

Cash collateral received is recognised in the balance sheet together with a corresponding financial liability measured at amortised cost. Collateral received in the form of securities is not recognised in the balance sheet unless reinvested. Unrealised and realised gains and losses on reinvestments measured at fair value are recognised 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 term of the agreement, accounting treatment of the underlying security follows ordinary accounting rules for securities. Cash received is recognised as a financial asset, with a corresponding shortterm financial liability recognised at amortised cost.

In connection with reverse repurchase agreements, the underlying security is not reinvested and therefore is not recognised in the balance sheet. The cash paid is derecognised from the balance sheet, and a corresponding receivable reflecting the cash amount that will be received in return is recognised.

#### 4.5. Accrued interest income and expenses

Accrued interest income and expenses are recognised on 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.

#### **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 accrued in the current year's financial statements, with payment received by Norges Bank in the year following.

#### 7. INTERNATIONAL MONETARY FUND (IMF)

#### 7.1 Norges Bank and the IMF

Pursuant to Section 25 of the Norges Bank Act, Norges Bank shall administer Norway's financial rights and fulfil the obligations ensuing from participation in the International Monetary Fund (IMF).

#### 7.2 Allocated Special Drawing Rights (SDRs)

Allocated Special Drawing Rights (SDRs) are recognised as an asset in the balance sheet. The value of SDRs is calculated on the basis of a currency basket comprising USD, EUR, GBP and JPY. The equivalent value of allocated SDRs in the IMF shows Norges Bank's total allocations of SDRs since the scheme entered into force in 1970 and is recognised as a liability in the balance sheet. SDRs are measured at amortised cost.

#### 7.3 Reserve position

Norges Bank's reserve position in the IMF is recognised in the balance sheet as a net outstanding account with the IMF. This consists of Norges Bank's allocated quota in the IMF less holdings in the Fund of constant SDRs, which the IMF holds as a krone deposit in Norges Bank. The reserve position is measured at amortised cost.

#### 7.4 Loans to the IMF

Loans to the IMF are initially recognised at cost. Loans to the IMF are subsequently measured at amortised cost.

#### **8. LENDING TO BANKS ETC.**

Loans to banks etc. are initially recognised at cost. There are no establishment fees or other directly attributable transaction costs. Subsequent measurement is at amortised cost, with the effective interest recognised in profit or loss. If there is evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the carrying amount and the present value of estimated future cash flows. The carrying amount of the engagement is reduced, and the amount of the loss for the year is recognised in profit or loss.

#### 9. FIXED ASSETS

Fixed assets are recognised at cost, less accumulated straight-line depreciation over their expected useful life. If the fair value of a fixed asset is less than the carrying amount, and the impairment is not expected to be temporary, the asset is written down to fair value.

#### 10. GOLD, ART COLLECTION ETC.

Norges Bank has holdings of gold coins and gold bars. The holdings were measured at fair value on the date the gold was reclassified from international reserves to non-current assets. If the fair value of gold coins and gold bars (metallic value of gold) is less than the carrying amount, and the impairment is not expected to be temporary, the carrying amount is reduced to fair value. In the event the metallic value of gold rises, the holdings are not revalued. 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 in the balance sheet.

#### 11. NOTES AND COINS IN CIRCULATION

Notes and coins in circulation are recognised in the balance sheet at face value when they are in circulation. Notes and coins are derecognised when they are withdrawn from circulation and no later than the expiry of the ten-year deadline for redemption. Notes and coins not redeemed by the ten-year deadline are recognised as income in profit or loss. Notes and coins redeemed after the ten-year deadline are recognised as an expense in profit or loss. Expenses for production of notes and coins are recognised in profit or loss as incurred.

#### 12. Deposits from the government

Deposits from the government are recognised in the balance sheet at face value. Interest terms are set in a special agreement between Norges Bank and the Ministry of Finance. The interest on deposits is based on money market rates weighted between Norwegian and foreign rates in proportion to the investments in Norges Bank's balance sheet (excl. Government Pension Fund Global).

#### 13. Deposits from banks

Deposits from banks are recognised in the balance sheet at face value. Income, excluding interest income, related to banks' account maintenance and settlement services, is presented under Other operating income.

#### 14. Pension and other benefit obligations

Accounting treatment of pension and other benefit obligations is in accordance with NRS 6 Pensions. Norges Bank has several pension plans, a funded plan for Bank employees financed by the Bank's pension fund, in addition to unfunded plans for a number of other employees. The Bank's other post-employment benefits are related to restructuring measures in the form of early retirement and termination benefits. Calculations for fund-based plans through Norges Bank's pension fund are based on actuarial assumptions regarding life expectancy, expected wage growth and adjustment of the National Insurance basic amount (G). The economic assumptions on which the calculation of the benefit obligations is based may change over time. The net benefit obligation is the difference between the present value of the benefit obligation and the fair value of plan assets. Plan assets are measured at fair value. Benefit obligations and plan assets are measured at the end of the reporting period. Employers' National Insurance contributions are included and are estimated on the basis of actual net underfunding.

Pension expense is calculated on the basis of a straightline allocation of benefits over the earning period and consists of the current service cost, less the return on plan assets.

Pursuant to NRS 6 Pensions, cumulative actuarial gains and losses that exceed the greater of 10% of the benefit obligation or 10% of the fair value of plan assets may be unrecognised in profit or loss for the year in order to smooth the effects.

#### 15. Capital

Norges Bank's capital consists of the Adjustment Fund, the Transfer Fund and Other capital. The Adjustment Fund comprises the Bank's restricted capital, and the Transfer Fund comprises the basis for transfers to the Treasury. Norges Bank's capital is governed by guidelines for provisions and allocations laid down by the Council of State on 7 February 1986, most recently amended by Royal Decree of 6 December 2002. Other capital consists of a revaluation fund, which is not included in the basis for transfers to the Treasury.



#### Note 1. Interest income and dividends

Figures in millions of NOK

	2010	2009
Interest income on deposits	12	66
Capital dividends	2 290	2 106
Interest income on securities	5 122	6 224
Interest income on lending	129	289
Interest income, securities lending	105	179
Interest income relating to IMF and SDRs	10	13
Interest income from financial derivatives	-88	-1 549
Interest income and dividends	7 580	7 328

Table 1.1: Interest income and dividends

#### Note 2. Change in value financial instruments

Figures in millions of NOK

	2010	2009
Realised gains/losses equities	-1 799	-1 108
Unrealised gains/losses equities	9 596	23 812
Realised gains/losses, fixed income instruments	2 241	296
Unrealised gains/losses, fixed income instruments	-413	7 874
Unrealised gains/losses, bonds reinvested in lending programme	0	301
Gains/losses, derivatives	-176	1 559
Change in value financial instruments	9 449	32 734

Table 2.1: Change in value financial instruments

#### Note 3. Valuation adjustment of foreign exchange

	2010	2009
Realised gains/losses, foreign exchange	-3 037	-9 541
Unrealised gains/losses, foreign exchange	-2 069	-43 548
Valuation adjustment of foreign exchange	-5 106	-53 089

Table 3.1: Valuation adjustment of foreign exchange

#### Note 4. Net other foreign financial instruments

Figures in millions of NOK

	2010	2009
Interest on borrowing	-33	-358
Gains/losses, borrowing in foreign currency	226	8 412
Exchange rate change, equivalent value of allocated SDRs	-21	856
Interest and foreign exchange gains, long-term lending	-11	-57
Interest and foreign exchange gains, other	-15	1
Net other foreign financial instruments	146	8 854

Table 4.1: Net other foreign financial instruments

#### Note 5. Net domestic financial instruments in foreign currency

Figures in millions of NOK

	2010	2009
Interest	11	275
Foreign exchange gains/losses	-267	-3 884
Net domestic financial instruments in foreign currency	-256	-3 609

Table 5.1: Net domestic financial instruments in foreign currency

#### Note 6. Net domestic financial instruments in NOK

	2010	2009
Interest expenses, borrowing	-2	-67
Gains/losses on forward exchange contracts	1 284	3 198
Net domestic financial instruments in NOK	1 282	3 131

Table 6.1: Net domestic financial instruments in NOK



#### Note 7. Interest expense, paid to Treasury, banks etc.

Figures in millions of NOK

	2010	2009
Interest expense, paid to Treasury	-780	-2 607
Interest expense on deposits from banks	-902	-1 348
Interest expense, depots operated by banks	-20	-19
Interest income on lending	1 947	1 920
Interest expense, paid to Treasury, banks etc.	245	-2 054

Table 7.1: Interest expense, paid to Treasury, banks etc.

Interest on Treasury deposits in 2010 was paid at an annual 0.50% in Q1, 0.25% in Q2, 0.50% in Q3 and 0.50% in Q4. The same interest rates apply for deposits from public account holders who receive interest on their deposits.

#### Note 8. Management fee, Government Pension Fund Global

The Bank's operating income and operating expenses include income and expenses of NOK 2 959m related to the management of the Government Pension Fund Global. These expenses are covered by the Ministry of Finance up to a set limit. The expenses related to management also include allocated indirect and imputed costs. The management fee covers these components, which are included in the Bank's operating expenses, including personnel expenses, depreciation and other operating expenses.

	2010	2009
Apportionment of salary, social security and other personnel-related costs	389	416
IT, information and decision support systems	224	204
Base fees to external managers	452	432
Performance-based fees to external managers	986	1 402
Custody and settlement costs	382	289
Outsourced IT and analysis costs	214	187
Consulting and legal fees	116	125
Allocated common costs Norges Bank	115	105
Other costs	81	68
Management fee	2 959	3 228
Total management costs excl. performance-based fees	1 973	1 826

Table 8.1: Management fee, Government Pension Fund Global

#### Note 9. Other operating income

Figures in millions of NOK

	2010	2009
Services, banks	71	46
Services, government	28	30
Rent, external	29	13
Other income	23	15
Other operating revenue	151	104

Table 9.1: Other operating revenue

#### Note 10. Personnel expenses

Figures in millions of NOK

	2010	2009
Personnel expenses		
Salaries and fees	-575	-587
Employer's National Insurance contributions	-66	-80
Pension expense (cf. 10.1)	-77	-140
Restructuring expense (cf. 10.2)	-9	-17
Other personnel expenses	-72	-68
Personnel expenses	-799	-892

Table 10.1: Personnel expenses

Norges Bank had 589 permanent employees on 31 December 2010, corresponding to 582.1 full-time equivalents (FTEs).

#### Benefits to governing bodies and senior management

#### Supervisory Council

The chair of the Supervisory Council receives annual remuneration of NOK 43 000, the deputy chair receives NOK 27 000 and the other members of the Council receive NOK 21 000. Alternates receive annual remuneration of NOK 3 500. Members of the Permanent Committee receive annual remuneration of NOK 43 000. Remuneration to members and alternates of the Permanent Committee and the Supervisory Council totalled NOK 623 000 in 2010.

Expenses for Norges Bank's Supervisory Council and the Office of the Supervisory Council amounted to NOK 11 174 000 in 2010. In addition there are the Supervisory Council's expenses for external auditing and assurance services (shown in Note 11). With regard to remuneration to members of the Supervisory Council and the director of the Office of the Supervisory Council, reference is made to the Supervisory Council's report to the Storting for 2010.

#### Executive Board - external members

Remuneration to members and alternates of the Executive Board is determined by the Ministry of Finance.



Figures in NOK

Name	Total remunera- tion paid	Executive Board	Audit Committee	Remuneration Committee
Liselott Kilaas	248 000	182 000	66 000	
Asbjørn Rødseth	237 000	182 000	55 000	
lda Helliesen	237 000	182 000	55 000	
Eirik Wærness	197 000	182 000		15 000
Brit Rugland	197 000	182 000		15 000

Table 10.2: Executive Board

Alternates received a fixed annual remuneration of NOK 120 000. Total remuneration to members and alternates of the Executive Board, Audit Committee and Remuneration Committee is NOK 1 356 000.

#### Governor and deputy governor

The salaries of the governor and deputy governor of Norges Bank are determined by the Ministry of Finance. In addition, they have a company car at their disposal, a free telephone and insurance covered by their employer. A full retirement pension for Governor Gjedrem and Deputy Governor Ovigstad is 2/3 of final salary adjusted in line with pensions in the National Insurance Scheme. Retirement benefits are payable from the date of retirement, albeit not before the age of 65. The period of service for full benefit is 12 years. The retirement benefit is subject to coordination with other public pension plans. At end-2010, the present value of the benefit obligation was determined by actuarial assessment to be NOK 12.7m for Governor Gjedrem and NOK 2.6m for Deputy Governor Ovigstad (for his period as deputy governor), taking into account coordination with the National Insurance Scheme. Coordination with other public pension plans will reduce Norges Bank's expenses. This is not taken into account in the calculations. Deputy Governor Ovigstad also has pension benefits accrued from his previous period of service at Norges Bank.

Figures in NOK

Executive	Name	Salary paid	Value of other benefits	Pension ben- efit earned	Personal loan
Governor until 1 Jan. 2011	S. I. Gjedrem	1 743 086	134 716	1 059 512	-
Deputy Governor	J. F. Qvigstad	1 555 039	166 029	1 214 033	1 890 000

Table 10.3: Governor and deputy governor

Øystein Olsen assumed the post of governor on 1 January 2011. His annual salary as determined by the Ministry of Finance is NOK 1 850 000. In addition, he has a company car at his disposal, a free telephone and insurance covered by his employer. From the date he assumed his post, Governor Olsen is a member of Norges Bank's pension fund. The terms and conditions of his retirement benefits are the terms and conditions for Norges Bank's pension fund in force on the date in question.

#### Salaries and retirement benefits for other directors at **Norges Bank**

Norges Bank's directors are entitled to the same postemployment benefits and have the same borrowing rights as the Bank's other employees. Pension plans are discussed in the section "Norges Bank's pension plans". Borrowing terms are discussed in Note 21.

#### Benefits to senior executives in Norges Bank's central banking activities

The Executive Board sets a salary interval for area directors in central banking operations. The governor determines annual salary within this interval.

Figures in NOK

Director	Name	Salary paid	Value of other benefits	Pension benefit earned	Personal Ioan
Norges Bank Financial Stability	K. Gulbrandsen	1 334 063	27 241	292 639	564 200
Norges Bank Monetary Policy	J. Nicolaisen	1 336 511	15 199	275 114	60 000
Norges Bank Administration	J. Ebbesen	1 363 803	13 573	232 422	-
Legal Department	M. Ryel	1 342 612	32 682	285 533	-
Communications Department.	S. Meisingseth	1 152 878	30 100	283 317	1 711 400
Internal Audit	I. Valvatne	1 310 682	21 193	279 541	1 302 000

Table 10.4: Benefits to senior executives in Norges Bank's central banking activities

#### Benefits to senior executives in Norges Bank **Investment Management**

The Executive Board sets a salary interval for the chief executive officer (CEO) of NBIM. The governor determines annual salary within this interval. Salaries for other members of the NBIM management team are determined by the CEO of NBIM in consultation with the Executive Board and following annual assessments.

Figures in NOK

	Name	Salary paid	Value of other benefits	Pension benefit earned	Personal Ioan
Chief Executive Officer	Yngve Slyngstad	4 181 678	27 929	345 792	905 944
Deputy CEO (to10 ct.2010)	Stephen Hirsch	5 306 396	145 181	769 502	0
Chief Risk Officer	Trond Grande	2 681 654	26 723	241 591	0
Chief Operating Officer	Age Bakker	2 384 688	20 192	299 660	0
Chief Compliance Officer	Jan Thomsen	2 766 665	66 594	259 640	0
Chief Strategic Relations Officer	Dag Dyrdal	2 165 563	35 746	302 746	0
Chief Administrative Officer	Mark Clemens	2 237 125	29 609	239 701	260 000
Chief Treasurer	Jessica Irschick*	4 903 500	13 319	490 350	0
Chief Investment Officer	Bengt Ove Enge	4 526 286	20 690	202 939	81 336

<sup>\*</sup> Pension plan in accordance with Note 10.2

Table 10.5: Benefits to senior executives in Norges Bank Investment Management

#### Norges Bank's pension plans

Norges Banks' ordinary pension obligations are covered by the Bank's own pension fund, which is organised as a separate legal entity. Retirement benefits are equal to 2/3 of the employee's salary at the time of retirement. The period of service for full benefits is 30 years. Employees contribute 2% of their gross annual salary into the pension fund. Norges Bank's contribution for 2010 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 retirement benefits covered by the funded plan is limited to an amount equivalent to 12 times the basic pension (G). An unfunded pension plan funded out of current income has been established to cover that portion of pensionable salaries in excess of 12G for those employees who already had an agreement entitling them to pension over and above this limit. For those



whose employment began after 1 January 2007, the basis for retirement benefits is limited to 12G. The pension plan complies with public service pension requirements.

The benefit obligation of Norges Bank's funded plans is NOK 2 124.1m. As from 2009, assumptions regarding mortality and other demographic factors have been changed from K 1963 to the standard K 2005 basis for group pension insurance. For Norges Bank the lump-sum premium was NOK 31.6m. The IR 73 rate is used as a basis for calculating disability provisions. A 3% supplement for future administration costs is priced into the benefit obligation. The value of the benefit obligation pertaining to the individual employee is calculated on the basis of the benefits the individual has earned or is receiving on 31 December 2010. The benefit obligation is equivalent to the calculated cash value of earned benefits. The Bank's funded pension plan covers 2 318 persons, of whom 1 002 are drawing

retirement benefits, 627 are active members (including all those affected by restructuring) and 689 are members who have left the Bank with deferred rights.

#### Norges Bank's benefit obligation

Benefit obligation is calculated on the basis of Norwegian Accounting Standard (NRS) 6 Pensions. Norges Bank has funded pension plans associated with membership in Norges Bank's pension fund. In addition, the Bank has unfunded plans funded out of current income. These are special and allocated pensions, the unfunded portions of pensions for employees with salaries higher than 12G, as well as early retirement pensions and redundancy pay agreements related to restructuring. The benefit obligation related to restructuring is the present value of all agreements, including agreements with disbursements in 2010 or later.

#### **Economic assumptions underlying the calculations:**

	2010	2009
Discount rate	4.60 %	5.50 %
Pension adjustment after the age of 67	3.00 %	4.25 %
Basic pension rate adjustment and adjustment of deferred rights	3.75 %	4.25 %
Expected wage growth	4.00 %	4.50 %
Expected return on plan assets	5.40 %	6.00 %
Expected annual attrition	2% up to age 50, then 0	2-3% up to age 50, then 0
Demographic assumptions	Standard FNO/Storebrand Pensj.tj. with 5% reduction in mortality relative to Finanstilsynet's margins of safety	K 2005 for death, IR 73 for disability

Table 10.6: Economic assumptions underlying the calculations

The Bank's overall benefit obligation including employer's National Insurance contribution was overfunded at end-2010. This overfunding can be utilised at a later date and has therefore been recognised in the balance sheet under

"Other assets in NOK" (see Note 22). Unfunded benefit obligations are presented as "Other liabilities in NOK" in the balance sheet (cf. Note 27).

#### **Benefit obligation**

Figures in millions of NOK

	2010	2009
Funded plans through the pension fund (overfunding)	-363	-247
Special pensions and allocated pensions	71	64
Benefit obligations associated with restructuring	73	95
Unfunded portion of pension, for salaries in excess of 12G	61	53
Norsk Kontantservice AS, part of lump-sum premium	8	14
Total overfunding of benefit obligation	-150	-21

Table 10.7: Benefit obligation

#### Breakdown of pension obligations, funded and unfunded plans

Figures in millions of NOK

	Funded plan	Unfunded plans	Total
Accrued benefit obligations	-2 822	- 198	-3 020
Fair value of plan assets	2 700	-	2 700
Unrecognised actuarial gains/(-) losses	485	-15	470
Net plan assets / (-) benefit obligation	363	-213	150

Table 10.8 Breakdown of pension obligations, funded and unfunded plans

#### Plan assets in funded plan are allocated as follows:

Allocation of plan assets for funded (defined-benefit) plan	2010	2009
Fixed income securities	73 %	74 %
Equities	27 %	26 %
Total	100 %	100 %

Table 10.9 Allocation of plan assets in funded plan



#### 10.1. Pension expense for employees in Norway

At end-2010, funded plans were overfunded, when including the effect of unrecognised actuarial gains. Pension expense is calculated in accordance with NRA 6 Pensions and includes benefits earned during the year, interest expense and expected return on plan assets. In accordance with the pension reform's new adjustment provisions, retirement benefits paid after age 67 will be adjusted 0.75% lower than the adjustment of G. This change in assumptions has resulted in recognised income from plan amendments (curtailment) of NOK 69m in 2010.

Norges Bank's share of the lump-sum premiums for employees of Norsk Kontantservice AS previously employed by Norges Bank is included in pension expense.

The increase in special and allocated benefits (unfunded) is included in the Bank's overall pension expense. The pension expense is shown in the table below:

Figures in millions of NOK

	2	010	2009
Pension expense, funded plan, which consists of:		59	122
Present value of benefits earned in the period	85	71	
Interest expense on benefit obligation	144	134	
Expected return on plan assets	-134	-127	
Recognised actuarial loss	29	37	
Recognised income from plan amendments (curtailment)	-69		
Members' contributions	-8	-8	
Administration expenses	12	15	
Special pensions and allocated pensions		11	10
Unfunded portion of pension for salaries in excess of 12 G funded out of current income		8	7
Norsk Kontantservice AS, employees previously employed by Norges Bank		0	1
Net pension expense for the year		78	140

Table 10.1.1: Pension expense

#### 10.2. Pension plans for locally employed staff of foreign offices

Locally employed staff at Norges Bank's offices in London and New York have a defined-contribution pension plan in accordance with local provisions in addition to what has been established by the authorities. As employer, Norges Bank contributes up to 8% of fixed salary for employees in New York and up to 10% of fixed salary for employees in London to the plans. The plans are managed externally,

within rules determined by Norges Bank. Recognised expenses for the plans in London and New York amounted to NOK 3.8m in 2010 and 4.3m in 2009 for the London and New York offices. Locally employed staff at Norges Bank's offices in Singapore and Shanghai have no pension plan beyond what has been established by the authorities.

#### 10.3. Restructuring expense

Restructuring expense is related to study packages, redundancy pay and early retirement pensions.

Figures in millions of NOK

	2010	2009
Changes in other benefit obligation in the period	-22	-19
Disbursements from the plan	31	36
Restructuring expense including employer's National Insurance contributions	9	17

Table 10.2.1: Restructuring expense

#### Note 11. Other operating expenses

Figures in millions of NOK

	2010	2009
IT, information and decision support systems	-359	-328
Base fees to external managers	-461	-445
Performance-based fees to external managers	-978	-1 425
Custody and settlement costs	-406	-324
Outsourced IT and analysis costs	-231	-202
Consulting and legal services	-176	-185
Other costs	-332	-288
Total other operating expenses	-2 944	-3 197

Table 11.1: Other operating expenses

#### **External auditor**

Figures in thousands of NOK

	2010
Statutory audit*	9 883
Other assurance services**	11 521
Other services	24
Total fees external auditor	21 428

Table 11.2: External auditor

- Statutory audit includes fees for discussions of financial reporting issues related to IFRS
- \*\* Includes NOK 5.9m related to auditing the Government Pension Fund Global's financial reporting for 2009 invoiced in 2010, as well as limited reviews of the Government Pension Fund Global's quarterly financial reporting and other assurance services. Amounts are exclusive of VAT.



# Note 12. Foreign securities

Figures in millions of NOK

			Figures	in millions of NO
	Cost	Fair value	Earned divi- dend/yield	Total fair value
Equities:		value		
Listed equities	94 724	93 774	117	93 891
Total equities	94 724	93 774	117	93 891
Of which equities lent				1 566
Government bonds:				
Government bonds	94 923	90 106	867	90 973
Total government bonds	94 923	90 106	867	90 973
Government-related bonds:				
Bonds issued by local governments	1 188	1 063	32	1 095
Bonds issued by supranational entities	4 005	3 844	54	3 898
Bonds issued by US federal agencies	4 249	3 600	90	3 690
Total government-related bonds	9 442	8 507	176	8 683
Inflation-linked bonds:				
Inflation-linked bonds issued by government authorities	2 381	3 308	3	3 311
Total inflation-linked bonds	2 381	3 308	3	3 311
Corporate bonds:				
Bonds issued by utilities	1 554	1 513	28	1 541
Bonds issued by financial institutions	7 385	6 463	128	6 591
Bonds issued by industrial companies	3 689	3 680	79	3 759
Total corporate bonds	12 628	11 656	235	11 891
Securitised debt instruments:				
Covered bonds	19 326	18 285	361	18 646
Mortgage-backed securities	2 385	2 302	20	2 322
Asset-backed securities	2 428	2 043	2	2 045
Commercial mortgage-backed securities	1 512	260	7	267
Total securitised debt instruments	25 651	22 890	390	23 280
Total Treasury bills	2 698	2 614	0	2 614
Total bonds and other fixed income instruments	147 723	139 081	1 671	140 752
Of which bonds lent				24 830

Table 12.1: Foreign securities

Total bonds and other fixed income instruments in the table of NOK140 752m include a liability item of NOK 1 492m, which is a short position in bonds. As from the 2010 financial year, short-sale bonds are not offset by bonds and other

fixed income instruments. Short-sale bonds are presented on a separate line under liabilities in the balance sheet under Bonds and other fixed income instruments. Comparative figures for 2009 have been restated.

## Note 13. Repurchase and reverse repurchase agreements

Figures in millions of NOK

	2010	2009
Lending associated with the investment portfolio	28 231	12 281
Lending associated with the money market portfolio	16 809	29 629
Lending associatd with the buffer portfolio	8 724	8 527
Total lending	53 764	50 437

Table 13.1: Repurchase and reverse repurchase agreements by portfolio

Norges Bank uses the markets for repurchase and reverse repurchase agreements directly and through securities lending programmes (see Note 14 Securities lending) as part of liquidity management and to generate additional income through investments. At any time the Bank will have lent or transferred parts of its holdings in bonds through repurchase agreements (repos and sell buy backs), against receiving a corresponding amount in cash. This may be in the form of financing of the asset management (borrowing of cash), or lending of securities with the aim of reinvesting received cash at higher interest and thus creating additional income/return. In addition the Bank has positions in reverse repurchase agreements where the counterparty has transferred bonds or equities to the Bank (reverse repo, buy sell backs and triparties) and where the Bank has transferred cash to the counterparty. Such positions are used in connection with placing liquidity and also through the securities lending agents as reinvestments of received cash collateral related to lent securities. Under repurchase agreements, the lent security is not derecognised from the Bank's balance sheet. Received cash is recognised as Deposits in foreign banks, with a corresponding liability to pay back the cash included in Borrowing in foreign currency. For reverse repurchase agreements, the security received is not recognised in the balance sheet, while transferred cash is derecognised from Deposits in foreign banks. A corresponding receivable is recognised as an asset on the line Lending.

### 13.1 Repurchase and reverse repurchase agreements in the investment portfolio

For repurchase agreements the transferred security may be viewed as collateral given by Norges Bank to borrow cash (see "Bonds given as collateral (asset)" in Table 13.1.1). This item also includes securities lending, where cash received is collateral held by Norges Bank. All positions within the instrument type repurchase agreements are shown in the table as borrowing of cash against given collateral in the form of securities.

Similarly, securities received under reverse repurchase agreements may be viewed as received collateral relating to lent/placed cash (see "Bonds received as collateral" in Table 13.1.1). In some cases these will be borrowed securities where transferred cash is collateral given by Norges Bank. All positions within the instrument type reverse repurchase agreements are shown in the table as placements of cash where received securities are collateral. Rules are laid down on which types of securities may be received as collateral. Bonds shall have a credit rating of at least A or similar from at least one of the rating agencies Fitch, Moody's and Standard & Poor's to be accepted as collateral.

The following table shows total positions in repurchase and reverse repurchase agreements in the investment portfolio as at year-end 2010, and corresponding collateral in the form of securities. The items Borrowing associated with repurchase agreements and Lending associated with reverse repurchase agreements show the balance sheet value of these agreements (amortised cost/cash amount transferred). This includes unsettled trades based on the transactions being recognised on the trade date.

The collateral in the form of securities is shown at fair value. For repurchase agreements this is the value the securities holdings are measured at in the balance sheet (see Note 12 Foreign securities). As for reverse repurchase agreements, the received securities are not recognised in the balance sheet. In order to show the total exposure of the positions, unsettled trades have been shown separately under received and given collateral. This securities collateral has not yet been transferred and therefore is not included in the lines Bonds given as collateral (asset) and Bonds/equities received as collateral in the table, while the corresponding cash amount to be transferred is included in Borrowing associated with repurchase agreements and Lending associated with reverse repurchase agreements.



Figures in millions of NOK

		2010		2009
	Book value	Fair value	Book value	Fair value
Borrowing associated with repurchase agreements (cash borrowed)	14 433	14 433	8 633	8 633
Bonds given as collateral (asset)	14 180	14 180	8 861	8 861
Unsettled trades (asset), collateral not yet transferred	85	85		
Net overcollateralisation (undercollateralisation) repurchase agreements		168		-228
Cash lent outside of securities lending programmes	14 005	14 005	2 520	2 520
Cash lent through securities lending programmes (reinvestment)	14 226	14 226	9 761	9 761
Lending associated with reverse repurchase agreements (total cash lent)	28 231	28 231	12 281	12 281
Bonds received as collateral		29 036		12 659
Equities received as collateral				242
Total collateral received		29 036		12 901
Unsettled trades (liability), collateral not yet received			195	195
Net overcollateralisation (undercollateralisation) reverse repurchase agreements		805		815
Net overcollateralisation (undercollateraliation) repurchase and reverse repurchase agreements		973		587

Table 13.1.1: Repurchase and reverse repurchase agreements

The table shows that Norges Bank within the investment portfolio is overcollateralised related to repurchase agreements in the amount of NOK 168m at the end of 2010. This means that the Bank has excess of the mentioned amount of cash received compared to collateral given. Similarly, Norges Bank is overcollateralised also for reverse repurchase agreements, in the amount of NOK 805m, as the Bank has an excess of received securities collateral relative to placed cash of this amount. Total overcollateralisation across these instrument types is NOK 973m as at 31 December 2010.

Outside of securities lending programmes Norges Bank had borrowed a net amount of NOK 427m for the investment portfolio at the end of year. This consists of the net effect of borrowed cash of NOK 14 432m and lent cash of NOK 14 005m. See also further descriptions of leverage in Note 19 Risk, and in Note 14 Securities lending, which describle the leverage effect of securities lending programmes.

### Note 14. Securities lending

Norges Bank has entered into agreements with external agents regarding securities lending. These agents have access to the securities holdings of the portfolio, and may lend these to other market participants with borrowing needs. Both equities and bonds are lent through the securities lending programmes. The purpose of the lending activities is both to provide the market with better access to securities and thereby to increase efficiency, and to create additional returns for the Bank based on its securities holdings. When a security is lent out, the borrower transfers collateral to the agent in the form of cash or securities. The collateral is held on behalf of Norges Bank. The agreements with the agents have provisions ensuring the Bank's interests in the event of the counterparty not being able to deliver the borrowed securities back, and in the event that the collateral that has been received for the loan is not sufficient to cover losses that may occur. The cash collateral is reinvested primarily in fixed income instruments at a higher interest rate than what is paid on received cash. The reinvestments are done by the agent both in the form of positions in the repo market (reverse repurchase agreements: reverse repos, buy sell backs and triparties) (see Note 13 Repurchase and reverse repurchase agreements) and in the form of bonds. At year-end 60% of these bond investments within the investment portfolio were rated at Aaa by Moody's. Bonds as a share of reinvestments have decreased from 40% to 20% during the last two years.

Lent securities are presented on separate lines in the balance sheet. Received cash collateral is recognised in the balance sheet as "Deposits in foreign banks" with a corresponding liability "Cash collateral received" based on the fact that the Bank has the right to dispose of this cash. Received collateral in the form of securities is not recognised in the balance sheet, because these are not reused (rehypothecated), but are left in custody. Reinvestments in the form of reverse repurchase agreements and bonds are recognised in the balance sheet in the same way as other such investments.

Norges Bank earns a net fee income from these securities lending programmes. The net income consists of the pure lending fee, costs related to cash collateral received, as well as interest income and realised returns from reinvestments. The agent's share as a fee for carrying out the transactions is included in this net income. Net income from securities lending is presented on the profit and loss account line Interest income and dividends. Income related to equities lending within the investment portfolio amounted to NOK 66m in 2010, while the corresponding income from bond lending amounted to NOK 274m in 2010 (see also Note 1 Interest income and dividends). In addition to the mentioned profit and loss items there are unrealised gains and losses related to reinvestments in the form of bonds measured at fair value. This element is not included in the fee income, but is presented on the profit and loss line Gain/loss on financial instruments. NOK 114m has been recorded as income in 2010 based on a change in unrealised losses for these holdings.

The following table shows an overview of positions within securities lending programmes at the end of 2010:



Figures in millions of NOK

		2010		2009
	Book value	Fair value	Book value	Fair value
Securities lent				
Equities lent	1 566	1 566	8 445	8 445
Bonds lent	24 830	24 830	18 135	18 135
Total securities lent	26 396	26 396	26 580	26 580
Collateral received				
Cash collateral received	17 893	17 893	16 733	16 733
Equities received as collateral		1 022		5 163
Bonds received as collateral		7 072		5 570
Total collateral received related to securities lending		25 987		27 466
Net overcollateralisation		410		886

Table 14.1: Positions within securities lending programmes

Figures in millions of NOK

	2010	2009
		Book value
Reinvestment related to securities lending		
Reverse repurchase agreements	14 226	9 762
Asset-backed securities	2 616	4 920
Other fixed income instruments	779	1 664
Total reinvestment of bonds and other fixed income instruments	3 395	6 584
Total reinvestment of cash collateral	17 621	16 346
Unrealised loss bonds and other fixed income instruments	268	382

Table 14.2: Reinvestment of cash collateral

The table shows that Norges Bank within its foreign exchange reserves at the end of 2010 had investments in bonds at a market value of NOK 3.4bn that have been made by using received cash collateral as financing. This may be seen as leverage of the portfolio, and is included in the measure of net leverage that is described in Note 19 Risk. Reinvestments in addition to this are done with

the purpose of covering interest costs on received cash collateral through the use of low risk instruments (reverse repurchase agreements), and are not viewed as creating leverage. The purpose of the securities lending programmes is primarily to earn extra returns in the form of securities lending fees, as opposed to getting access to additional capital for investment.

### Note 15. Financial derivatives

Table 15.1 below shows the nominal values of positions in financial derivatives for purchased (long) and sold (short) positions, as exposure. Nominal value is the basis for the calculation of any payment flows and gains/losses for the contracts. In addition, assets (positive) and liabilities (negative) are shown at market value.

Figures in millions of NOK

		Ехро	sure		Fair value		
	2010		Avera	ge 2010	31.		
	Purchased Sold		Purchased	Purchased Sold		abilities	Net
Foreign exchange contracts	5 217	0	12 171	118	14	12	2
Stock exchange listed futures contracts	18 061	271	22 689	2 000	7	9	-2
Interest rate swaps	0	1 587	1 248	4 386	0	185	-185
Credit default swaps	0	0	198	36	0	0	0
Equity swaps	38	10	14	14	5	7	-2
Total swaps	38	1 597	1 460	4 436	5	192	-187
Options	0	0	1 135	608	0	0	0
Total financial derivatives	23 316	1 868	37 455	7 162	26	213	-187

Table 15.1: Financial derivatives

#### Foreign currency exchange contracts

This item consists of foreign currency exchange contracts with normal settlement for future delivery. Contract exposure is the sum of the nominal value of the contracts at any given point in time.

#### Non-stock-listed futures contracts

Exposure is the nominal value of the underlying instruments.

#### **Unlisted financial derivatives (OTC)**

#### Interest rate swaps

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

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

#### Credit default swaps

In a credit default swap, the seller receives a periodic premium or lump sum from the purchaser as compensation for assuming the credit risk. The purchaser receives payment from the seller only if the credit protection of the underlying credit is triggered (a credit event). A credit event might, for example, be a default on the underlying credit or bond loan.

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 security (ABS) indices and commercial mortgage-backed security (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 agreements between two counterparties to swap cash flows based on changes in the underlying securities, which can be shares, an equity portfolio or an index. In addition to the periodic cash flow, payments are received in connection with dividends and corporate events.

Exposure corresponds to the nominal 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 as Sold. Options where Norges Bank pays a premium are reported under purchased contracts.



Table 15.2 shows received and given collateral related to positions in financial derivatives in the investment portfolio.

Figures in millions of NOK

	2010	2009
OTC financial derivatives		
Net fair value OTC financial derivatives (book value)	-185	36
Cash collateral received related to OTC positions	0	0
Futures contracts and equity swaps		
Fair value futures contracts	-7	36
Fair value equity swaps	-2	-1
Deposits with clearing brokers (collateral given)	87	127
Bonds given as collateral to clearing brokers	-136	-300

Table 15.2: Collateral related to financial derivatives in the investment portfolio

Norges Bank gives or receives cash collateral in connection with positions in OTC financial derivatives (interest rate swaps, credit rate swaps and options) when certain conditions are met. Follow-up against collateral thresholds is done per counterparty, and if the net market value of positions with the counterparty exceeds the given limits, the party that has negative market value is required to give collateral to the other party. Norges Bank had as of year-end neither received nor given collateral within the foreign exchange reserves' positions. There was a preponderance of negative market values as of year-end, but the Bank had not given collateral related to them because the thresholds for this are high owing to the Bank's high creditworthiness.

Received cash collateral included in the line Cash collateral received as of the end of 2010 is connected to securities lending (see Note 14 Securities lending for additional information).

Futures contracts and equity swaps (CFD - Contracts for Difference) are transacted via clearing brokers, and for these positions, collateral is delivered to the clearing brokers. This can be given in the form of cash (margin calls) and/or securities. The value of cash deposits is recognised in the balance sheet on the line Deposits in foreign banks. Transferred securities are not derecognised.

### Note 16. Claims on the IMF

Figures in millions of NOK

	2010	2009
Quota in the IMF	15 163	15 139
Holdings in constant SDRs	-11 615	-12 198
Reserve position in the IMF	3 548	2 941
Special Drawing Rights	14 461	14 493
Claims on the IMF	18 009	17 434
Claims on the IMF in addition to international reserves entered on the line "Other assets in foreign currency"		
Loans to the IMF	2 688	711
Equivalent value of allocated Special Drawing Rights	-14 176	-14 156

Table 16.1: Claims on the IMF

The IMF's task is to promote international monetary and financial stability. The IMF gives advice to member countries and provides temporary funding in the event of balance of payments 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. At end-2010, SDR 1 563m was allocated. Changes in the item also express changes in the SDR exchange rate.



## Note 17. International reserves

### Relationship between different reserve terms and portfolio terms used at Norges Bank

Norges Bank's foreign exchange reserves include a money market portfolio and an investment portfolio. In addition, a buffer portfolio is used for the regular transfers to the Government Pension Fund Global. Foreign exchange reserves also include IMF reserves, excluding the loan to the IMF.

### By portfolio

			2010		
	Invest- ment	Money market	Buffer	IMF reserves, etc.	Total
Securities and deposits	229 558	7 463	12	2	237 034
Other foreign exchange reserves	28 252	16 814	8 720	0	53 785
Foreign exchange reserves according to IMF definition	257 810	24 276	8 732	2	290 820
IMF reserve position/SDRs	0	0	0	18 009	18 009
International reserves	257 810	24 276	8 732	18 011	308 829
Foreign exchange claims, foreign	2 040	0	0	4 689	6 729
Foreign exchange liabilities, foreign	-2 175	-1	0	-895	-3 071
IMF reserve position/drawing rights and loans	0	0	0	-20 697	-20 697
Borrowing (foreign exchange liabilities)	-32 326	0	0	0	-32 326
Foreign exchange reserves according to Norges Bank's financial statements	225 348	24 276	8 732	1 108	259 464
Outstanding financial statements, separate portfolios under management	-612	0	4 934	0	4 322
Unrecognised unsettled cash agreements			1 878		1 878
Foreign exchange for management	224 737	24 276	15 543	1 108	265 664

Table 17.1: International reserves by portfolio

#### By currency

Figures in millions of NOK

	2010								
	USD	CAD	EUR	GBP	JPY	CHF	SDR	Other	Total
Securities and deposits	109 450	3 826	64 984	23 969	19 749	3 326	0	11 730	237 034
Other foreign exchange reserves	24 428	0	27 938	460	932	0	0	27	53 785
Foreign exchange reserves according to IMF definition	133 878	3 826	92 922	24 430	20 681	3 326	0	11 757	290 820
IMF reserve position/SDRs	0	0	0	0	0	0	18 009	0	18 009
International reserves according to IMF definition	133 878	3 826	92 922	24 430	20 681	3 326	18 009	11 757	308 829
Foreign exchange claims, foreign	1 528	0	2 270	11	86	51	2 782	0	6 729
Foreign exchange liabilities, foreign	-2 354	0	-1 272	-353	932	0	-23	0	-3 070
- IMF reserve position/drawing rights and loans	0	0	0	0	0	0	-20 697	0	-20 697
Borrowing (foreign exchange liabilities)	-13 957	0	-16 537	-1 286	-546	0	0	0	-32 326
Foreign exchange reserves according to Norges Bank's financial statements	119 096	3 826	77 383	22 801	21 154	3 377	71	11 757	259 464
Outstanding financial statements, separate portfolios under management	0	-48	1 547	2 549	358	-50	0	-35	4 322
Unrecognised unsettled cash agreements			1 878						1 878
Foreign exchange for management	119 096	3 778	80 808	25 350	21 512	3 327	71	11 722	265 664

Table 17.2: International reserves by currency

### Note 18 Fair value measurement of financial instruments

#### **Control environment**

The control environment for measuring the fair value of financial instruments is organised around a formalised and documented valuation policy and guidelines which are supported by work and control procedures. The policy document for valuation refers to pricing hierarchies which are established for each of the different asset classes.

The valuation environment is established, and adjusted, in accordance with leading best market practices for valuation. The operational implementation of the best market practice principles is done in a manner to ensure a transparent, scalable and comparable valuation of all holdings on a daily basis through the use of sophisticated processes using both internal and external data solutions.

In principle all holdings in securities and other instruments are valued by independent valuation specialists. These pricing providers were chosen based on thorough analyses by the internal department in Norges Bank that is operationally responsible for valuations. This department on a routine and ongoing basis follows-up with these price providers through dialogue, controls and inquiries connected to the prices of individual securities. The prices of financial instruments from these independent price providers are based on observable prices and/or models that use observable and in some cases unobservable input factors.

On a daily basis the valuation process is subject to numerous controls by the internal valuation department as well as by the fund accountant focusing on defined thresholds and sensitivities. The levels of these thresholds and sensitivities are monitored and adjusted in accordance with prevailing market conditions. At each month-end additional extensive controls are performed to ensure that established pricing procedures and fair value measurement principles following from the valuation policy have been followed. This includes



verifying that the external fund accountant uses external prices as required by the price hierarchy in force at the relevant time, as well as verifying that the resulting values reflect fair value as of the actual date, i.e. that the value of the current holdings reflects the amount that can be realised in an arm's length transaction between two well informed and willing parties. Throughout this process, particular attention is paid to illiquid financial instruments, structured products and special instruments in the portfolio that have additional valuation challenges. Illiquid instruments are identified with the help of sector and currency classifications, price differences between different external price providers, coverage of the instrument by external price vendors, credit rating indicators, bid/ask spreads, and activity in the market.

A valuation memo and report are prepared at the end of each quarter documenting the results of the controls performed, status of the valuation, the largest sources of price uncertainties and associated valuation risk, as well as other relevant information for the valuation.

This documentation is reviewed by a valuation committee which acts a forum for the consideration of significant pricing issues and formally approves the valuation. The committee meets at least once a quarter prior to the publication of the financial reporting. The committee consists of the NBIM leader group.

#### Valuation methods

Norges Bank has defined hierarchies for the independent price sources that are used for valuation. Holdings that are included in the benchmark portfolio are normally priced in accordance with the index providers' prices, while the remaining holdings of equities and bonds are priced almost exclusively by reputable independent external price providers. Prices are verified based on a comparative analysis of the applicable prices in the established hierarchies with prices from available alternative price sources. When alternative price sources are considered to be more representative of fair value, prices are adjusted to bring the valuation closer to expected fair value.

Equities are valued almost exclusively based on official closing prices from stock exchanges or last traded exchange prices, and are thus observable market prices. The same applies to more than half of the holdings in bonds. Over 80% of the investments of foreign exchange reserves as of the end of 2010 were holdings of high liquidity and therefore associated with low valuation risk.

For both parts of the bond portfolio and the majority of the interest rate derivatives, valuation is performed using valuation models as opposed to direct pricing as observable prices are not available to a sufficient extent due to varying degrees of illiquidity and limited market activity. These valuation techniques are both models that use observable market data and models that to a large extent make use of unobservable market data. Valuation methodologies used by the independent valuers for bonds and derivatives are generally a combination of market standard and proprietary models but based on standard valuation principles. The models are combined with extensive daily research and analysis by the evaluation teams in order to generate high quality valuations. Methodologies vary according to the asset class or sub class under review. For bonds these will include, but are not limited to, credit spreads based on observable prices for comparable instruments, non-adjusted and option-adjusted discounted cash flow models for bonds containing embedded options, and models with discount margins for bonds with floating interest rates. In the OTC derivative market, established option pricing models as well as implied interest rate curves and credit spreads are the most commonly used valuation methods.

The data, both observable and unobservable, used in the different valuation models includes the following elements:

- Bond prices prices based on price quotes and relevant market activity in both newly issued and from secondary market transactions.
- Credit spreads these are sourced from the credit derivative market as well as trades of more liquid bonds.
- Interest rate curves benchmark interest rate curves are often the foundation of the valuation matrix and are sourced from various market sources including government bond markets, interest rate swap markets, futures markets as well as interbank markets.
- Currency rates obtained from various stock exchanges and trading markets for use in the valuation of spot, forward and futures contracts.
- Equity prices.
- Prepayment rates early prepayment of principal.
   Estimates based on both historical and expected levels can have a material effect on the valuation of individual types of bonds where early prepayment of principal is possible. This information is collected by the external price providers from various market sources, for example reports from market participants and data sources such as Bloomberg/Reuters.
- Default and recovery estimates assumptions regarding expected default and loss given default are important input factors in the models that price structured instruments and which estimate the relative size and timing of cash flows for the different tranches. Data sources are the same as for prepayment rates.

- Structuring and cash flow details per tranche analysis of structured bonds produces estimated cash flows which are used as input in the valuation models. Data sources are the same as for prepayment rates.
- Volatility this is the extent to which the price of a security fluctuates. Volatility is one of the key input factors in the valuation of option derivatives. Data sources are the same as for prepayment rates.
- Correlation this is the extent to which changes in one variable are interdependent with changes in another variable. Positive correlation indicates that the variables move in the same direction while negative correlation means the variables change in the opposite direction. Data sources are the same as for prepayment rates.
- Counterparty risk prices are based on an assumption of risk-free counterparties. This is a reasonable assumption based on the existence of netting agreements and the use of collateral.

#### **Pricing uncertainty**

All equities, bonds and financial derivatives have been allocated to categories for assessed pricing uncertainty. Level 1 consists of investments that are valued based on observable market prices in active markets and are considered to have very limited pricing risk. Investments allocated to level 2 are valued using models with observable market data. These holdings have some pricing uncertainty with regards to establishing fair value, but overall this valuation risk is considered to be limited. Holdings allocated to category 3 are priced using models with considerable use of unobservable input factors, which implies substantial uncertainty surrounding the establishment of fair value. Nevertheless, it should be noted that the majority of these investments are valued by external professional price providers who are regarded as giving the best estimate of fair value and where the total valuation from different price providers varies only to a limited extent. Uncertainty connected with valuation gives a risk of both too high and too low values. Extensive controls are employed to mitigate this risk.

Table 18.1 below groups the investments into categories of assessed pricing uncertainty as at 31 December 2010 for the investment portfolio.

Figures in millions of NOK

		Level 1		Level 2		Level 3		Total
	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009
Equities	93 880	83 050	10	13	0	1	93 890	83 064
Total bonds	94 023	52 500	37 058	58 516	2 667	4 026	133 748	115 042
Government bonds	85 078	26 037	1 505	539	0	0	86 583	26 576
Government-related bonds	2 714	10 081	5 964	6 135	5	0	8 683	16 216
Inflation-linked bonds	3 311	3 561	0	5 231	0	0	3 311	8 792
Corporate bonds	548	0	11 235	24 183	108	92	11 891	24 275
Securitised bonds	2 372	12 821	18 354	22 428	2 554	3 934	23 280	39 183
Total financial derivatives	-7	36	-183	34	0	0	-190	70
Assets	2	43	19	318	0	0	21	361
Liabilities	-9	-7	-202	-284	0	0	-211	-291
Total	187 896	135 586	36 885	58 563	2 667	4 027	227 448	198 176

Table 18.1: Investments categorised by assessed pricing uncertainty



Table 18.2 shows a further specification of level 3 holdings.

Figures in millions of NOK

	2010	2009
Equities	0	1
Total bonds	2 667	4 026
Government related bonds	5	0
Corporate bonds	108	92
Securitised bonds	2 554	3 934
Asset-backed securities (ABS)	307	699
Commercial mortgage-backed securities (CMBS)	127	733
Mortgage-backed securities (CMO)	2 121	2 502
Total level 3	2 667	4 027

Table 18.2 Specification of level 3 holdings

Almost all of the equity holdings are classified as level 1 with a low valuation risk as there is normally available an official closing price from active trading on a listed stock exchange, thus correctly reflecting the fair value.

The pricing uncertainty situation for bonds is much more varied. Norges Bank carries out analyses for each reporting period to identify the extent to which there have been actual transactions and to identify the price transparency that is associated with market liquidity for different types of bonds as well as for a number of individual securities. The pricing of most government bonds is based on observable market prices in an active market with quoted prices and frequent transactions, i.e. level 1. Government-related and inflation-linked bonds are allocated to level 1 and 2 based on the Bank's analyses of liquidity and the degree of trading and price transparency in the markets. The analysis shows a relatively high degree of observed liquidity for these bonds. Most corporate bonds are assessed as priced by models with observable input factors, while certain particularly illiquid corporate obligations are allocated to level 3 and some highly liquid bonds belong to level 1. Securitised bonds are allocated to all three categories based on the complexity of the input factors and the degree of liquidity, actual transactions and price transparency in the markets. Covered bonds are categorised in the observable levels 1 and 2 based on the degree of liquidity and price transparency in the markets. Some very liquid guaranteed mortgage-backed securities belong to level 1 with observable market prices in active markets. Other guaranteed mortgage-backed securities that are not tranched have been classified as priced by models using observable data inputs, i.e. level 2. Securitised bonds that are deemed to be tranched such that they have a particularly high exposure to unobservable input factors have been allocated to level 3. Other securitised bonds are allocated to categories 2 and 3 based on the observed degree of price consensus between the available price providers.

Norges Bank's analyses indicate that the valuation risk has been somewhat reduced over the course of 2010, as well as during only the fourth quarter. Total exposure that is regarded as being particularly uncertain as related to correct pricing estimates was NOK 2.7bn at year-end 2010, versus NOK 4.0bn at end-2009. This consisted mainly of securitised bonds (NOK 2.6bn) of which NOK 2.5bn was US securitised bonds. It is in particular the securitised bonds not guaranteed by a federal agency that are associated with a high degree of pricing uncertainty (NOK 1.6bn). The remaining NOK 0.9bn consisted of structured securitised bonds where the underlying debt is guaranteed, but where there is particularly greater sensitivity to other estimated assumptions in the pricing models, primarily related to principal repayments. The reduction in level 3 holdings through 2010 is primarily due to the reclassification of certain securitised bonds to level 2 as a result of improved pricing data quality and pricing consensus between alternative price sources. Maturity and repayment of principal also contributed in some degree to the reduced exposure to holdings in level 3.

The size of the price uncertainty for level 3 holdings is difficult to estimate exactly. While the average price uncertainty for individual securities in this category is expected to be approximately +/- 10%, the group as a whole is expected to

have somewhat lower price uncertainty due to diversification effects. Estimated valuation uncertainty was therefore determined to be +/- NOK 0.2bn in this category as compared to NOK 0.3bn as of the end of 2009.

The result of the valuation based on ordinary pricing sources in comparison to the established external price provider hierarchy as of 31 December 2010 is viewed as providing an appropriate reflection of market values in accordance with the fair value principle. It was therefore not necessary to make any accounting provisions related to price uncertainty during the year.

#### **18.2 MONEY MARKET PORTFOLIO**

All holdings of securities and other instruments in the money market portfolio are valued by independent valuation specialists. All prices from these independent pricing providers are based on observable market prices in active markets and are regarded as having very limited valuation risk. The holdings in the money market portfolio as government bonds and Treasury bills and are categorised in their entirety as being in level 1.

### Note 19. Risk

Norges Bank's foreign exchange reserves are divided into an investment portfolio managed by NBIM and a money market portfolio managed by Norges Bank Monetary Policy (NBPO). As these portfolios have different purposes, their risk profiles are different.

In addition, a buffer portfolio is used for the regular transfers of foreign exchange to the Government Pension Fund Global. This portfolio receives funds from the State's Direct Financial Interest in petroleum activities (SDFI) and from Norges Bank's foreign exchange purchases in the foreign exchange market. The buffer portfolio is managed by NBIM along with the investment portfolio.

#### 19.1 RISK IN THE INVESTMENT PORTFOLIO **MANAGED BY NBIM**

#### Portfolio risk

The composition of the investment portfolio's holdings and the associated risk is determined primarily by the benchmark portfolio defined by Norges Bank's Executive Board.

In the investment mandate for the portfolio issued by Norges Bank's Executive Board, there are several guidelines and restrictions for the combined equity and bond asset class, as well as for the individual asset classes. These restrictions regulate to what degree Norges Bank can engage in active investment management while remaining within the legally established capital allocations.

#### Norges Bank's governance structure

The Executive Board of Norges Bank has delegated the responsibility for implementation of the investment mandate to the Chief Executive Officer (CEO) of Norges Bank Investment Management (NBIM) which is an organisational unit within Norges Bank.

The CEO of NBIM is empowered by a job description, by an investment mandate, and by the Executive Board's approval of principles for risk management at NBIM which cover operational and investment risk management. In addition to this specific delegation, NBIM must also adhere to internationally recognised standards within performance measurement, valuation and industry best practice.

Reporting requirements from the Executive Board of Norges Bank to NBIM are outlined in the CEO's job description. The Executive Board receives monthly reports, with more extensive reporting on a quarterly basis. The governor of Norges Bank is notified immediately for special issues or serious breaches to the investment mandate.

#### **NBIM** governance structure

Within NBIM, investment responsibilities are further delegated through investment mandates. Responsibility for processes and personnel is delegated through job descriptions, while process requirements are detailed through policies and guidelines. The construction of the NBIM leader group and delegation reflects a desire and requirement to ensure segregation of duties between investment management, treasury and trading, risk management, compliance and operating units.

The market risk committee, credit and counterparty risk committee, and the investment universe committee complement the delegation of responsibility by advising on investment risk management, as well as on the instrument universe.

Internal risk reporting requirements are issued by the CEO through job descriptions to personnel in the risk area. The CEO receives daily, weekly and monthly reports. The CEO is notified immediately for special issues or serious breaches to the investment mandate.

#### **NBIM** investment processes

Segregation of roles and responsibilities is a cornerstone of process design at NBIM. Processes such as the man-



agement of investment mandates, portfolio hierarchy and counterparties are delegated to the Chief Risk Officer (CRO). Changes or additions to existing investment mandates in NBIM, the portfolio hierarchy or new counterparties require approval by the CEO.

#### NBIM's framework for investment risk

The Executive Board's risk management principles are detailed further in NBIM through policies and guidelines. The responsibility for an effective organisation and process related to risk management is delegated to the CRO to ensure a robust risk management process within NBIM.

#### Risk measurement process

NBIM implements measurements, processes and systems to mitigate the risk of overreliance on any one given method of measurement, process or system to control investment risk. NBIM complements robust best of breed risk management systems and processes with internally developed measurements and processes to ensure an overlap between industry solutions with flexible alternative solutions and risk management processes.

Risk management at NBIM is defined as:

- Market risk management
- Credit risk management
- Counterparty risk management, and
- Operational risk management

The first three items listed are defined by NBIM as investment risk. In NBIM the investment area has responsibility for investing, and for taking and managing the portfolio risk and individual mandate risk, while the risk management area independently measures, manages and reports investment risk across the portfolio, asset classes and other levels within the portfolio that reflect the investment process. Operational risk is managed separately from investment risk

#### Investment risk - market risk

NBIM defines market risk as the risk of a loss or a change in the market value of the portfolio or in a part of the portfolio as a result of changes in financial market variables. This includes movements in credit spreads. Market risk is measured by NBIM on the following dimensions: absolute and relative exposure as compared to the benchmark, volatility and correlation risk which estimates the economic risk to the entire portfolio or to parts of the portfolio, systematic factor risk and liquidity risk. Market risk is actively taken to generate investment returns in line with the investment mandates' objectives of the investment mandates.

#### Investment risk - credit risk

NBIM defines credit risk as the risk of loss due to an issuer being unable to meet its payment obligations. Within credit risk NBIM measures risk as: single issuer credit risk where the probability of default and loss given default are taken into account, as well as portfolio credit risk where credit risk takes into account the correlation in credit losses between the instruments and the issuers. Credit risk is actively taken to generate investment returns in line with the investment mandates objectives.

#### Investment risk – counterparty risk

NBIM defines counterparty risk as the risk of loss related to the possible bankruptcy of a counterparty or other similar event leading to counterparty default. Counterparty risk can be divided into credit risk associated with the bankruptcy of a counterparty, default risk and custodian risk. Counterparty risk is controlled and mitigated to the largest extent possible, given the investment strategy.

#### Market risk measurement

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

Measurement and assessment of market risk in NBIM is performed along multiple risk dimensions, employing several methodologies and approaches. Combining different and complementary risk measures gives increased insight into the portfolio's risk profile.

#### Asset class per region

The portfolio is invested across several asset classes and regions as shown in the table below.

Figures in millions of NOK

	Region	Market value* in per cent	Assets minus liabilities
Equities	Americas and Africa	52.4 %	
	Europe	29.6 %	
	Asia and Oceania	18.0 %	
Total equities		41.2 %	93 835
Bonds	Americas and Africa	41.5 %	
	Europe	49.7 %	
	Asia and Oceania	8.9 %	
Total bonds		58.7 %	130 901

Table 19.1.1: Market value and book value by asset class and region

#### Concentration risk

Within the holdings of the investment portfolio, a large percentage of the investments are in government issued bonds. It is also normal for private companies to issue both bonds and equities. The following tables show the concentration of investment in the largest issuers of government bonds and other issuers.

Table 19.1.2 shows the largest exposures in bonds issued by governments, including government bonds issued in local currency, foreign currencies and inflation-linked bonds issued in local currency.

Figures in millions of NOK

	Market value
USA	42 905
Japan	11 871
United Kingdom	9 710
Germany	9 224
France	5 615
Spain	3 003
Austria	1 718
Italy	1 643
The Netherlands	1 633
Finland	635

Table 19.1.2: Largest positions within the category government bonds and inflation-linked bonds issued by governments



Includes only holdings of equities and bonds

Table 19.1.3 shows the investment portfolio's largest holdings of non-government issues, for both bonds and equities.

Covered bonds issued by financial institutions are included in the bonds column.

Figures in millions of NOK

	Sector	Fixed income	Equities	Total
European Investment Bank	Government-related	2 646		2 646
Bank of Scotland PLC	Finance	2 453		2 453
La Caja de Ahorros y Pensiones de Barcelonas	Finance	1 952		1 952
Ayt Cedulas Cajas Global	Finance	1 947		1 947
Kreditanstalt fuer Wiederaufbau	Government-related	1 755		1 755
Caja de Ahorros y Monte de Piedad de Madrid	Finance	1 356		1 356
Exxon Mobil Corp	Energy		1 173	1 173
Banco Popular Espanol SA	Finance	974	13	987
Apple Inc	Technology		941	941
Deutsche Pfandbriefbank AG	Finance	926		926

Table 19.1.3: Largest total positions excluding governments, for both bonds and equities

#### Volatility and correlation risk

NBIM uses risk modelling to quantify the economic risk connected to all or parts of a portfolio. Examples of risk measures used are Value at Risk and tracking error. Value at Risk and tracking error are standard risk measurements based on statistical methodologies such as standard deviation. The risk measures give an estimate of how much one can expect the portfolio's value to change assuming normal market conditions. Expected volatility can be expressed in terms of the portfolio's risk or active risk. The tables below present risk both in terms of the portfolio's absolute risk and of the relative/active risk.

		Expected volatility – responsive						Ехр	ected vol	atility – long-term
	Risk measure	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009	31.12. 2010	Min 2010	Max 2010	Average 31.12. 2010 2009
Portfolio	Standard deviation	7.8 %	5.2 %	9.9 %	7.5 %	7.0 %	10.9 %	10.3 %	11.9 %	10.8 % 11.6 %
Equities	Standard deviation	10.3 %	9.0 %	15.9 %	11.9 %	9.8 %	20.3 %	20.2 %	24.7 %	20.9 % 21.8 %
Bonds	Standard deviation	9.5 %	6.3 %	14.3 %	10.3 %	9.7 %	14.0 %	11.0 %	14.5 %	13.0 % 11.5 %

Table 19.1.4: Portfolio risk in terms of expected standard deviation through 2010

			Expected volatility – responsive					Ехр	ected vol	atility – lon	g-term
	Risk measure	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009
Portfolio	Tracking error	42.74	32.86	107.20	61.30	40.91	54.75	37.94	115.03	69.72	45.14
Equities	Tracking error	30.27	4.73	159.64	41.19	8.95	44.27	5.67	125.78	48.01	14.97
Bonds	Tracking error	65.83	53.98	160.71	86.30	71.79	81.10	67.06	139.13	96.46	80.07

Table 19.1.5: Active risk in terms of expected tracking error through 2010 (in basis points)

Through 2010 risk levels varied and peaked in Q2 with an expected standard deviation for the portfolio of just under 12% using long-term modelling. Volatility in both the equity and bond markets increased due to the uncertainties in the European government debt markets, funding challenges for banks and fears of an economic downturn particularly in the US. The portfolio's tracking error varied during 2010 and in Q2 was 107 basis points. The background for the high level of the tracking error was an adjustment of the portfolio's benchmark portfolio, which resulted in increases in relative market exposures. There was also high volatility in financial markets.

In the responsive modelling shown in the table above, Norges Bank has used a parametric calculation methodology based on daily returns with a decay factor of 0.97, which implies that newer data is given more weight than older data. This measurement approach was employed in 2010 and prior years for measurement against the expected tracking error restriction given by Norges Bank's Executive Board. The same methodologies are used for both portfolio risk and tracking error. Tracking error was within the current restrictions in 2010. In Q2 there was a breach owing to changes in the benchmark portfolio, which were implemented over a period. These changes coincided with increased financial market turbulence.

#### Strengths and weaknesses

A strength of these types of risk models is that one can estimate the risk of a portfolio across different asset classes, markets, currencies, securities and derivatives and express that risk by a single figure which takes into account the correlation between different asset classes, securities and risk factors.

Model-based risk estimates are based on historical relationships in the marketplace. Models that use recent historical data have good forecasting capabilities in normal markets. Alternatively, in periods with significant changes in volatility and correlation the estimates will be less reliable. Additionally, the models estimate risk over a specified period of time based on the assumptions that the exposures are liquid and can be closed within the period. Calculated volatility gives a point estimate of risk, and gives little information about the total risk profile (the tail ends of the risk distribution). Annualisation assumes that volatility and the portfolio in its entirety are constant over time. To compensate for these weaknesses in the model, Norges Bank uses complementary models, methods and various stress tests.

#### Follow-up testing of models (back testing)

Follow-up testing of the models (back testing) is performed to validate the model's ability to estimate risk. One of the methods used is to compare the predicted risk estimated by the models to the actual risk observed in the portfolio's actual return.

The table below summarises the total number of observations where actual loss exceeds the expected risk, the expected frequency and the ratio between them. Only downside risk has been taken into account. The closer the observed/expected ratio is to 1, the better the model has estimated risk. Three different confidence levels are considered. A ratio above one indicates that the risk has been underestimated.

Risk measure	Period	Expected	Actual	Actual/ Expected
Standard deviation	2 years	83	58	0.7
Value at Risk 95%	2 years	26	21	0.81
Value at Risk 99%	2 years	5	5	0.96

Table 19.1.6: Comparison between portfolio's expected loss frequency and actual loss frequency

Risk measure	Period	Expected	Actual	Actual/ Expected
Tracking error	2 years	83	41	0.49
Value at Risk 95%	2 years	26	27	1.04
Value at Risk 99%	2 years	5	20	3.84

Table 19.1.7: Comparison between expected loss frequency on relative and actual loss frequency



The investment portfolio investment mandate allows for the opportunity to be exposed to several systematic risk factors. Risk factors are common characteristics of securities that most securities are exposed to to some extent, and that contribute to both the risk and to the return related to a security. This type of factor analysis is based on the observed return on the portfolio and attempts to explain the observed return based on a number of factors, such as the market portfolio, emerging economies, value stocks and small-cap companies over a long time series.

#### Credit risk

Credit risk is the risk of losses from issuers of fixed income instruments defaulting on their payment obligations. Fixed income instruments in the portfolio's benchmark portfolio are all rated as investment grade by one of the major credit rating agencies, Standard & Poor's (S&P), Moody's or Fitch. The credit rating reflects the issuer's expected creditworthiness. Bonds in the fixed income asset class benchmark portfolio are investment grade and therefore deemed to represent low credit risk. In the table below, 2.3% of the actual portfolio is categorised non-investment grade (Higher risk) as of 31 December 2010.

Table 19.1.6 is specifies the actual fixed income portfolio based on the different credit rating categories as of 31 December 2010.

Figures in millions of NOK

	Aaa	Aa	Α	Baa	Higher risk	Total
Government bonds	71 828	13 522	279	482	472	86 583
Government related bonds	7 211	928	270	206	68	8 683
Inflation-linked bonds		3 311				3 311
Corporate bonds	215	2 405	4 728	4 100	443	11 891
Securitised bonds	16 041	5 290	152	153	1 644	23 280
Total bonds and other fixed income securities	95 295	25 456	5 429	4 941	2 627	133 748

Table 19.1.8: Bond portfolio specified by credit rating category

Following the financial crisis of 2007 and 2008 bankruptcy and default rates increased. As of the end of 2010 the investment portfolio held defaulted bonds with a market value of NOK 375m, or 0.3% of the holdings in the fixed income portfolio. The nominal size of defaulted bonds was NOK 2.4bn. Norges Bank uses a credit default definition in line with the definition used by the credit rating agencies

for securitised debt. Defaulted bonds are grouped under "Higher risk" in the table above.

Table 19.1.9 below shows the fixed income asset class aggregated by credit rating and currency. In line with the ruled-based capital allocation, European currencies are a larger percentage of the fixed income asset class than the market value in the benchmark portfolio Barclays Global Aggregate would indicate.

	Aaa	Aa	Α	Baa	Ba	Higher risk	Total
EUR	25.6 %	9.0 %	1.7 %	1.7 %	0.5 %	0.1 %	38.6 %
USD	36.1 %	0.8 %	1.6 %	1.6 %	0.1 %	1.3 %	41.5 %
GBP	9.5 %	0.3 %	0.8 %	0.4 %	0.0 %	0.0 %	11.0 %
JPY	0.0 %	8.9 %	0.0 %	0.0 %	0.0 %	0.0 %	8.9 %
CAD	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Total	71.2 %	19.0 %	4.1 %	3.7 %	0.6 %	1.4 %	100.0 %

Table 19.1.9: Bond portfolio specified by credit rating category and currency

The credit risk of the portfolio can be managed through the use of credit derivatives. The credit risk in the bond portfolio is reduced through the use of this type of derivative. See Note 15 Financial derivatives for additional information.

In addition to the credit rating based approach Norges Bank has started to use two other methods to measure credit risk. These model-based approaches complement the credit rating method and are used to monitor credit risk in the fixed income asset class independently of credit rating. These methods are comparable to Value at Risk and tracking error in the manner in which credit risk is quantified into one number and is a function of observable credit spreads and equity prices. Norges Bank will continue to develop the use of these methods.

#### **Counterparty risk**

Norges Bank is exposed to risk vis-à-vis counterparties in the international settlement and custody systems where trades are settled. Additionally, counterparties are necessary to ensure efficient cash management, and effective trading and hedging of market and/or credit risk. Repurchase and reverse repurchase agreements and securities lending via external agents also give rise to counterparty risk.

Norges Bank reduces counterparty risk concentration by using many counterparties and by setting strict credit rating requirements. Rating requirements for counterparties with unsecured bank deposits on behalf of Norges Bank are higher than in situations when collateral is given. Netting agreements are used to further mitigate counterparty exposure when trading in OTC derivatives and foreign exchange contracts. A final means of reducing counterparty risk a collateral requirement when a counterparty net position reaches a predefined level. Norges Bank actively seeks to mitigate counterparty risk through the use of strict guidelines intended to diversify risk.

The method used to calculate counterparty exposure, gross and net, is in accordance with the recommendations of the UK Financial Services Authority. Two methods are used. An internal counterparty risk model was implemented during 2010 for OTC derivatives, time deposits, bank deposits, and foreign exchange contracts. The model prices these positions using different assumptions to take into account possible future market movements. The model gives a measurement of expected future exposure. Netting agreements and collateral are taken into account in determining the net exposure.

An expanded financial collateral method is used for repurchase agreements and securities lending transactions executed via external agents. This method entails calculating the market value and adding an additional internal charge that reflects the position's volatility. These positions are also adjusted for netting and actual received and given collateral when determining the net exposure. In Table 19.1.10 below the exposure is specified by type of activity/instrument that is categorised as having a counterparty risk. In addition to the figures from the internal risk model, the counterparty risk according to the balance sheet figures is given, adjusted for both recognised and not recognised collateral.

Figures in millions of NOK

				3	
	Balance sheet value adjusted for collateral	Gross exposure	Netting effects	Collateral and guaran- tees	Net exposure
Time deposits					0
Unsecured bank deposits	381	396			396
OTC derivatives, including foreign exchange contracts	-141	224	66	84	74
Repurchase and reverse repurchase agreements*	-973	833	149		684
Securities lending transactions**	-142	1 370		1 301	69
Total		2 823	215	1 385	1 223

- The column Balance sheet value adjusted for collateral takes into account all positions in the repurchase market, including the reinvestment of cash collateral (see Note 13 Repurchase and reverse repurchase agreements). The internal measurement and controls of counterparty risk for these types of instruments do not include these reinvestments as of year-end.
- The column Balance sheet value adjusted for collateral includes securities lent and received collateral (see Note 14 Securities lending) and is adjusted for unrealised losses connected to reinvestments in the form of bonds.

Table 19.1.10: Counterparty risk by type of position



In the table above the share of the balance sheet line Deposits in foreign banks pertaining to the investment portfolio (NOK 422m as of 31 December 2010) is divided into bank deposits (nostro bank deposits and futures margin) of NOK 381m and NOK 42m of equity swap margin. The latter is included in the line OTC derivatives incl. foreign exchange contracts in the table. This line consists of, in addition to the NOK 227 of margin deposits on equity swaps, net market value of foreign exchange contracts (NOK 3m) and swap agreements (NOK -187 million) (see Note 15 Financial

derivatives). Counterparty risk for derivative positions is followed-up on a net basis at Norges Bank.

Norges Bank's counterparties have a credit rating from an independent credit rating agency. Only in instances when the counterparty risk is considered very low can an internal credit evaluation be used as the basis for counterparty approval. Credit ratings of the Bank's counterparties are monitored and complemented by alternative credit risk indicators. Table 19.1.11 shows Norges Bank's counterparties classified according to credit rating category.

	Norges Bank counterparties (excl. brokers)	Brokers
Aaa	3	3
Aa	55	57
A	23	36
Baa		21
Ba		6
В		3
Total	81	126

Table 19.1.11: Counterparties by credit rating

#### Leverage

Leverage is used primarily to ensure effective management of investments. The use of leverage is regulated in the investment mandate issued by Norges Bank's Executive Board to NBIM. Leverage is measured net as a percent of the net market value of the portfolio. The definition takes into account the net value of cash, cash equivalents as well as derivatives converted to the underlying security and cash position. When the net value of these items is negative, this is defined as leverage. Cash equivalents include bank deposits and bank loans, receivables and short-term liabilities, as well as repurchase and reverse repurchase

agreements. The net cash effect is measured as a percentage of the portfolio's net market value. See also Note 13 Repurchase and reverse repurchase agreements and Note 14 Securities lending for additional information on the activities that principally create leverage. These accounted for 98% of the leverage effect in the investment portfolio as of year-end. The remainder is primarily due to short-term liabilities, for example unsettled trades and money market loans that normally contribute to leverage. Leverage in the investment portfolio was reduced somewhat in 2010 and has been constantly low in the period.

	31.12.2009	Q1 2010	Q2 2010	Q3 2010	31.12.2010
Net leverage as a percentage of market value as of the end of the period	5.8 %	3.0 %	1.4 %	1.9%	1.8 %

Table 19.1.12: Net leverage

#### Sale of securities Norges Bank does not own

Sale of securities not owned by Norges Bank (short sales) can only be done if the Bank has established borrowing agreements to cover a negative position. Such transactions are used to a very low degree.

#### 19.2 RISK IN THE MONEY MARKET PORTFOLIO MAN-AGED BY NORGES BANK MONETARY POLICY (NBMP)

#### Purpose of the portfolio

The money market portfolio 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 portfolio is also used to meet Norges Bank's international obligations, including transactions with the IMF and loans to individual countries, and to carry out foreign exchange transactions on behalf of the Government Petroleum Insurance Fund.

On 3 February 2010 the Executive Board approved new guidelines for the money market portfolio effective from 31 March 2010. According to the guidelines, the size of the portfolio was to be between SDR 2bn and SDR 3bn. In addition, investments in government securities were to have a residual maturity of less than one year. Furthermore, the benchmark portfolio was to be composed of USD and EUR overnight money market indices and Treasury bill indices for the same currencies.

#### Market risk

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

#### Absolute market risk

Absolute risk is estimated based on the actual portfolio, as the standard deviation of the return. The model uses expected standard deviation, based on the composition of the portfolio and assumptions regarding sensitivities to fluctuations in relevant market factors and correlations between these factors. A parametric weighted method is employed. The standard deviation is a statistical term that indicates the magnitude of variation that can be expected in the return on the portfolio. The expected annual standard deviation in the actual portfolio was 0.2% in local currency at end-2010. This means that in two out of every three years the value of the portfolio is expected to fluctuate within +/-0.2% of total market value (one standard deviation) based on the actual portfolio at that time.

Market risk at end-2010 was at a low level relative to historical market risk for equivalent portfolios.

#### Relative market risk

The market risk in the money market portfolio is also measured by expected relative volatility. This is statistically defined risk measure that indicates the size of the expected deviation that can normally be expected between the return on the benchmark portfolio and the return on the actual portfolio. Corresponding estimates of absolute market risk are parametrically weighted using a method of estimating relative market risk.

The Executive Board has issued guidelines for how much the actual portfolio may deviate from the benchmark portfolio. The limit for expected relative market volatility has been set at 1.0%, and the Bank uses a model that takes into account market fluctuations. Average expected relative volatility was measured at 0.11% in 2010, falling somewhat in Q4 and ending at 0.08% at year-end.

#### **Credit risk**

Credit risk is the risk of losses if issuers of fixed income instruments default on their payment obligations to Norges Bank. Another form of credit risk is the counterparty risk that arises through derivatives and foreign exchange contracts. Settlement risk, which arises in connection with the purchase and sale of securities, where not all transactions take place in real time, also gives rise to counterparty risk.

The limits for exposure to a particular bank (exposure limits) include time deposits and trading in foreign exchange (spot, forward and swap transactions). Maximum exposure to the most creditworthy banks has been set at NOK 1bn. Unsecured deposits may be made with counterparties with a minimum long-term rating of AA-/AA-/Aa3, respectively, from one of the three major rating agencies: S&P, Fitch and Moody's. Transactions are not permitted with a counterparty that has received a rating lower than A-/A-/A3 from one of the three agencies.

Investments where the counterparty has given collateral in the form of cash or securities may be undertaken if the counterparty has a long-term rating no lower than A-/A-/A3. /A3.



### Note 20. Other assets in foreign currency

Figures in millions of NOK

	2010	2009
BIS shares	94	94
Unsettled trades	1 972	802
Other assets	103	58
Loans to the IMF	2 688	711
Long-term lending, foreign	1 872	671
Other assets in foreign currency	6 729	2 336
Allocated, unpaid shares in BIS	-268	-269

Table 20.1: Other assets in foreign currency

Norges Bank has been allocated a total of 8 000 shares at SDR 5 000 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 and has a contingent liability equivalent to the value of the share on the allocation date. This is recognised under the item "Other liabilities in foreign currency" in the amount of NOK 23m. In addition; Norges Bank has a con-

tingent liability to the BIS related to the allocated shares of NOK 268m, which is not recognised in the balance sheet. In 2010, dividends on BIS shares amounted to NOK 56.

Seðlabanki Íslands has drawn NOK 1 872m under a bilateral loan agreement with Norges Bank at end-2010. The loan is guaranteed by the Icelandic and Norwegian governments.

## Note 21. Lending to banks etc.

Figures in millions of NOK

	2010	2009
Lending to banks, fixed-rate loans	60 057	75 442
Lending to Norges Bank's employees	486	487
Lending to banks etc.	60 543	75 929

Table 21.1: Lending to banks etc.

Lending to banks is in the form of fixed-rate loans provided against collateral in approved securities. Loan maturities averaged 1.1 months in 2010. The corresponding average maturity in 2009 was 2 months.

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 2 280 000 and a maximum term of 30 years. Consumer

loans are limited to a maximum of four times the monthly salary. The loan schemes apply to all employees. In 2010, the interest rate was linked to the norm rate (the norm rate for loans on favourable terms from an employer). The Ministry of Finance sets the norm rate up to 6 times a year, and in 2010 interest rates increased from 2.00% to 2.75%.

## Note 22. Other assets in NOK

Figures in millions of NOK

	2010	2009
Fee for management of the Government Pension Fund Global	2 959	3 228
Outstanding accounts, separate portfolios under management	4 322	3 193
Paid-in capital, Norges Bank's pension fund	142	142
Overfunded pension plan	363	247
Domestic deposits	40	38
Other domestic assets	22	28
Other assets in NOK	7 848	6 876

Table 22.1: Other assets in NOK

agreements vis-à-vis other portfolios managed by Norges Bank. These related-party transactions were performed on an arm's length basis.



<sup>&</sup>quot;Outstanding accounts, separate portfolios under management" comprises the net value of deposits, short-term borrowing, repurchase agreements and reverse repurchase

# Note 23. Fixed assets

Figures in thousands of NOK

										341143 01 1401
	Software	Vehicles, Machinery, IT equipment	Security system	Machinery, Fixtures	Buildings with. installations.	Bank building Head office Bankplassen 2	Building under construction	Bank's Holiday cabins	Land	Total
Cost at 1 January	231 143	Machi- nery,	system	13 364	789 619	1 657 410	26 696	436	59 881	2 867 876
+ Transfers from building under construction	18	IT equip- ment	0	0	24 179	0	-24 197	0	0	0
+Additions	1	0	4 915	2 607	14 380	0	5 453	0	0	27 356
- Disposals	1 821	402	253	0	4 664	0	0	436	0	7 575
-/+Adjustments	0	0	0	0	0	0	0	0	0	0
Cost at 31 December	229 341	26 300	67 289	15 971	823 515	1 657 410	7 952	0	59 881	2 887 657
- Accumulated depreciation and impairment	125 233	21 498	45 242	8 961	424 558	746 406	0	0	0	1 371 897
Carrying amount at 31 Dec	104 108	4 802	22 047	7 010	398 957	911 004	7 952	0	59 881	1 515 760
Undepreciated remainder of previously revalued assets	0	0	0	0	2 315	887 333	0	0	56 580	946 228
Ordinary depreciation for the year	31 371	2 179	8 315	1 830	33 505	37 193	0	0	0	114 393
Impairment for the year	0	0	0	0	0	0	0	0	0	0
Share of ordinary depr. relating to previously revalued assets	0	0	0	0	771	36 243	0	0	0	37 014
Depreciation schedule, no. of years	5-6	5	6-7	5-10	5-27	20-50	none	none	none	

Table 23.1: Fixed assets

# Note 24. Other liabilities in foreign currency

	2010	2009
Share capital in BIS not paid up	23	23
Unsettled trades	470	1 528
Other liabilities	864	646
Other liabilities in foreign currency	1 357	2 197

Table 24.1: Other liabilities in foreign currency

## Note 25. 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 in the amount of NOK 53.9bn and consist of NOK 49.1bn in banknotes and NOK 4.8bn in coins.

Norges Bank is obliged to redeem notes and coins for 10 years following the decision to withdraw them as legal tender. In 2010, redeemed/invalidated banknotes and coins amounting to NOK 3.2m were charged as an expense in Norges Bank's financial statements.

## Note 26. Deposits from banks etc.

Figures in millions of NOK

	2010	2009
Sight deposits from banks	79 810	80 215
Other deposits	84	93
Deposits from banks etc.	79 894	80 308

Table 26.1: Deposits from banks etc.

### Note 27. Other liabilities in NOK

Figures in millions of NOK

	2010	2009
Pension and other benefit obligations	213	226
Other liabilities	369	436
Other liabilities in NOK	582	662

Table 27.1: Other liabilities in NOK

## Note 28. Adjustment Fund

	2010	2009
Adjustment Fund balance at 1 January.	51 298	58 865
Transferred from	0	7 567
Allocated to	12 686	0
Adjustment Fund balance at 31 December.	63 985	51 298

Table 28.1: Adjustment Fund



## Note 29. Other capital

Figures in millions of NOK

	2010	2009
Revaluation Fund at 1 January.	983	1023
Reversals from the Fund in the period	-37	-40
Revaluation Fund at 31 December.	946	983

Table 29.1: Other capital

### Note 30. Government Pension Fund Global

The Ministry of Finance has a krone deposit at Norges Bank relating to the Government Pension Fund Global of NOK 3 074.5bn. The equivalent of 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 positive in 2010, and NOK 255.4bn was transferred to the krone account. This is recognised in profit or loss 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 reporting has been prepared for the Government Pension Fund Global. The profit and loss account, balance sheet and notes (GPFG1-12) are as follows:

#### Profit and loss account

	Note	2010	2009
Profit/loss on financial assets excluding exchange rate adjustments			
Interest income on deposits in foreign banks		377	462
Interest income, lending associated with reverse repurchase agreements		350	696
Net income/expenses and gains/losses from:			
- Equities and units		207 070	488 082
- Bonds and other fixed income instruments		60 316	118 971
- Financial derivatives		-3 552	7 398
Interest expense repurchase agreements		-574	-2 571
Other interest expense		-105	-60
Other expenses		-9	-193
Profit/loss before exchange rate adjustments	1	263 873	612 785
Exchange rate adjustments		-8 498	-417 607
Profit/loss before management fee		255 375	195 178
Management fee	2	-2 959	-3 228
Profit/loss for the year		252 416	191 950

#### **Balance sheet**

Other liabilities

Owner's capital

Management fee payable

**Total financial liabilities** 

Total liabilities and capital

Figures in millions of NOK

		Figures	s in millions of NOK
EIENDELER	Note	2010	2009
ASSETS FINANCIAL ASSETS			
Foreign bank deposits		6,303	4,644
Lending associated with reverse repurchase agreements	3,4	255,501	191,473
Cash collateral paid	3	0	140
Equities and units	5	1,733,378	1,496,759
Equities lent	4,5	162,483	150,847
Bonds and other fixed income instruments	3,4,5	1,038,793	918,500
Bonds lent	4,5	215,090	161,990
Financial derivatives	6	3,068	2,263
Unsettled trades		4,864	17,572
Other assets	7	1,358	251
Total financial assets	9,11, 12	3,420,838	2,944,439
LIABILITIES AND CAPITAL FINANCIAL LIABILITIES			
Short-term borrowing		2,939	6,238
Borrowing associated with repurchase agreements	3	132,992	109,536
Cash collateral received	4	172,309	154,676
Bonds and other fixed income instruments	5	809	10,278
Financial derivatives	6	9,372	8,118
Unsettled trades		20,358	11,925

The Government Pension Fund Global is presented in the following way in the balance sheet of Norges Bank:

	_	
Assets		
Investments for the Government Pension Fund Global	3 074 461	2 636 815
Liabilities		
Deposits in krone account Government Pension Fund Global	3 074 461	2 636 815



7

2

8

9,11, 12

4,639

2,959

346,377

3,074,461

3,420,838

3,625

3,228

307,624

2,636,815

2,944,439

# GPFG 1. Profit/loss before exchange rate adjustments

Figures in millions of NOK

	Interest income/ expense	Dividends	Net income/ expense*	Realised gains/ losses	Unrealised gains/ losses	Total
Interest income on deposits in foreign banks	377					377
Interest income, lending associated with reverse repurchase agreements	350					350
Net income/expense and gains/losses from:						
- Equities and units		42 775	1 446	30 494	132 355	207 070
- Bonds and other fixed income instruments	47 077		274	5 273	7 692	60 316
- Financial derivatives	-2 519			-538	-495	-3 552
Interest expense repurchase agreements	-574					-574
Other interest expense	-105					-105
Other expenses			-9			-9
Profit/loss before exchange rate adjustments	44 606	42 775	1 711	35 229	139 552	263 873

See also Note 4 Securities lending

Table 1.1: Specification of profit/loss before exchange rate adjustments

# GPFG 2. Management fee

		2010		2009
	NOK thousands	Per cent	NOK thousands	Per cent
Apportionment of salary, social security and other personnelrelated costs	389 260		416 360	
IT, information and decision support systems	223 335		203 604	
Base fees to external managers	452 151		431 931	
Performance-based fees to external managers	986 143		1 401 762	
Custody and settlement costs	382 255		289 279	
Outsourced IT and analysis costs	213 488		186 699	
Consulting and legal fees	116 304		124 960	
Allocated common costs Norges Bank	115 258		105 463	
Other costs	81 300		67 921	
Total management fee	2 959 494	0.11	3 227 979	0.14
Total management fee excluding performance-based fees	1 973 351	0.07	1 826 217	0.08

Table 2.1: Specification managment fee\*

\* The table shows total costs incurred by Norges Bank that are reimbursed by the Ministry of Flnance as the principal for the management of the Government Pension Fund Global. Fees to external managers and custody and settlement fees are invoiced directly to and paid individually by each of the portfolios managed by Norges Bank. All other costs included in the total management fee are costs that are common for the management of all portfolios and are allocated to the individual portfolio using a cost allocation model based primarily on market values and asset class composition.

## GPFG 3. Repurchase and reverse repurchase agreements

Norges Bank uses the markets for repurchase and reverse repurchase agreements directly and through securities lending programmes (see Note 4 Securities lending) as part of liquidity management and to generate additional income through investments. At any time the Bank will have lent or transferred parts of its holdings in bonds through repurchase agreements (repos and sell buy backs), against receiving a corresponding amount in cash. This may be in the form of financing of the asset management (borrowing of cash), or lending of securities with the aim of reinvesting received cash at higher interest and thus creating additional income/ return. In addition the Bank has positions in reverse repurchase agreements where the counterparty has transferred bonds or equities to the Bank (reverse repo, buy sell backs and triparties), and where the Bank has transferred cash to the counterparty. Such positions are used in connection with placing liquidity and also through the securities lending agents as reinvestments of received cash collateral related to lent securities. Under repurchase agreements, the lent security is not derecognised from the balance sheet of the Government Pension Fund Global. Received cash is recognised as Foreign bank deposits, with a corresponding liability to pay back the cash included in Borrowing associated with repurchase agreements. For reverse repurchase agreements the borrowed security is not recognised in the balance sheet, while transferred cash is derecognised from Foreign bank deposits and a corresponding receivable is recognised as an asset, Lending associated with reverse repurchase agreements.

For repurchase agreements the transferred security may be viewed as collateral given by Norges Bank to borrow cash, see "Bonds given as collateral (asset)" in Table 3.1. This item also includes lending of securities, where received cash is collateral held by Norges Bank. All positions within the instrument type repurchase agreements are shown in

the table as borrowing of cash against given collateral in the form of securities.

Similarly received securities in relation to reverse repurchase agreements may be viewed as received collateral related to lent/placed cash, see "Bonds received as collateral" in Table 3.1. In some cases these will be borrowed securities where transferred cash is collateral given by Norges Bank. All positions within the instrument type reverse repurchase agreements are shown in the table as placements of cash where received securities are collateral. Rules are laid down on which types of securities may be received as collateral. Bonds shall have a credit rating of at least A or similar from at least one of the rating agencies Fitch, Moody's and Standard & Poor's to be accepted as collateral.

In addition to collateral related to each transaction the Bank has established a process for monitoring the net market value of the positions by comparing the collateral value against the transaction value per counterparty, where additional collateral in the form of either securities or cash is given or received if the exposure is above a threshold value. Within the Government Pension Fund Global the Bank has not received or given such cash collateral at year-end. Given and received additional collateral in the form of securities is shown separately in Table 3.1 and is treated in the financial statements similarly to other security collateral.

Table 3.1 shows total positions in repurchase and reverse repurchase agreements in the Government Pension Fund Global as at year-end 2010, with comparative figures for 2009, and corresponding collateral in the form of securities. The items Borrowing associated with repurchase agreements and Lending associated with reverse repurchase agreements shows the balance sheet value of these positions (amortised cost / cash amount transferred). This includes unsettled trades based on the transactions being recognised on the trade date. The collateral in the form of securities is shown at fair value. For repurchase agreements this is the value the securities holdings are measured at in the balance sheet (see Note 5 Equities and units / Bonds and other fixed income securities). As for reverse repurchase agreements, the received securities are not recognised in the balance sheet. In order to show the total exposure of the positions, unsettled trades have been shown separately under received and given collateral. This securities collateral has not yet been transferred and therefore is not included in the lines Bonds given as collateral (asset) and Bonds/equities received as collateral in Table 3.1, while the corresponding cash amount to be transferred is included in Borrowing associated with repurchase agreements and Lending associated with reverse repurchase agreements.



#### Specification repurchase and reverse repurchase agreements

Figures in millions of NOK

		2010		2009
	Book value	Fair value	Book value	Fair value
Borrowing associated with repurchase agreements (cash borrowed)	132 992	132 992	109 536	109 536
Bonds given as collateral (asset)	130 198	130 198	107 265	107 265
Unsettled trades (asset), collateral not yet transferred	205	205	0	0
Net over collateralisation (under collateralisation) repurchase agreements	2 589	2 589	2 271	2 271
Cash lent outside of securities lending programmes	101 990	101 990	65 824	65 824
Cash lent through the securities lending programmes (reinvesting)	153 511	153 511	125 649	125 649
Lending associated with reverse repurchase agreements (total cash lent)	255 501	255 501	191 473	191 473
Bonds received as collateral	-	243 481	-	185 774
Equities received as collateral	-	5 813	-	4 378
Total received collateral	-	249 294	-	190 152
Unsettled trades (liability), collateral not yet received	7 820	7 820	2 058	2 058
Net over collateralisation (under collateralisation) reverse repurchase agreements	-	1 613	-	737
Additional collateral				
Cash collateral paid (additional collateral)	-	-	140	140
Collateral given in the form of bonds	505	505	-	-
Received collateral in the form of bonds	-	384	-	-
Total additional collateral	-	121		140
Net over collateralisation (under collateralisation) repurchase and reverse repurchase agreements	-	4 081	-	2 868

Table 3.1: Specification repurchase and reverse repurchase agreements

Table 3.1 shows that Norges Bank within the Government Pension Fund Global is over-collateralised related to repurchase agreements in the amount of NOK 2 589m at the end of 2010. This means that the Bank has an excess of the mentioned amount of cash received compared to collateral given. Similarly Norges Bank is over-collateralised also for reverse repurchase agreements, in the amount of NOK 1 613m, as the Bank has an excess of received securities collateral compared to placed cash of this amount. Total over-collateralisation across these instrument types,

including additional collateral, is NOK 4 081m as at 31 December 2010.

Outside of securities lending programmes Norges Bank had borrowed a net amount of NOK 31bn at the end of the year. This consists of the net effect of borrowed cash of NOK 132 992m and lent cash of NOK 101 990m. See also further descriptions of leverage in Note 12 Risk, and in Note 4 Securities lending which describes the leverage effect of the securities lending programmes.

## GPFG 4. Securities lending

Norges Bank has entered into agreements with external agents regarding securities lending. These agents have access to the securities holdings of the portfolio and may lend these to other market participants with borrowing needs. Both equities and bonds are lent through the securities lending programmes. The purpose of the lending activities is both to provide the market with better access to securities and thereby to increase efficiency, and to create additional returns for the Government Pension Fund Global based on its securities holdings. When a security is lent out, the borrower transfers collateral to the agent in the form of cash or securities. The collateral is held on the behalf of Norges bank. The agreements with the agents have provisions ensuring the bank's and the portfolio's interests in the event of the counterparty not being able to deliver the borrowed securities back, and in the event that the collateral that has been received for the loan is not sufficient to cover losses that may occur. The cash collateral is reinvested primarily in fixed income instruments at a higher interest rate than what is paid on received cash. The reinvestments are done by the agent both in the form of positions in the repo market (reverse repurchase agreements: reverse repos, buy sell backs and triparties, see Note 3 Repurchase and reverse repurchase agreements) and in the form of bonds. At year-end 70% of these bond investments within the Government Pension Fund Global were rated at Aaa from Moody's. Bonds as a share of reinvestments have decreased from 36% to 10% during the last two years.

Lent securities are presented on separate lines in the balance sheet. Received cash collateral is recognised in the balance sheet as "Foreign bank deposits" with a corresponding liability "Cash collateral received" based on the fact that the bank has the right to dispose of this cash. Received collateral in the form of securities is not recognised in the balance sheet because these are not reused (rehypothecated), but are left in custody. Reinvestments in the form of reverse repurchase agreements and bonds are recognised in the balance sheet in the same way as other such investments.

Norges Bank earns a net fee income based on these securities lending programmes. The net income consists of the pure lending fee, costs related to received cash collateral, as well as interest income and realised returns from reinvestments. The agent's share as a fee for carrying out the transactions is included in this net income. Net income from securities lending is presented on the profit and loss account lines Net income/expenses and gains/losses from equities and units and Net income/expenses and gains/losses from bonds and other fixed income instruments. The income related to equities lending within the Government Pension Fund Global amounted to NOK 1 446m in 2010, while the corresponding income from bond lending amounted to NOK 274m in 2010 (see also Note 1 Profit/loss before exchange rate adjustments). In addition to the mentioned profit and loss items come unrealised gains and losses related to reinvestments in the form of bonds measured at fair value. This element is not included in the fee income, but is also included in the profit and loss line Net income/expenses and gains/losses from bonds and other fixed income instruments. NOK 1 010m has been recorded as income in 2010 based on a change in unrealised loss for these holdings.

Tables 4.1 and 4.2 show an overview of positions within securities lending programmes at the end of 2010 and 2009.

Figures in millions of NOK

		2010		2009
	Book value	Fair value	Book value	Fair value
Securities lent				
Equities lent	162 483	162 483	150 847	150 847
Bonds lent	215 090	215 090	161 990	161 990
Total securities lent	377 573	377 573	312 837	312 837
Collateral received				
Cash collateral received	172 309	172 309	154 676	154 676
Equities received as collateral	-	123 995	-	92 191
Bonds received as collateral	-	98 962	-	79 896
Total collateral related to securities lending	172 309	395 266	154 676	326 763
Net over-collateralisation	-	17 693	_	13 926

Figures in millions of NOK

	2010	2009
	Book value	Book value
Reinvestment connected to securities lending		
Reverse repurchase agreements	153 511	125 649
Asset-backed securities	13 541	22 030
Other fixed income instruments	3 831	4 600
Total reinvestment in the form of bonds and other fixed income instruments	17 372	26 630
Total reinvestments of cash collateral	170 883	152 279
Unrealised loss bonds and other fixed income instruments	1 341	2 351

Table 4.2: Reinvestment of cash collateral connected to securities lending

Table 4.2 shows that Norges Bank within the Government Pension Fund Global at the end of 2010 has investments in bonds at a market value of NOK 17bn that have been made by using received cash collateral as financing. This may be seen as the leverage of the portfolio and is included in the measure of net leverage that is described in Note 12 Risk. Reinvestments in addition to this are done with

the purpose of covering interest costs on received cash collateral through the use of low risk instruments (reverse repurchase agreements), and are not viewed as creating leverage. The purpose of the securities lending programmes is primarily to earn extra returns in the form of securities lending fees, as opposed to getting access to additional capital for investment.

# GPFG 5. Equities and units/bonds and other fixed income instruments

	Cost price	Fair value	Accrued interest/ dividends	Total fair value
Equities and units:				
Listed equities	1 746 534	1 893 714	2 147	1 895 861
Total equities and units	1 746 534	1 893 714	2 147	1 895 861
Hereof equities lent				162 483
Government bonds:				
Government bonds	537 015	514 337	6 658	520 995
Total government bonds	537 015	514 337	6 658	520 995
Government-related bonds:				
Bonds issued by local authorities	33 977	33 142	667	33 809
Bonds issued by supranational bodies	26 899	27 565	441	28 006
Bonds issues by federal agencies	89 286	85 615	1 345	86 960
Total government-related bonds	150 162	146 322	2 453	148 775
Inflation-linked bonds:				
Inflation-linked bonds issued by government authorities	92 062	102 835	502	103 337
Total inflation-linked bonds	92 062	102 835	502	103 337
Corporate bonds:				
Bonds issued by utilities	21 592	21 013	384	21 397
Bonds issued by financial institutions	122 414	108 892	2 060	110 952
Bonds issued by industrial companies	74 963	73 468	1 363	74 831
Total corporate bonds	218 969	203 373	3 807	207 180
Securitised bonds:				
Covered bonds	201 887	192 780	4 210	196 990
Mortgage-backed securities	61 201	55 356	246	55 602
Asset-backed securities	18 031	14 117	19	14 136
Commercial mortgage-backed securities	6 487	6 026	33	6 059
Total securitised bonds	287 606	268 279	4 508	272 787
Total bonds and other fixed income instruments*	1 285 814	1 235 146	17 928	1 253 074
Hereof bonds lent				215 090

Table 5.1: Specification of equities and units / bonds and other fixed income instruments



Total bonds and other fixed income instruments of NOK 1 253 074m in the table includes a liability amount of NOK 809m, which is short positions in bonds. From the annual financial statements for 2010 short sales of bonds are no longer netted against the asset line Bonds and other fixed income securities. Short sales of bonds are presented on a separate line under liabilities in the balance sheet as Bonds and other fixed income securities. Comparative figures for 2009 have been restated.

### GPFG 6. Financial derivatives

Table 6.1 shows the nominal values of positions in financial derivatives for purchased (long) and sold (short) positions as exposure. Nominal value is the basis for the calculation

of any cash flow and gains/losses for the contracts. In addition, assets (positive market values) and liabilities (negative market values) are shown at market value.

Figures in millions of NOK

	Exposure			Fa			
	2010 Average 2010		31.12.2010				
	Purchased	Sold	Purchased	Sold	Asset	Liability	Net
Foreign exchange contracts	29 849	0	27 468	0	402	316	86
Stock exchange listed futures contracts	16 791	17 056	20 557	16 267	43	22	21
Interest rate swaps	25 002	74 689	14 035	70 908	1 847	7 300	-5 453
Credit default swaps	37 092	2 246	30 926	2 434	41	749	-708
Equity swaps	39	128	823	85	21	77	-56
Total swaps	62 133	77 063	45 784	73 427	1 909	8 126	-6 217
Options	33 845	15 217	24 829	15 840	714	908	-194
Total financial derivatives	142 618	109 336	118 638	105 534	3 068	9 372	-6 304

Table 6.1: Exposure – financial derivatives

#### Foreign currency exchange contracts

This item consists of foreign currency exchange contracts with normal settlement for future delivery. Contract exposure is the sum of the nominal value of the contracts at any given point in time.

#### **Stock-listed futures contracts**

Exposure is the nominal value of the contracts.

#### Non-stock listed financial derivatives (OTC)

#### Interest rate swaps

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

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

#### Credit default swaps

In a credit default swap, the seller receives a periodic premium or lump sum from the purchaser as compensation for assuming the credit risk. The purchaser receives payment from the seller only if the credit protection of the underlying loan is triggered (a credit event). A credit event might, for example, be a default on the underlying credit or bond loan.

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 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 agreements between two counterparties to swap cash flows based on changes in the underlying securities, which can be shares, an equity portfolio 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 as sold. Options where Norges Bank pays a premium are reported under purchased contracts.

Table 6.2 shows received and given collateral in connection with financial derivative positions.

Figures in millions of NOK

	2010	2009
OTC financial derivatives		
Net fair value OTC financial derivatives (book value)	-6 355	-5 887
Cash collateral received in relation to OTC positions	-1	0
Futures contracts and equity swaps		
Fair value futures contracts	21	-289
Fair value equity swaps	-56	172
Deposits with clearing brokers (collateral given)	331	639
Bonds given as collateral to clearing brokers	620	560

Table 6.2: Collateral connected to financial derivatives

Norges Bank gives or receives cash collateral in connection with positions in OTC financial derivatives (interest rate swaps, credit rate swaps and options). Follow-up against collateral thresholds is done per counterparty, and if the net market value of positions held by the counterparty exceed the given limits, the party with the negative market value is required to give collateral to the other party. The bank had as of year-end received collateral of NOK 1m from counterparties because few of the Government Pension Fund Global's positions had postive market values. There is a preponderance of negative market values as of year-end, but the Bank had not given any collateral on behalf of the Government Pension Fund Global as the limit is set quite high due to the bank's high credit-worthiness.

Other received cash collateral, included in the line Cash collateral received as of the end of 2010 is connected to securities lending. See Note 4 Securities lending for additional information.

Futures contracts and equity swaps (CFD - Contracts for Difference) are transacted via clearing brokers, and for these positions collateral is delivered to the clearing brokers. This can be given in the form of cash (margin calls) and/or securities. The market value of cash deposits is included in the balance shown in the line Foreign bank deposits. Transferred securities is not deducted.



# GPFG 7. Other assets / Other liabilities

Figures in millions of NOK

	2010	2009
Withholding tax	1 239	176
Accrued interest securities lent	119	75
Total other assets	1 358	251

Table 7.1: Other assets

Figures in millions of NOK

	2010	2009
Capital gains tax payable abroad	88	255
Other foreign liabilities	229	176
Liabilities to other portfolios under common management*	4 322	3 193
Total other liabilities	4 639	3 625

## Table 7.2: Other liabilities

# GPFG 8. Owner's capital

Figures in millions of NOK

	2010	2009
Balance in the krone account on 1 January	2 636 815	2 273 289
Inflows during the year*	185 230	171 577
Management fee payable to Norges Bank	-2 959	-3 228
Profit/loss transferred to/from krone account	255 375	195 178
Owner's capital – krone account balance	3 074 461	2 636 815

Table 8.1: Specification owner's capital

The Government Petroleum Insurance Fund was discontinued as of 31 December 2010, and net assets of NOK 19 838m transferred to the Government Pension Fund Global. This cash inflow is shown as part of Inflows during the year. Out of the total inflows to the Government Pension Fund Global in 2010, NOK 3.2bn were used during the first quarter to pay the 2009 accrued management fee to Norges Bank. The remainder of NOK 182bn was transferred into the investment portfolio.

Liabilities to other portfolios under common management comprises the net value of bank deposits, security lending, repurchase agreements and reverse repurchase agreements vis-a-vis other portfolios managed by Norges Bank. These related party transactions have been conducted using the same principles as for transactions conducted with unrelated parties.

# GPFG 9. Currency distribution

Figures in millions of NOK

								2010
	USD	CAD	EUR	GBP	CHF	JPY	Other	Total
Foreign bank deposits	422	41	681	170	-11	50	4 950	6 303
Lending associated with reverse repurchase agreements	67 503	277	168 506	7 365	0	7 231	4 619	255 501
Equities and units	592 971	53 984	394 203	236 938	98 658	84 194	272 430	1 733 378
Equities lent	25 418	917	38 477	22 662	6 115	21 370	47 524	162 483
Bonds and other fixed income instruments	357 578	24 941	459 350	113 462	5 125	55 429	22 908	1 038 793
Bonds lent	57 586	2 085	116 823	30 340	45	0	8 211	215 090
Financial derivatives	-7 660	-32	-1 061	-2 312	-2	-162	14 297	3 068
Unsettled trades	1 487	33	2 523	31	60	288	442	4 864
Other assets	122	0	291	12	932	0	1	1 358
Total financial assets	1 095 427	82 246	1 179 793	408 668	110 922	168 400	375 382	3 420 838
Short-term borrowing	2	0	0	0	1 706	359	872	2 939
Borrowing associated with repurchase agreements	34 392	462	66 482	19 521	0	7 831	4 304	132 992
Cash collateral received	54 398	0	116 713	1 198	0	0	0	172 309
Bonds and other fixed income instruments	809	0	0	0	0	0	0	809
Financial derivatives	201	63	3 877	2 540	-192	7 508	-4 625	9 372
Unsettled trades	11 374	479	7 383	198	36	270	618	20 358
Other liabilities	207	-48	1 547	2 571	-50	358	54	4 639
Management fee payable							2 959	2 959
Total financial liabilities	101 383	956	196 002	26 028	1 500	16 326	4 182	346 377

Table 9.1 Specification of the balance sheet by currency



# GPFG 10. Real Estate Investments

On 13 January 2011 Norges Bank signed the agreements for the first real estate investment of the Global Pension Fund Global. The transaction is expected to be completed 1 April 2011. The investment gives rights to a 25% share in the net operating income generated by a portfolio of properties that are located in and around the prime retail location of Regent Street, London, United Kingdom. This real estate portfolio is currently managed on behalf of the United Kingdom by The Crown Estate, who will continue to manage this portfolio following the completion of this transaction. The agreed purchase price is GBP 452m (NOK 4.2bn). A deposit of GBP 22.4 m (NOK 204m) was paid to The Crown Estate on 13 January 2011, with the remainder due and payable on 1 April 2011.

# GPFG 11. Fair value measurement of financial instruments

#### **Control environment**

The control environment for measuring the fair value of financial instruments is organised around a formalised and documented valuation policy and guidelines which are supported by work and control procedures. The policy document for valuation refers to pricing hierarchies which are established for each of the different asset classes.

The valuation environment is established, and adjusted, in accordance with leading best market practices for valuation. The operational implementation of the best market practice principles is done in a manner to ensure a transparent, scalable and comparable valuation of all holdings on a daily basis through the use of sophisticated processes using both internal and external data solutions.

In principle all holdings in securities and other instruments are valued by independent valuation specialists. These pricing providers were chosen based on thorough analyses by the internal department in Norges Bank that is operationally responsible for valuations. This department on a routine and ongoing basis follows-up with these price providers through dialogue, controls and inquiries connected to the prices of individual securities. The financial instrument prices from these independent price providers are based on observable prices and/or models that use observable and in some cases unobservable input factors.

On a daily basis the valuation process is subject to numerous controls by the internal valuation department as well as by the fund accountant, focusing on defined thresholds and

sensitivities. The levels of these thresholds and sensitivities are monitored and adjusted in accordance with prevailing market conditions. At each month-end, additional extensive controls are performed to ensure that established pricing procedures and fair value measurement principles following from the valuation policy have been followed. This includes verifying that the external fund accountant uses external prices as required by the price hierarchy in force at the relevant time, as well as verifying that the resulting values reflect fair value as of the actual date, i.e. that the value of the current holdings reflects the amount that can be realised in an arm's length transaction between two well informed and willing parties. Throughout this process, particular attention is paid to illiquid financial instruments, structured products and special instruments in the portfolio that have additional valuation challenges. Illiquid instruments are identified with the help of sector and currency classifications, price differences between different external price providers. coverage of the instrument by external price vendors, credit rating indicators, bid/ask spreads, and activity in the market.

A valuation memo and report are prepared at the end of each quarter documenting the results of the controls performed, status of the valuation, the largest sources of price uncertainties and associated valuation risk, as well as other relevant information for the valuation.

This documentation is reviewed by a valuation committee which acts as a forum for the consideration of significant pricing issues and formally approves the valuation. The committee meets at least once a quarter prior to the publication of the financial reporting. The committee consists of the NBIM leader group.

#### Valuation methods

Norges Bank has defined hierarchies for the independent price sources that are used for valuation. Holdings that are included in the benchmark portfolio are normally priced in accordance with the index providers' prices, while the remaining holdings of equities and bonds are priced almost exclusively by reputable independent external price providers. Prices are verified based on a comparative analysis of the applicable prices in the established hierarchies with prices from available alternative price sources. When alternative price sources are considered to be more representative of fair value, prices are adjusted to bring the valuation closer to expected fair value.

Equities are valued almost exclusively based on official closing prices from stock exchanges or last traded exchange prices, and are thus observable market prices. The same applies to more than half of the holdings in bonds. Over 80% of the investments for the Government Pension Fund

Global as of the end of 2010 were holdings of high liquidity and therefore associated with low valuation risk.

For both part of the bond portfolio and the majority of the interest rate derivatives, valuation is performed using valuation models as opposed to direct pricing, as observable prices are not available to a sufficient extent due to varying degrees of illiquidity and limited market activity. These valuation techniques are both models that use observable market data and models that to a large extent make use of unobservable market data. Valuation methodologies used by the independent valuers for bonds and derivatives are generally a combination of market standard and proprietary models but based off standard valuation principles. The models are combined with extensive daily research and analysis by the evaluations teams in order to generate high quality valuations. Methodologies vary according to the asset class or sub class under review. For bonds these will include, but are not limited to, credit spreads based on observable prices for comparable instruments, non-adjusted and option adjusted discounted cash flow models for bonds containing embedded options, and models with discount margins for bonds with floating interest rates. In the OTC derivative market, established option pricing models as well as implied interest rate curves and credit spreads are the most commonly used valuation methods.

The data, both observable and unobservable, used in the different valuation models includes the following elements:

- Bond prices prices based on price quotes and relevant market activity in new issues and from secondary market transactions.
- Credit spreads these are sourced from the credit derivative market as well as trades of more liquid bonds.
- Interest rate curves benchmark interest rate curves are often the foundation of the valuation matrix and are sourced from various market sources including government bond markets, interest rate swap markets, future markets as well as interbank markets.
- Currency rates obtained from various stock exchanges and trading markets for use in the valuation of spot, forward and future contracts.
- Equity prices.
- Prepayment rates early repayment of principal. Estimates based on both historical and expected levels can have a material effect on the valuation of individual types of bonds where early prepayment of principal is possible. This information is collected by the external price providers from various market sources, for example reports from market participants and data sources such as Bloomberg/Reuters.

- Default and recovery estimates assumptions regarding expected default and loss given default are important input factors in the models that price structured instruments and which estimate the relative size and timing of cash flows for the different tranches. Data sources are the same as for prepayment rates.
- Structuring and cash flow details per tranche analysis of structured bonds produces estimated cash flows which are used as input in the valuation models. Data sources are the same as for prepayment rates.
- Volatility this is the extent to which the price of a security fluctuates. Volatility is one of the key input factors in the valuation of option derivatives. Data sources are the same as for prepayment rates.
- Correlation this is the extent to which changes in one variable are interdependent with changes in another variable. Positive correlation indicates that the variables move in the same direction while negative correlation means the variables change in opposite direction. Data sources are the same as for prepayment rates.
- Counterparty risk prices are based on an assumption of risk-free counterparties. This is a reasonable assumption based on the existence of netting agreements and the use of collateral.

#### Pricing uncertainty

All equities, bonds and financial derivatives have been allocated to categories for assessed pricing uncertainty. Level 1 consists of investments that are valued based on observable market prices in active markets and are considered to have very limited pricing risk. Investments allocated to level 2 are valued using models with observable market data. These holdings have some pricing uncertainty with regards to establishing fair value, but overall this valuation risk is considered to be limited. Holdings allocated to category 3 are priced using models with considerable use of unobservable input factors, which implies substantial uncertainty surrounding the establishment of fair value. Nevertheless, it should be noted that the majority of these investments are valued by external professional price providers who are regarded as giving the best estimate of fair value and where the total valuation from different price providers varies only to a limited extent. Uncertainty connected with valuation gives a risk for both too high and too low values. Extensive controls are employed to mitigate this risk.



Table 11.1 groups the investments into categories of assessed pricing uncertainty as at 31 December 2010.

Figures in millions of NOK

		Level 1		Level 2		Level 3		Total
	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009
Equities	1 894 318	1 646 147	1 454	1 453	88	5	1 895 860	1 647 606
Total bonds	726 521	514 290	501 291	522 404	25 262	33 518	1 253 074	1 070 212
Government bonds	496 468	307 416	24 527	5 010	0	0	520 995	312 426
Government-related bonds	72 362	71 964	76 149	82 090	264	0	148 775	154 054
Inflation-linked bonds	75 182	32 293	28 155	56 321	0	0	103 337	88 614
Corporate bonds	1 389	0	204 077	225 232	1 714	3 092	207 180	228 324
Securitised bonds	81 120	102 616	168 383	153 750	23 284	30 427	272 787	286 793
Total financial derivatives	21	-289	-6 325	-5 566	0	0	-6 304	-5 855
Assets	43	105	3 025	2 158	0	0	3 068	2 263
Liabilities	-22	-394	-9 350	-7 724	0	0	-9 372	-8 118
Total	2 620 860	2 160 148	496 420	518 291	25 350	33 524	3 142 630	2 711 963

Table 11.1: Specification of investments by level of price uncertainty

Table 11.2 shows a further specification of level 3 holdings.

Figures in millions of NOK

	2010	2009
Equities	88	5
Total bonds	25 262	33 518
Government-related bonds	264	0
Bonds issued by federal agencies	200	0
Bonds issued by local authorities	64	0
Corporate bonds	1 714	3 092
Bonds issued by financial institutions	1 651	3 091
Bonds issued by industrial companies	63	1
Securitised bonds	23 284	30 426
Asset-backed securities (ABS)	3 878	6 673
Commercial mortgage-backed securities (CMBS)	465	2 442
Mortgage-backed securities (CMO)	18 941	21 311
Total level 3	25 350	33 523

Table 11.2: Additional specification of level 3

Almost all of the equity holdings are classified as level 1 with a low valuation risk as there is normally available an official closing price from active trading on a listed stock exchange, thus correctly reflecting the fair value. Equity holdings classified as level 2 consist mainly of relatively illiquid shares where the price estimate is based on more liquid shares issued by the same company. The valuation risk in this instance is also generally low as the model is straightforward and the input factors observable. Equities classified as level 3 consist of a few holdings where the valuation is particularly uncertain due to a lack of observable transactions markets and also of equities that have been suspended over a longer time period due to special circumstances such as bankruptcy, nationalisation, or liquidation.

The pricing uncertainty situation for bonds is much more varied. Norges Bank carries out analyses for each reporting period to identify the extent to which there have been actual transactions and to identify the price transparency that is associated with market liquidity for different types of bonds as well as for a number of individual securities. The pricing of most government bonds is based on observable market prices in an active market with quoted prices and frequent transactions, i.e. level 1. Government-related and inflation-linked bonds are allocated to level 1 and 2 based on the bank's analyses of liquidity and the degree of trading and price transparency in the markets. The analysis shows a relatively high degree of observed liquidity for these bonds. Most corporate bonds are assessed as priced by models with observable input factors, while certain particularly illiquid corporate bonds are allocated to level 3 and some highly liquid bonds belong to level 1. Securitised bonds are allocated to all three categories based on the complexity of the input factors and the degree of liquidity, actual transactions and price transparency in the markets. Covered bonds are categorised in the observable levels 1 and 2 based on the degree of liquidity and price transparency in the markets. Some very liquid guaranteed mortgage-backed securities belong to level 1 with observable market prices in active markets. Other guaranteed mortgage-backed securities that are not tranched have been classified as priced by models using observable data inputs, i.e. level 2. Securitised bonds that are deemed to be tranched such that they have a particularly high exposure to unobservable input factors have been allocated to level 3. Other securitised bonds are allocated to categories 2 and 3 based on the observed degree of price consensus between the available price providers.

Norges Bank's analyses indicate that the valuation risk has been somewhat reduced over the course of 2010, as well as during only the fourth quarter. Total exposure that is regarded as being particularly uncertain as related to correct pricing estimates was NOK 25.3bn as of year-end 2010, versus NOK 33.5bn at the end of 2009. This consisted mainly of securitised bonds (NOK 23.3bn) of which NOK 23.1bn is United States' securitised bonds. It is in particular the securitised bonds not guaranteed by a federal agency that are associated with a high degree of pricing uncertainty (NOK 16.4bn). The remaining NOK 6.7bn consisted of structured securitised bonds where the underlying debt is guaranteed, but where there is particularly greater sensitivity towards other estimated assumptions in the pricing models, primarily related to the principal repayments. The reduction in level 3 holdings throughout 2010 is primarily due to the reclassification of certain securitised bonds to level 2 as a result of improved pricing data quality and pricing consensus between alternative price sources. Maturity and repayment of principal also contributed in some degree to the reduced exposure of holding in level 3.

The size of the price uncertainty for level 3 holdings is difficult to estimate exactly. While the average price uncertainty for individual securities in this category is expected to be approximately +/- 10 percent, the group as a whole is expected to have somewhat lower price uncertainty due to diversification effects. Estimated valuation uncertainty was therefore determined to be +/- NOK 1.5–2bn in this category as compared to NOK 2-3bn as of the end of 2009.

The result of the valuation based on ordinary pricing sources in comparison to the established external price provider hierarchy as of 31 December 2010 is viewed as providing an appropriate reflection of market values in accordance with the fair value principle. It was therefore not necessary to make any accounting provisions related to price uncertainty during the year.



# GPFG 12. Risk

# Government Pension Fund Global investment mandate

The Ministry of Finance has delegated the investment responsibility related to the Government Pension Fund Global to the Executive Board of Norges Bank. Norges Bank shall seek to obtain the highest possible return after expenses measured in the currency basket of the benchmark.

The Ministry of Finance has placed the Government Pension Fund Global as a Norwegian krone deposit in Norges Bank. Norges Bank in its own name invests the Norwegian krone deposit in a portfolio consisting of equities, fixed income securities, real estate and cash. The asset class level benchmarks are tailored with strategic allocations to regions, rule-based adjustments to certain fixed income sectors, exclusion of selected companies from the investment universe, and the real estate benchmark is adjusted for actual real estate asset class leverage and expected investment management expenses and taxes. Securities issued in Norwegian kroner or issued by Norwegian entities are excluded from the investment portfolio and benchmark. Positions in financial derivatives are part of the relevant asset classes, but are shown separately in the portfolio's profit and loss account and balance sheet.

# Norges Bank's governance structure

The Executive Board of Norges Bank has delegated the responsibility for implementation of the investment mandate to the Chief Executive Officer (CEO) of Norges Bank Investment Management (NBIM) which is an organisational unit within Norges Bank.

The CEO of NBIM is empowered by a job description, by an investment mandate, and by the Executive Board's principles for risk management at NBIM which cover operational and investment risk management. In addition to this specific delegation, NBIM must also adhere to internationally recognised standards within performance measurement, valuation and industry best practice.

Reporting requirements from the Executive Board of Norges Bank to NBIM are outlined in the CEO's job description. The Executive Board receives monthly reports, with more extensive reporting on a quarterly basis. The Governor of Norges Bank is notified immediately for special issues or serious breaches to the investment mandate.

# **NBIM** governance structure

Within NBIM investment responsibilities are further delegated through investment mandates. Responsibility for processes and personnel is delegated through job descrip-

tions, while process requirements are detailed through policies and guidelines. The construction of the NBIM leader group and delegation reflects a desire and requirement to ensure segregation of duties between investment management, treasury and trading, risk management, compliance and operations.

The market risk committee, credit and counterparty risk committee, and the instrument universe committee complement the delegation to advice on investment risk management, as well as on the instrument universe.

Internal risk reporting requirements are issued by the CEO through job descriptions to personnel in the risk area. The CEO receives daily, weekly and monthly reports. The CEO is notified immediately for special issues or serious breaches to the investment mandate.

#### **NBIM** investment processes

Segregation of roles and responsibilities is a cornerstone of process design at NBIM. Processes such as the management of investment mandates, portfolio hierarchy and counterparties are delegated to the Chief Risk Officer (CRO). Changes or additions to existing investment mandates in NBIM, the portfolio hierarchy or new counterparties require approval by the CRO.

#### **NBIM** investment mandates

In the investment mandate as given to Norges Bank for the Government Pension Fund Global, there are several guidelines and restrictions for the combined equity and bond asset classes, as well as for the individual asset classes. These restrictions regulate to what degree Norges Bank can engage in active investment management while remaining within the rule based capital allocations.

#### NBIM's framework for investment risk

The Executive Board's risk management principles are detailed further in NBIM through policies and guidelines. The responsibility for an effective organisation and process related to risk management is delegated to the CRO to ensure a robust risk management process within NBIM.

#### Risk management process

NBIM implements measurements, processes and systems to mitigate the risk of overreliance on any one given method of measurement, process or system to control investment risk. NBIM complements robust best of breed risk management systems and processes with internally developed measurements and processes to ensure an overlap between industry solutions with flexible alternative solutions and risk management processes.

#### Risk management at NBIM is defined as:

- Market risk management
- Credit risk management
- Counterparty risk management, and
- Operational risk management

The first three items listed are defined by NBIM as investment risk. In NBIM the investment area has responsibility for investing, and for taking and managing the portfolio risk and individual mandate risk, while the risk management area independently measures, manages and reports investment risk across the portfolio, asset classes and other levels within the portfolio that reflect the investment process. Operational risk is managed separately from investment risk.

#### Investment risk - market risk

NBIM defines market risk as the risk of a loss or a change in the market value of the portfolio or in a part of the portfolio as a result of changes in financial market variables. This includes movements in credit spreads. Market risk is measured by NBIM on the following dimensions: absolute and relative exposure as compared to the benchmark, volatility and correlation risk which estimates the economic risk to the entire portfolio or to parts of the portfolio, systematic factor risk and liquidity risk. Market risk is actively taken to generate investment returns in line with the objective of the investment mandates.

#### Investment risk - credit risk

NBIM defines credit risk as the risk of loss due to an issuer being unable to meet its payment obligations. Within credit risk NBIM measures risk as: single issuer credit risk where the probability of default and loss given default are taken into account, as well as portfolio credit risk where credit risk takes into account the correlation in credit losses between the instruments and the issuers. Credit risk is actively taken to generate investment returns in line with the investment mandates' objectives.

# Investment risk – counterparty risk

NBIM defines counterparty risk as the risk of loss related to the possible bankruptcy of a counterparty or other similar event leading to counterparty default. Counterparty risk can be divided into credit risk associated with the bankruptcy of a counterparty, default risk and custodian risk. Counterparty risk is controlled and mitigated to the largest extent possible, given the investment strategy.

# Market risk measurement

Market risk is the risk of changes in the value of the portfolio due to movements in interest rates, equity prices, foreign currency exchange rates and credit spreads. Norges Bank measures risk in both absolute terms for the actual portfolio, and the relative market risk for holdings of the Government Pension Fund Global.

Measurement and assessment of market risk in NBIM is performed along multiple risk dimensions, employing several methodologies and approaches. Combining different and complementary risk measures gives increased insight into the risk profile related to the holdings of the Government Pension Fund Global.

# Asset class per region

The portfolio is invested across several asset classes and regions as shown in Table 12.1

	Region	Market value* in percent	Owner's capital before management fee
Equities	Americas and Africa	36.7 %	
	Europe	48.0 %	
	Asia and Oceania	15.2 %	
Total equities		60.2 %	1 891 250
Bonds	Americas and Africa	35.2 %	
	Europe	59.8 %	
	Asia and Oceania	5.0 %	
Total bonds		39.8 %	1 186 170

Table 12.1: Allocation by asset class and region



<sup>\*</sup> Includes only holdings in equities and bonds.

### Concentration risk

Within the holdings of the Government Pension Fund Global a large percentage of the investments are in government issued bonds. It is also normal for private companies to issue both bonds and equities. The following tables show the concentration of investment in the largest issuers of government bonds and other issuers.

Table 12.2 shows the largest exposures in bonds issued by governments, including government bonds issued in local currency, foreign currencies and inflation-linked bonds issued in local currency.

Figures in millions of NOK

	Market value in NOK million
USA	164 627
United Kingdom	98 581
Germany	73 609
Italy	58 461
Japan	54 991
France	52 345
Spain	25 361
Belgium	14 229
The Netherlands	12 940
Austria	11 224

Table 12.2: Largest positions within the category government and inflation-linked bonds by issuing country

Table 12.3 shows the portfolio's largest holdings of nongovernment issues, for both bonds and equities. Covered bonds issued by financial institutions are included in the bonds column.

Figures in millions of NOK

	Sector	Bonds	Equities	Total
HSBC Holdings PLC	Financial institution	2 780	21 152	23 932
Fannie Mae	Government related	22 588		22 588
European Investment Bank	Government related	22 273		22 273
Royal Dutch Shell PLC	Energy		21 403	21 403
Nestle SA	Consumer/non- cyclical		21 285	21 285
Bank of Scotland PLC	Financial institution	17 996		17 996
Kreditanstalt fuer Wiederaufbau	Government related	17 108		17 108
Vodafone Group PLC	Communication	1 346	15 215	16 561
BP PLC	Energy	499	15 939	16 438
Banco Santander SA	Financial institution	5 854	8 794	14 648

Table 12.3: Largest total positions excluding governments, for both bonds and equities

# Volatility and correlation risk

NBIM uses risk modelling to quantify the economic risk, connected to the entire portfolio or parts of a portfolio. Examples of risk measures used are Value at Risk and tracking error. Value at Risk and tracking error are standard risk measurements based on statistical methodologies such as standard deviation. The risk measures give an estimate of how much one can expect the portfolio's value to change assuming normal market conditions. Expected volatility can be expressed in terms of the portfolio's risk or active risk. Tables 12.4 and 12.5 present risk both in terms of the portfolio's absolute risk and the relative/active risk.

		Expected volatility – responsive						E	pected v	olatility – lo	ng-term
	Risk measure	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009
Portfolio	Standard deviation	7.2 %	6.2 %	9.8 %	7.7 %	7.2 %	13.2 %	13.1 %	15.8 %	13.6 %	14.5 %
Equities	Standard deviation	9.7 %	9.2 %	15.9 %	11.9 %	10.0 %	21.1 %	21.0 %	25.2 %	21.7 %	22.4 %
Bonds	Standard deviation	8.3 %	6.3 %	13.9 %	9.6 %	10.0 %	12.3 %	11.2 %	13.4 %	12.2 %	11.8 %

Table 12.4: Portfolio risk in terms of expected standard deviation through 2010 (in percent)

		Expected volatility – responsive						Exp	pected vo	olatility – lo	ng-term
	Risk measure	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009	31.12. 2010	Min 2010	Max 2010	Average 2010	31.12. 2009
Portfolio	Tracking error	23.86	23.86	59.19	34.10	26.88	54.06	37.41	58.47	47.72	40.01
Equities	Tracking error	28.49	27.18	46.84	37.95	34.50	60.51	44.79	70.93	58.11	56.98
Bonds	Tracking error	32.00	30.75	114.44	55.12	40.10	76.80	50.74	90.41	76.43	55.71

Table 12.5: Active risk in terms of expected tracking error through 2010 (in basis points)

At the end of 2010 the total risk for the Government Pension Fund Global's holdings and the risk for the equity asset class were at the same level as at the end of 2009, while the fixed income asset class risk was reduced from 10% to 9%. During 2010 risk levels varied and peaked in the second quarter as the standard deviation for the entire portfolio, for equities and for fixed income was 9.8%, 15.9% and 13.9%, respectively. Volatility in both the equity and fixed income markets increased due to the uncertainties in the European government debt markets, funding challenges for banks and fears of an economic downturn. In the second half of 2010 the expectation of a new recession lessened and fluctuations in equity markets declined.

In the responsive modelling shown in the table above, Norges Bank has used a parametric calculation methodology based on daily returns with a decay factor of 0.97 which implies that newer data is given more weight than older data. This measurement approach has been employed in 2010 and prior years for measurement against the 150 basis points expected tracking error restriction given by the Ministry of Finance. The mandate for the Government Pension Fund Global in force from 2011 has a limit of 100 basis points expected tracking error. Controls to ensure compliance with this restriction will be based on a new long-term model which uses equally distributed weekly return data over the last three years and a parametric calculation methodology. This long-term model is a better match when compared to the long-term investment horizon of the Government Pension Fund Global's holdings. The same methodologies are used for both portfolio risk and tracking error. Tracking error based on both a responsive return series and on the long-term model has been within the current and the new restrictions in 2010.

# Strengths and weaknesses

A strength of these types of risk models is that one can estimate the risk of a portfolio across different asset classes, markets, currencies, securities and derivatives and express the risk through one single figure which takes into account the correlation between different asset classes, securities and risk factors.

Model-based risk estimates are based on historical relationships in the market place. Models that use recent historical data have good forecasting capabilities in normal markets. Alternatively, in periods with significant changes in volatility and correlation the estimates will be less reliable. Additionally the models estimate risk over a specified period of time based on the assumptions that the exposures are liquid and can be closed within the period. Calculated volatility gives a point estimate of risk, and gives little information about the total risk profile (the tail ends of the risk distribution). Annualisation assumes that volatility and the portfolio in its entirety are constant over time. To compensate for these weaknesses in the model, NBIM uses complementary models, methods and various stress tests.

Follow-up testing of models (back-testing)

Follow-up testing of the models (back-testing) is performed to validate the model's ability to estimate risk. One of the methods used is to compare the predicted risk estimated by the models to the actual risk observed in the portfolio's actual return.

The table below summarises the total observations where actual loss exceeds the expected risk, the expected frequency and the ratio between them. Only downside risk has been taken into account. The closer the observed/expected ratio is to 1, the better the model has estimated risk. Three different confidence levels are considered. A ratio above one indicates that the risk has been underestimated.

Risk measure	Period	Expected	Actual	Actual/Expected
Standard deviation	2 years	83	65	0.78
Value at Risk 95%	2 years	26	19	0.73
Value at Risk 99%	2 years	5	4	0.77

Table 12.6: Comparison between portfolio's expected loss frequency and actual loss frequency

Risk measure	Period	Expected	Actual	Actual/Expected
Standard deviation	2 years	83	42	0.50
Value at Risk 95%	2 years	26	13	0.50
Value at Risk 99%	2 years	5	4	0.77

Table 12.7: Comparison between expected and actual loss frequency on relative return

The Government Pension Fund Global investment mandate allows for the opportunity to be exposed to several systematic risk factors. Risk factors are common security characteristics that most securities are to some extent exposed to, and that contribute to both the risk and to the return of a security. This type of factor analysis is based on the observed return on the portfolio and attempts to explain the observed return based on a number of factors, such as the market portfolio, emerging economies, value stocks and small-cap companies over a long time series.

## **Credit risk**

Credit risk is the risk of losses from issuers of fixed income instruments defaulting on their payment obligations. Fixed income instruments in the portfolio's benchmark portfolio are all rated as investment grade by one of the major credit rating agencies, Standard & Poor's (S&P), Moody's or Fitch. The credit rating reflects the issuer's expected creditworthiness. Bonds in the fixed income asset class benchmark portfolio are investment grade and therefore deemed to represent low credit risk. In Table 12.8, 2.3% of the actual portfolio is categorised non-investment grade (Higher risk) as of 31 December, 2010.

Table 12.8 specifies the actual fixed income portfolio based on the different credit rating categories as of 31 December 2010.

Figures in millions of NOK

	Aaa	Aa	Α	Baa	Higher risk	Total
Government bonds	390 840	109 658	6 989	9 106	4 402	520 995
Government-related bonds	97 246	38 097	7 410	5 576	446	148 775
Inflation linked bonds	58 558	44 260			519	103 337
Corporate bonds	4 139	45 576	82 693	69 837	4 935	207 180
Securitised bonds	207 742	40 997	3 549	1 880	18 619	272 787
Total bonds and other fixed income securities	758 525	278 588	100 641	86 399	28 921	1 253 074

Table 12.8: Fixed income portfolio by credit rating

Following the financial crisis of 2007 and 2008 bankruptcy and default rates increased. As of the end of 2010 the portfolio of the Government Pension Fund Global held defaulted bonds with a market value of NOK 2.9bn, or 0.2% of the holdings in the fixed income portfolio. The nominal size of defaulted bonds was NOK 13.3bn. Norges Bank uses a credit default definition in line with the definition used by the credit rating agencies for securitised debt. Defaulted bonds are grouped under "Higher risk" in the table above.

Table 12.9 below shows the fixed income asset class aggregated by credit rating and currency. In line with the ruled-based capital allocation European currencies are a larger percentage of the fixed income asset class than the market value in the benchmark portfolio would indicate.

	Aaa	Aa	Α	Baa	Higher risk	Total
EUR	26.0 %	14.1 %	3.3 %	2.1 %	0.5 %	46.0 %
USD	21.3 %	2.5 %	3.6 %	4.0 %	1.7 %	33.1 %
GBP	9.2 %	0.6 %	1.0 %	0.6 %	0.0 %	11.4 %
JPY	0.0 %	4.4 %	0.0 %	0.0 %	0.0 %	4.4 %
CAD	1.4 %	0.6 %	0.1 %	0.1 %	0.0 %	2.2 %
Other currencies	2.8 %	0.0 %	0.0 %	0.1 %	0.0 %	2.9 %
Total	60.7 %	22.2 %	8.0 %	6.9 %	2.2 %	100.0 %

Table 12.9: The bond portfolio specified by credit rating and currency

The credit risk of the portfolio can be managed through the use of credit derivatives. The credit risk in the bond portfolio is reduced through the use of this type of derivative. See Note 6 Financial derivatives for additional information.

In addition to the credit rating based approach Norges Bank has started using two other methods to measure credit risk. These model-based approaches complement the

credit rating method and are used to monitor credit risk in the fixed income asset class independently of credit rating. These methods are comparable to Value at Risk and tracking error in the manner in which credit risk is quantified into one number and is a function of observable credit spreads and equity prices. Norges Bank will continue to develop the use of these methods.

#### **Counterparty risk**

Norges Bank is exposed to risk vis-à-vis counterparties in the international settlement and custody systems where trades are settled. Additionally, counterparties are necessary to ensure efficient cash management, and effective trading and hedging of market and/or credit risk. Repurchase and reverse repurchase agreements and securities lending via external agents also give rise to counterparty risk.

Norges Bank reduces counterparty risk concentration by using many counterparties and by setting strict credit rating requirements. Rating requirements for counterparties with unsecured bank deposits on the behalf of Norges Bank are higher than in situations when collateral is given. Netting agreements are used to further mitigate counterparty exposure when trading in OTC derivatives and foreign exchange contracts. An additional reduction in counterparty risk is ensured through a collateral requirement for counterparty net positions with a positive market value. The concentration of counterparty risk is reduced through the implementation of low exposure limits per counterparty.

The method used to calculate counterparty exposure, gross and net, is in accordance with the recommendations of

the UK Financial Services Authority. Two methods are used. An internal counterparty risk model was implemented during 2010 for OTC derivatives, time deposits, bank deposits, and foreign exchange contracts. The model prices these positions using different assumptions to take into account possible future market movements. The model gives a measurement of expected future exposure. Netting agreements and collateral is taken into account in determining the net exposure.

An expanded financial collateral method is used for repurchase agreements and securities lending transactions executed via external agents. This method entails calculating the market value and adding an additional internal charge that reflects the position's volatility. These positions are also adjusted for netting and actual received and given collateral when determining the net exposure. In Table 12.10 the exposure is specified by type of activity/instrument that is categorised as having counterparty risk. In addition to the figures from the internal risk model, the counterparty risk according to the balance sheet figures is given, adjusted for both recognised and not recognised collateral.

Figures in millions of NOK

	Balance sheet value adjusted for collateral	Gross exposure	Netting effects	Collateral and guarantees	Net exposure
Time deposits	2 796	2 708			2 708
Unsecured bank deposits	3 279	3 281			3 281
OTC derivatives including foreign exchange contracts	-6 098	8 523	5 462	1 581	1 480
Repurchase and reverse repurchase agreements*	-4 081	5 756	579		5 177
Securities lending transactions**	-16 352	30 965		17 597	13 368
Total		51 233	6 041	19 178	26 014

<sup>\*</sup> The column Balance sheet value adjusted for collateral takes into account all positions in the repurchase market, including the reinvestment of cash collateral, see also Note 3 Repurchase and reverse repurchase agreements. The internal measurement and controls of counterparty risk for these types of instruments does not include these reinvestments as of year-end.

Table 12.10: Counterparty risk by type of position

In Table 12.10 the balance sheet line Deposits in foreign banks (NOK 6 303m as of 31 December 2010) is divided into time deposits of NOK 2 796m, unsecured bank deposits (nostro bank deposits and futures margin) of NOK 3 279m and NOK 227m of equity swap margin. The latter is included

in the line OTC derivatives including foreign exchange contracts in the table. This line consists of, in addition to the NOK 227m of margin deposits on equity swaps, net market value of foreign exchange contracts (NOK 86m), swap agreements (NOK -6 217m) and options (NOK -194m). See also

<sup>\*\*</sup> The column Balance sheet value adjusted for collateral includes securities lent and received collateral, see also Note 4 Lending of securities, and is also adjusted for unrealised losses connected to reinvestments in the form of bonds.

Note 6 Financial derivatives. Counterparty risk for derivative positions is followed-up on a net basis in Norges Bank.

Norges Bank counterparties have a credit rating from an independent credit rating agency. Only in instances when the counterparty risk is considered very low can an internal credit evaluation be used as the basis for counterparty approval. Credit ratings of the Bank's counterparties are monitored and complemented by alternative credit risk indicators. Table 12.11 shows Norges Bank's counterparties classified according to credit rating category.

	Norges Bank's counterparties (excluding brokers)	Brokers
Aaa	3	3
Aa	55	57
А	23	36
Baa		21
Ba		6
В		3
Total	81	126

Table 12.11: Counterparties categorised by credit rating

## Leverage

Leverage is used primarily to ensure effective management of the investments. The use of leverage is regulated in the investment mandate issued by the Norges Bank governing board to NBIM. Leverage is measured net as a percent of the net market value of the portfolio of the Government Pension Fund Global. The definition takes into account the net value of cash, cash equivalents as well as derivatives converted to the underlying security and cash position. When the net value of these items is negative, this is defined as leverage. Cash equivalents include bank deposits and bank loans, receivables and short-term liabilities, as well as repurchase and reverse repurchase agreements. The net cash effect is measured as a percentage of the portfolio's net market value. See also Note 3 Repurchase and reverse repurchase agreements and Note 4 Securities lending for additional information on the activities that principally create leverage. These accounted for close to 80% of the leverage effect as of year-end. The remainder is primarily due to short-term liabilities, for example unsettled trades and money market loans that normally contribute to leverage. Leverage in the portfolio of the Government Pension Fund Global is reduced somewhat in 2010 and has been constantly low in the period.

	31.12.2009	1 Q. 2010	2 Q 2010	3 Q 2010	31.12.2010
Net leverage as a percent of market value as of the end of the period	3.1%	3.0%	2.7%	1.9%	2.0%

Table 12.12: Net leverage

# Sale of securities Norges Bank does not own

Sale of securities not owned by Norges Bank (short sales) can only be done if the Bank has established borrowing agreements to cover a negative position. Such transactions are used to a very low degree.



# Auditor's reports for 2010

To the Supervisory Council of Norges Bank

# INDEPENDENT AUDITOR'S REPORT

# Report on the Financial Statements

We have audited the accompanying financial statements of Norges Bank, which comprise the balance sheet as at December 31, 2010, and the profit and loss account, showing a profit of NOK 12 649 million for the year then ended, and a summary of significant accounting policies and other explanatory information. The financial reporting of the Government Pension Fund Global, showing a profit of NOK 252 416 million for the year then ended, is included in Norges Bank's financial statements and disclosed in Note 30.

# The Executive Board's and the Governor's Responsibility for the Financial statements

The Executive Board and the Governor are responsible for the preparation and fair presentation of these financial statements in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, with the reporting exceptions set out in the accounting policies, and for such internal control as the Executive Board and the Governor determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

# Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements give a true and fair view of the financial position of Norges Bank as at December 31, 2010, and of its financial performance for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway with the reporting exceptions set out in the accounting policies.

# Report on Other Legal and Regulatory Requirements

Opinion on the Executive Board's report and the allocation of the profit

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Executive Board's report concerning the financial statements, and the proposal for the allocation of the profit complies with the law and regulations and that the information is consistent with the financial statements.

## Opinion on Registration and documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, «Assurance Engagements Other than Audits or Reviews of Historical Financial Information», it is our opinion that the company's management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the company's accounting information.

Oslo, 2 March 2011

**Deloitte AS** 

Aase Aa. Lundgaard State Authorised Public Accountant (Norway)



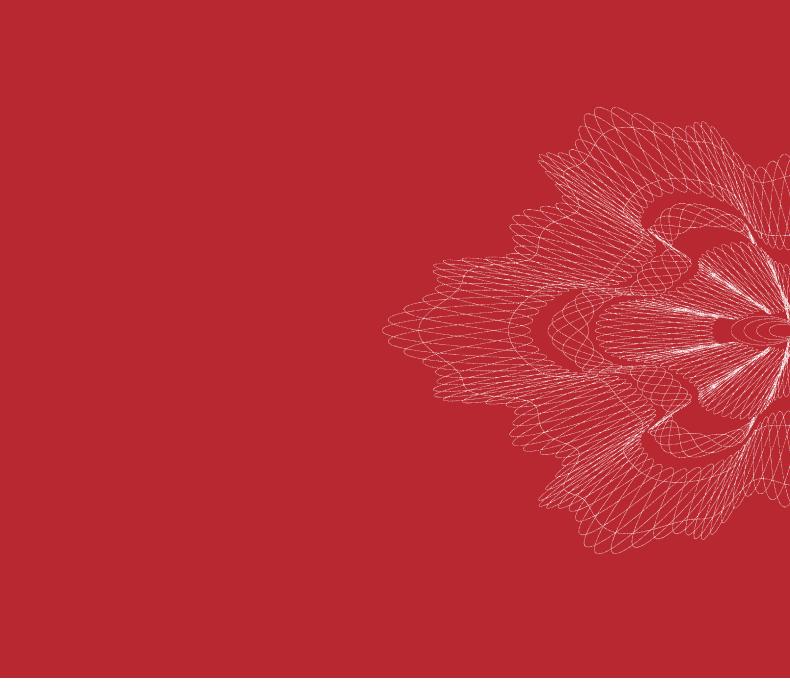
# Resolution of the Supervisory Council on the financial statements for 2010

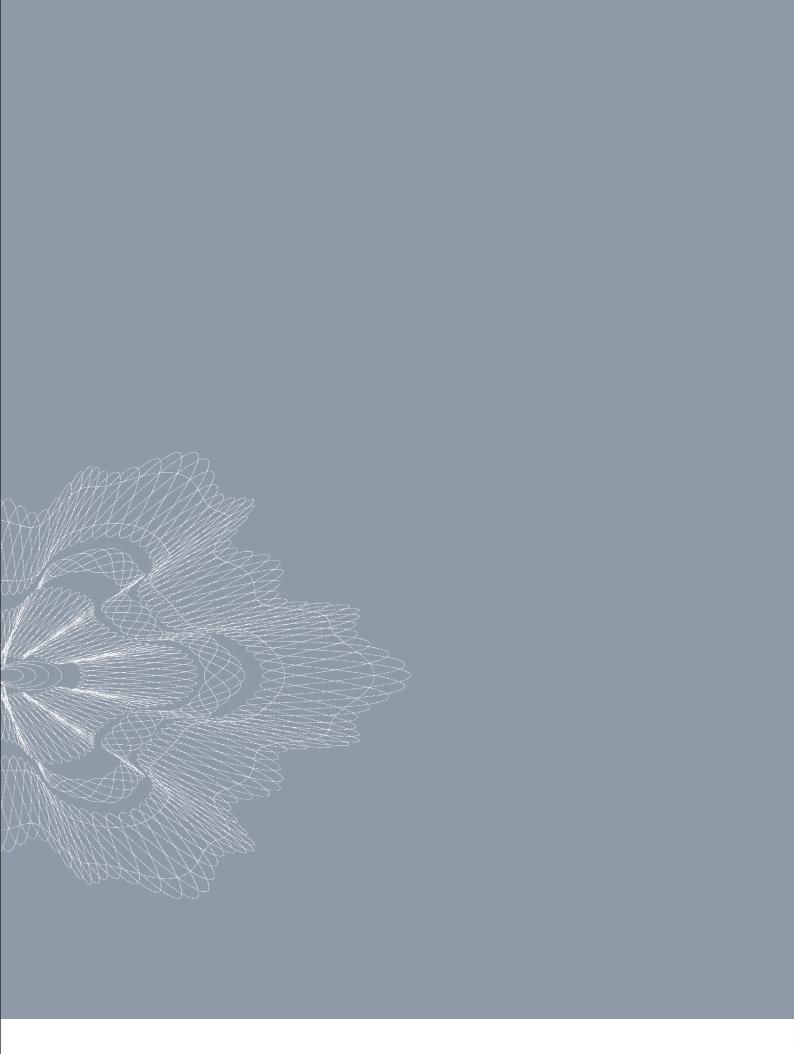
In accordance with the current guidelines for the allocation and distribution of Norges Bank's profit, the Supervisory Council adopted the following decision at its meeting on 17 March 2010:

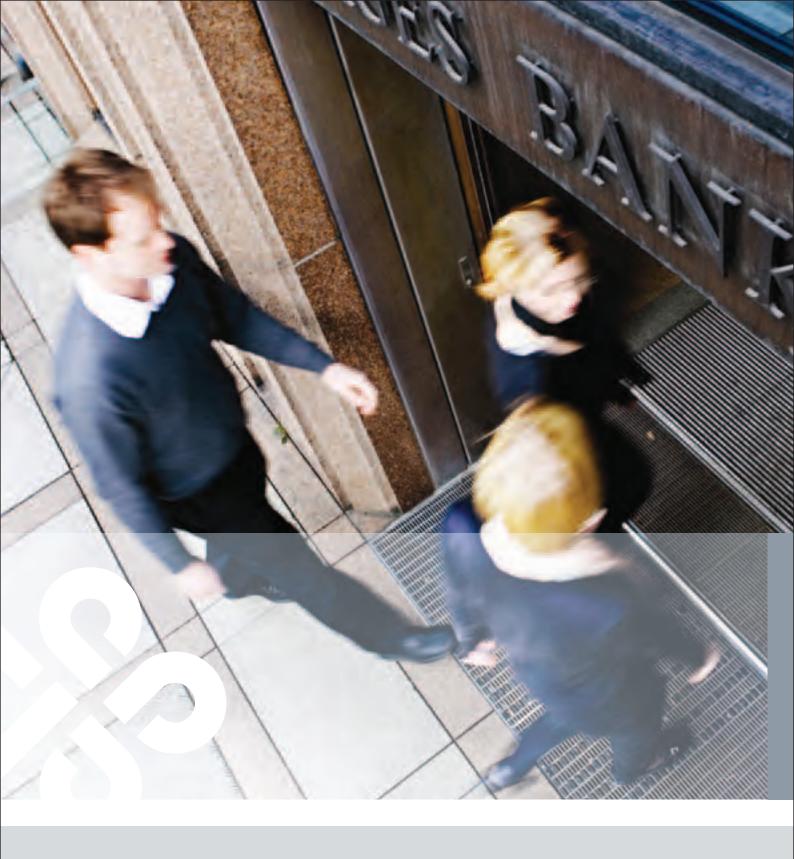
- The Supervisory Council takes note of the Annual Report of the Executive Board for 2010.
- The Supervisory Council takes note of the auditor's report for Norges Bank for 2010 and the auditor's report on the financial reporting for the Government Pension Fund Global for 2010.
- The Supervisory Council adopts Norges Bank's financial statements for 2010 with the following transfers and allocations:
  - In accordance with a statement from the Ministry of Finance, as a result of the impairment of previously revalued assets, the sum of NOK 37m is to be transferred from "Other capital" to profit for the year.
  - In accordance with the guidelines, the profit after other allocations of NOK 12 686m is to be transferred to the Adjustment Fund.

# The Supervisory Council's statement on the minutes of the meetings of the Executive Board and its supervision of the Bank in 2010

The Supervisory Council's statement concerning the minutes of the meetings of the Executive Board and its supervision of the Bank was previously included in the Bank's Annual Report. As a result of amendments to the Norges Bank Act, for 2010 the Supervisory Council has issued a separate report directly to the Storting on 17 March 2011. The report will be published separately and be available on the Bank's website.







# Norges Bank's activities

### **CHAPTER 1:**

# Organisation, management and use of resources

# Promoting economic stability in Norway

The aim of Norges Bank is to promote economic stability in Norway. The Bank's activities are regulated by the Norges Bank Act of 24 May 1985. The Act states that Norges Bank shall be an executive and advisory body for monetary, credit and foreign exchange policy. The Bank shall issue banknotes and coins, 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. The Act authorises the Bank to implement measures customarily or ordinarily taken by a central bank.

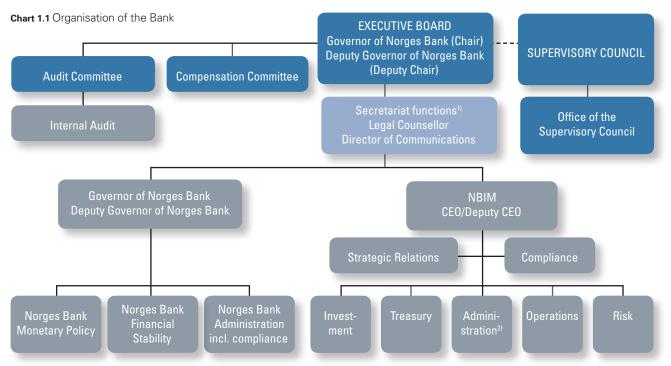
The Government has defined an inflation target for monetary policy in regulations issued pursuant to the Norges Bank Act.

Norges Bank's responsibilities in managing the Government Pension Fund Global (GPFG) are governed by the Act relating to the Government Pension Fund Global and a mandate laid down by the Ministry of Finance.

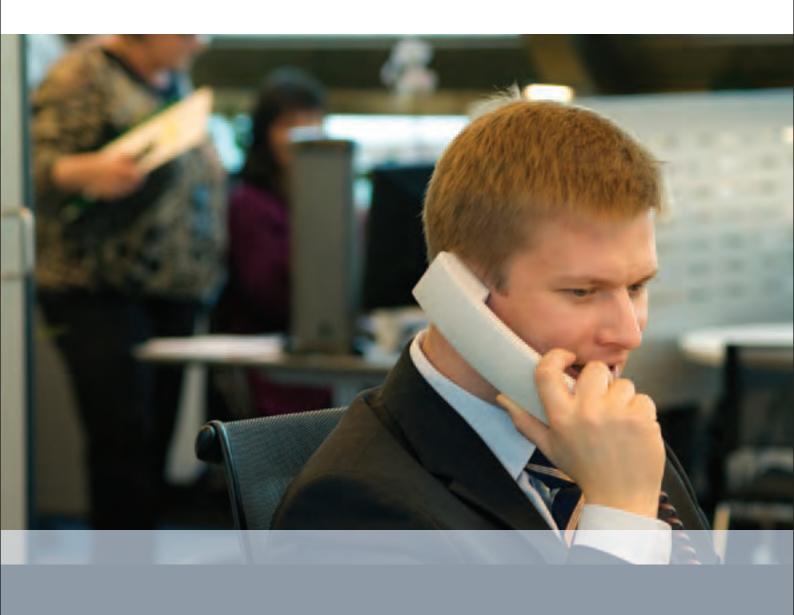
# Organisation of activities

The highest decision-making bodies of Norges Bank are the Executive Board and the Supervisory Council. The Executive Board, which oversees the executive and advisory activities of the Bank, consists of seven members, all appointed by the King. The governor and deputy governor of Norges Bank are chairman and deputy chairman, respectively, of the Executive Board. They are appointed to full-time positions with six-year terms. The five other members are appointed to four-year terms. Normally, two alternates for these members regularly attend meetings to ensure continuity in Executive Board business. 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.

The Supervisory Council supervises the Bank's operations and ensures that the rules governing the Bank's activities are observed. In this respect the Supervisory Council shall supervise the Executive Board at securing satisfactory management and control of the Bank's administration and operations and the establishment of appropri-



Performs secretariat functions for the Executive Board, the Compensation Committee, Audit Committee, safequards the legal framework for central bank activities and the Executive Board's external communication.



# Oversight and audit

Norges Bank's Supervisory Council is composed of 15 members, all elected by the Storting. By means of its activities and reports, it shall provide assurance to the Storting that Norges Bank, including the management of the GPFG, operates in a pro-

per and appropriate manner and in compliance with legislation and other standards.

A secretariat has been established by the Supervisory Council, the Office of the Supervisory Council, which performs oversight and control tasks, administers the agreement with the external auditor and performs secretariat tasks for the Supervisory Council. It also functions as a liaison between the Office of the Auditor General, the external auditor and the Bank, especially with regard to the GPFG.

The Office of the Supervisory Council is professionally and administratively independent of the Bank.

Beginning with reporting for 2010, the Supervisory Council will submit a separate report to the Storting.



ate procedures to ensure that the Bank's activities are conducted in accordance with legislation, agreements, decisions and other regulatory frameworks.

The governor is responsible for the day-to-day management of the Bank and represents the Bank externally.

The Executive Board has delegated a large share of the day-to-day operations of the Bank to the governor, who has further delegated these to the operational areas. Pursuant to Section 5, final paragraph, of the Norges Bank Act, "[t]he Governor is in charge of the Bank's administration and the implementation of the decisions".

Organisation of the Bank's operations is based on clearly defined core activities. Norges Bank shall:

- promote price stability by means of monetary policy;
- promote financial stability and contribute to robust and efficient payment systems;
- manage the portfolios of the Government Pension Fund Global (GPFG) and the Bank's own foreign exchange reserves in an efficient and confidence-inspiring manner. As from 2011, the Government Petroleum Insurance Fund is merged with the GPFG.

Central banking activities comprise Norges Bank Monetary Policy (NBMP) and Norges Bank Financial Stability (NBFS). In addition Norges Bank Administration (NBA) provides staff and support functions.

In the case of Norges Bank Investment Management (NBIM), the Executive Board has delegated decision-making authority to the chief executive officer in his job description. NBIM manages the GPFG and much of Norway's foreign exchange reserves. NBIM has a number of separate support functions, but also receives support from NBA in central banking activities. More information on the management and organisation of NBIM may be found in the *Government Pension Fund Global Annual Report*.

Within the annual frameworks allocated for FTEs and budgets and established shared processes, the individual operational areas are allowed considerable freedom with respect to personnel management and budget disposal. A recommended upper limit for the number of FTEs is set for a three-year period.

The main management principle is line management. This means that all managers have clearly defined areas of responsibility with the decision-making authority they need. They are accountable for results attained and for maintaining activities within the frameworks set out in job descriptions, plans and budgets, shared processes, policy documents and other guidelines from their superiors. Each year, managers are subject to appraisal by their immediate superiors and subordinates. The appraisal criteria are direction, result orientation, interpersonal skills and professional qualities.

#### **Values**

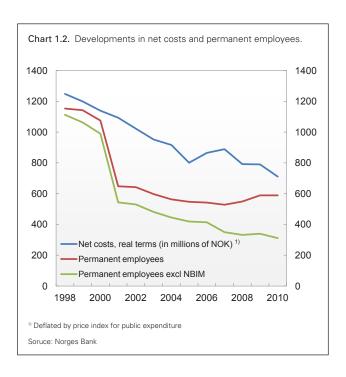
The employees of Norges Bank shall achieve results, be committed, show a high degree of ethical awareness and seek to attain a high standard of professionalism and integrity. The Bank shall be transparent with regard to its operations, be willing to change and build further on a solid reputation. Norges Bank seeks to set the standards for best practice among small central banks. All areas of the Bank's operations shall be subject to regular external evaluations. Resources shall be used prudently and efficiently.

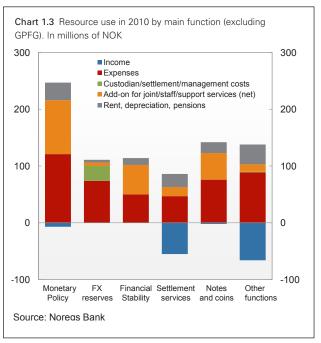
#### **Focus on core functions**

A focus on Norges Bank's three core functions is the guiding principle for the development of the Bank. As a result of the spin-off of activities into limited companies, outsourcing, discontinuation of tasks and general increase in efficiency, the number of permanent employees has been halved since the end of the 1990s to 589 at end-2010. At the same time, the Bank has built up a unit for investment management with approximately 278 employees. There were 311 employees in central banking activities, including the secretariat to the Supervisory Council. In 2010, the number of employees in administrative positions in the traditional portion of the central bank declined by around 30, while NBIM grew by the same number.

Since the end of the 1990s, net operating expenses have been reduced by 43% in real terms, measured in relation to the price index for public expenditure. This does not include restructuring costs (for more details, see the Report of the Executive Board). The costs of managing the GPFG 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. Chart 1.2 provides an overview of developments in net costs and staffing.

"The employees of Norges Bank shall achieve results, be committed, show a high degree of ethical awareness and seek to attain a high standard of professionalism and integrity"





# Distribution of costs by main function

Norges Bank distributes costs by main function. The purpose of this is to illustrate total costs for the various main functions. The overview has also increased awareness with regard to cost-effectiveness.

In 2010, costs were distributed among the following main function categories:

- Monetary policy
- Management of the GPFG
- Management of long-term foreign exchange reserves
- Financial stability
- · Settlement services
- Purchase, production and distribution of notes and coins
- Other functions<sup>1</sup>

The point of departure is operating expenses and operating income in the Bank's internal financial statements, with the addition of depreciation, amortisation and imputed cost of pension benefits<sup>2</sup>. Emphasis has been placed on including expenses 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. These factors result in deviations from figures for operating expenses and operating income in the annual financial statements.

The distribution is based on a cost driver analysis. The proportions of the distribution keys are estimates, 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 mainly fixed.

Gross costs in 2010 amounted to NOK 3 800m and net costs to NOK 711m. The corresponding figures for 2009 were NOK 4 079m and NOK 761m, respectively. Net use of resources has declined by just over NOK 50m. Costs for the main functions "notes and coins" and "management of long-term foreign exchange reserves" have decreased in particular. Chart 1.3 shows the distribution of costs. The GPFG is not included in the graphic representation.

Management of the GPFG is by far the most resource-intensive function. Gross costs were NOK 2 962m in 2010 and NOK 3 232 m in 2009. Norges Bank's costs are covered by the Ministry of Finance according to the principle of full cost coverage.



These include the organisation of management of buildings, the Banking Law Commission, services for the government and the management of the Government Petroleum Insurance Fund.

Petroleum insulance Fullow 2 Return and interest resulting from the Bank's tasks relating to monetary policy and management of financial wealth are not included.

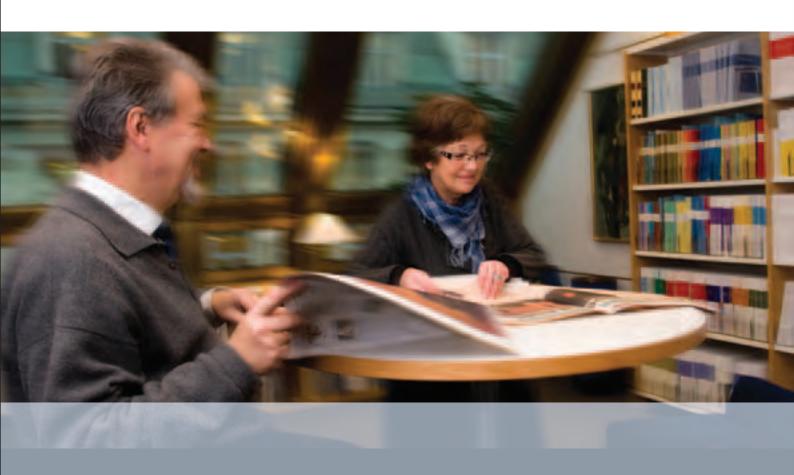
# **Human resource policy programmes**

Norges Bank's human resource policy objectives involve ensuring that the Bank continues to attract, develop and retain qualified staff. This level of ambition is dependent on appropriate human resource policy instruments, that these instruments are used according to intentions and that they provide the desired results. Compensation and incentives systems at Norges Bank are to be competitive.

Norges Bank has a separate pension fund for employees. 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's insurance programme covers personal guarantees, group life insurance, group accident and illness insurance, travel insurance and accident insurance. These costs make up 1% of the Bank's total personnel expenses. The Bank has a loan scheme for employees where the interest rate is equal to the norm interest rate\*.

Employees of Norges Bank have access to the Bank's two conference and holiday facilities. There are also some parking places at the head office of the Bank for use by employees.

\* The norm interest rate laid down by the Ministry of Finance for use in the taxation of loans on favourable terms for employees.



# Norges Bank - a specialist enterprise

Norges Bank is a specialist enterprise characterised by a high degree of internationalisation. This is reflected by a workplace with employees from over 20 countries. This diversity provides the Bank with a richer working environment, but also places considerable demands on the Bank's ability to organise and adapt to the new realities. A stable low level of sickness absence and structured feedback in the form of annual manager appraisals and working environment surveys support the view of the Bank as an inclusive workplace that successfully integrates employees across nationalities, age and gender.

Norges Bank makes targeted efforts to bolster its reputation as one of Norway's most attractive workplaces. Through its presence at colleges and universities and through various publishing media and lecture activities, the Bank works to reach selected target groups. In 2010 Norges Bank was ranked as the third most attractive workplace among young economists.

Recruitment of new staff aims at ensuring the Bank a supply of capable managers and skilled specialists. The Bank's recruitment processes are to be transparent and professional and ensure that the Bank hires the most qualified candidates, regardless of age, gender, religion, ethnic background, disability or sexual orientation. In addition to meeting the Bank's normal recruitment needs, NBIM's Investment Talent Programme helped to recruit a small group of candidates who will have the opportunity to develop their professional skills, including through being posted abroad.

It is the Bank's aim to achieve greater gender balance. The target for the proportion of women is 40% regardless of job category. The number of women in managerial posts is still somewhat too low, and measures to increase the proportion of women will continue.

A key instrument in retaining staff with critical skills is a competitive pay and incentive system that is actively used to promote and reward good performance. Clear requirements will be imposed through active use of the individual employee's skills, while the Bank will establish conditions to ensure that highly motivated and qualified

staff members are given the opportunity for lifelong learning. The Bank aims to facilitate greater rotation and mobility across areas, and high-quality scholarships and study programmes abroad are to establish conditions for building new expertise.

Norges Bank also outsourced administrative units in 2010, and a total of 12 employees had to find new jobs outside the Bank. For those who leave the Bank as well as those who remain, such processes involve changes. This requires new ways of working. Meetings and assessment conferences are forums for employees to influence developments.

In 2010 all managers at the Bank participated in inhouse leadership development programmes. The programmes focus on good management and a shared understanding of the Bank's activities, which in turn contributes to more integrated management and follow-up of the Bank's employees. These efforts will continue in 2011.

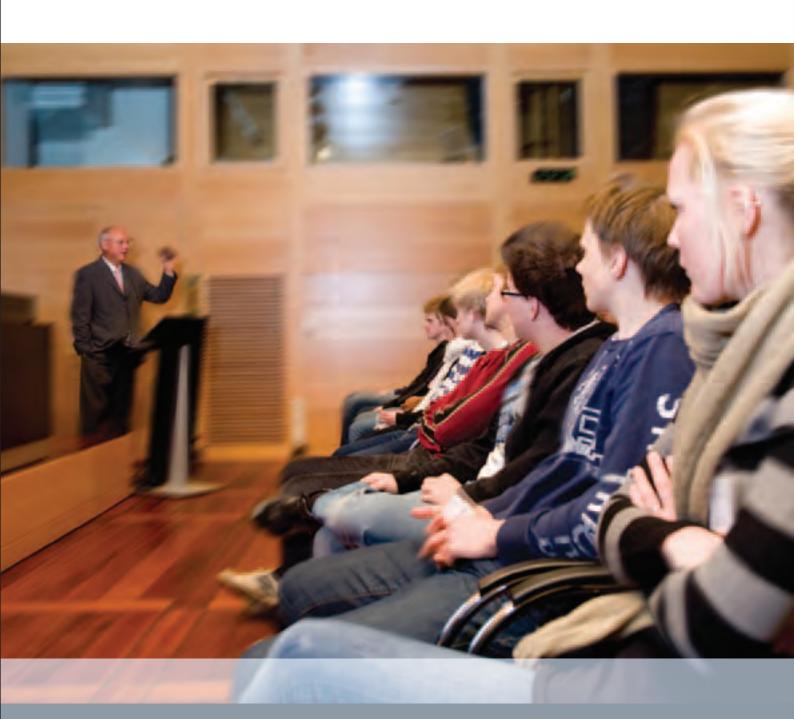
# Communications activities

Communication at Norges Bank is a means of achieving the objectives of the annual strategic plan. Norges Bank's prime objective is to build confidence in the Bank's activities among the general public.

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, through active communications activities, the Bank seeks 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.

Norges Bank presents forecasts for the Norwegian economy and for the key policy rate three times a year in the Monetary Policy Report. Prospects for financial stability are presented twice a year in separate Financial Stability reports. A report on payment systems is published annually. In addition, the Bank holds eight monetary policy meetings a year. Bank lending surveys are published four times a year, and the regional network presents its report six times a year. The Bank also publishes four reports on the GPFG each year.





"Speeches given by the executive management of Norges Bank are an important part of the Bank's external communications"

In 2010, Norges Bank webcast the governor's annual address, the governor's address at the symposium in November and 15 press conferences in connection with the Executive Board's monetary policy meetings and in connection with the publication of the *Financial Stability* report, the *Monetary Policy Report* and the reports on the performance of the GPFG. In addition, press conferences are available by podcast and live video streaming to mobile devices. The public can also subscribe to a text message alert of interest rate decisions and follow news about the Bank on Twitter. In 2010 the Bank also began to use Flickr, where it posts images from both the present and the past. TNS Gallup also conducted the first reputation survey for Norges Bank to measure the general public's perception of the Bank.

# **Speeches**

Speeches given by the executive management of Norges Bank are an important part of the Bank's external communication. The executive management of Norges Bank gave speeches to business and industry, organisations, banks, educational institutions and government bodies throughout Norway and abroad. The objective of the speeches is to disseminate important information and analyses regarding all aspects of Norges Bank's activities. Speeches are used to communicate the background for monetary policy decisions, information regarding the Bank's other activities, such as financial stability or management of the GPFG or the state of the Norwegian or global economy. In 2010, 49 speeches were given, 19 of which were published on Norges Bank's website at the time that they were given. A number of the unpublished speeches had similar content to those that had already been published, and the Bank's home page therefore merely referred to these.

# Website

The Internet is the Bank's most important communication tool. The website is continuously being developed and, after its redesign in 2008, efforts have been made to enhance user-friendliness. Functions requested by users have been implemented, and adaptations have been made to comply with the requirements for quality labelling of public websites. In an evaluation of public websites, Norges Bank's website was awarded five out of six stars in 2010. In addition to news reports, the pages contain

extensive information about the Bank's responsibilities. Electronic versions of the Bank's publications are also available. User statistics show an average of 648 000 hits per month in 2010, a decrease from 757 000 the previous year. Information on the GPFG was transferred to a separate website (www.nbim.no) on 19 April 2010. That website had 110 000 hits in 2010.

# Other publications

In addition to the Annual Report, online information and the other reports mentioned above, Norges Bank issues the following publications: the journal Penger og Kreditt is published semi-annually on the Bank's website, and articles for the English version, Economic Bulletin, are added to the annual volume, also published on the website, as they are finalised. Research projects are documented in the Working Papers series, of which 31 were issued in 2010. Some of these are later printed as articles in external books and journals. Staff Memos contain other documentation or reports that form part of the Bank's work on key issues and 13 were published exclusively on the website. Core documents and other important information are translated into English, with simultaneous publication in Norwegian and English in most cases. These include major speeches, press releases, reports, brochures, circulars, monetary policy meeting documents and information published on the Bank's website.

### **CHAPTER 2:**

# Monetary policy

# **MONETARY POLICY IN 2010**

# Turbulence in the wake of the financial crisis

Underlying inflation was below target in 2010 and fell through the year. At the same time, growth in the Norwegian economy picked up after a decline the previous year. The downturn was mild. The consideration of keeping consumer price inflation close to 2.5% and the considerations of stabilising developments in output and employment suggested a low key policy rate in 2010.

To prevent a deep and prolonged downturn, the key policy rate was reduced sharply in autumn 2008 and subsequent months. In addition, Norges Bank implemented measures to improve money market liquidity and ease banks' funding situation. Government spending was also increased substantially. Economic activity began to pick up in autumn 2009, and the recovery initially appeared to be strong. There was also a sense of growing optimism in other countries, and interest rate expectations rose in Norway and abroad. The interest rate forecast was revised up in *Monetary Policy* Report 3/09, and the key policy rate was raised by a total of 0.5 percentage point to 1.75% towards end-2009.

At the beginning of 2010, underlying inflation was close to 2.5%, and growth in the Norwegian economy was moderate.

# **Modest upturn**

In the first months of 2010 it became clear that the upturn in Norway and abroad was more moderate than projected. The financial crisis was followed by new imbalances that seemed to be putting a damper on the recovery in many countries. The costs associated with rescuing the banking system, combined with falling tax revenues and rising social security expenditure had resulted in considerable fiscal deficits and mounting sovereign debt in many countries. Borrowing costs for many governments eventually rose, and unemployment climbed rapidly. There were prospects that many advanced

economies would be marked by spare production capacity for some time ahead, and interest rate expectations fell.

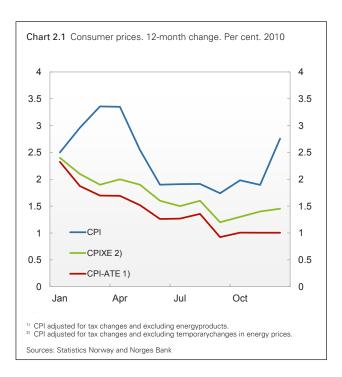
The recovery of the Norwegian economy continued into 2010, but capacity utilisation rose more slowly than expected and continued to be below a normal level. In February the enterprises in Norges Bank's regional network reported moderate growth, but considerable differences across sectors. Activity remained sluggish in the building and construction and manufacturing sectors, with weak household demand. Consumer price inflation declined in the first months of 2010. The decline was expected and was related to the appreciation of the krone throughout 2009.

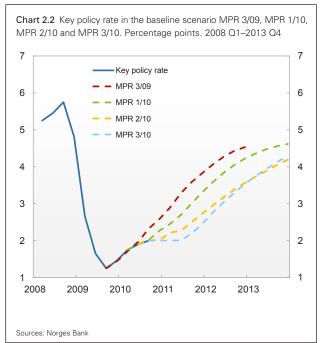
At the monetary policy meeting on 24 March, underlying inflation was projected at approximately 2%. Lower external interest rates, a stronger krone and lower wage growth pulled down on the inflation projections in Monetary Policy Report 1/10. Growth in the economy also appeared to be lower than expected. Against this background, the interest rate forecast was revised down compared with the Monetary Policy Report from October 2009 (see Chart 2.2). The key policy rate was kept unchanged at 1.75% at the March monetary policy meeting.

In the assessment of the use of instruments, weight was placed, on the one hand, on the fact that the consideration of guarding against the risk of future financial imbalances suggested a gradual increase in the key policy rate towards a more normal level. On the other hand, a markedly higher interest rate in Norway and a wider interest rate differential between Norway and other countries might have increased the risk of a krone appreciation and inflation that was too low. This suggested that the interest rate should not be raised too rapidly.

# Renewed turbulence

Into spring renewed turbulence arose in financial markets. Market participants were less confident that countries with weak government finances would be able to service growing government debt. Government bond yields rose sharply in several countries, particularly in Greece. The EU and the IMF concluded a loan agreement with Greece in early May, and subsequently quickly established a loan scheme that could also include other countries. There were prospects that growth in the euro area could be weaker than previously projected. At the same time, growth was





# 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 of 1985. Pursuant to Sections 19 and 20 of the Act, Norges Bank sets the interest rates on banks' deposits with and loans from the central bank.

The mandate for monetary policy was laid down by the Government in 2001. 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 per cent 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."

The instrument of monetary policy is the key policy rate, which is the interest rate on banks' overnight deposits in Norges Bank. The key rate has an impact on the shortest money market rates, and expectations regarding the future key policy rate have a decisive impact on the level of market rates for loans with longer maturities.

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

Decisions concerning interest rates and other important changes are normally taken at the Executive Board's announced monetary policy meetings. Three times a year, publication of the Monetary Policy Report coincides with the key rate decision. In the Report, Norges Bank analyses the current economic situation and provides forecasts for economic developments and for the key rate. On the basis of the analysis in the report, the Executive Board adopts the monetary policy strategy in the form of an interval for the key rate for the period up to the next Monetary Policy Report.



# Flexible inflation targeting

Norges Bank operates a flexible inflation targeting regime, so that smoothing fluctuations both in inflation and in output and employment is 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 anchor inflation expectations, and the objective of smoothing developments in output.

Expectations regarding future interest rates play an important role for developments in output, employment, incomes and inflation. Through its interest rate forecasts, Norges Bank influences the interest rate expectations of market participants, enterprises and households. Interest rate forecasts should satisfy the following main criteria:

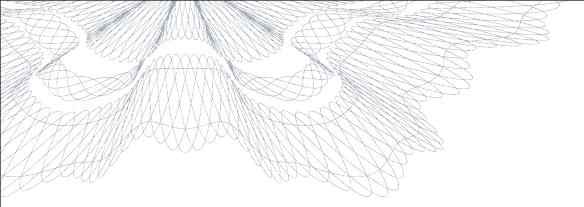
- 1) The interest rate should be set with a view to stabilising inflation at target or bringing it back to target after a deviation has occurred. The relevant time horizon will depend on the type of disturbances to which the economy is exposed and their effect on the path for inflation and the real economy ahead.
- 2) The interest rate path should at the same time provide a reasonable balance between the path for inflation and the path for overall capacity utilisation in the economy. In the assessment, potential effects of asset prices, such as property prices, equity prices, and the krone exchange rate on stability in output, employment and inflation are also taken into account.

Assuming the criteria above have been satisfied, the following additional criteria are useful:

- 3) Interest rate adjustments should normally be gradual and consistent with the Bank's previous response pattern.
- 4) Interest rate developments should result in acceptable developments in inflation and output also under alternative assumptions concerning the economic situation and the functioning of the economy. Any substantial and systematic deviations from simple, robust monetary policy rules should be explained.

The interest rate forecast is an expression of Norges Bank's overall judgement and assessment based on the criteria above. Usually, the criteria cannot all be satisfied simultaneously, and the various considerations must therefore be weighed against each other.

Forecasts of the key policy rate and other economic variables are based on incomplete information concerning the economic situation and the functioning of the economy. Should developments in the economy differ from assumptions or should the central bank change its view of the functioning of the economy, developments in the interest rate and other variables may deviate from the forecasts. The Monetary Policy Report contains an account of any changes in the interest rate forecast and underlying factors. A summary of changes described in the reports issued through the year is published in the Annual Report.



Financial market turbulence gradually fed through to Norway. The krone exchange rate fluctuated considerably, and Norwegian money market premiums rose. At the same time, the recovery in the Norwegian economy continued, broadly as projected in the March *Report*. The key policy rate was raised by 0.25 percentage point to 2% at the monetary policy meeting in May, in line with the strategy set out in Monetary Policy Report 1/10. The risk of a renewed downturn in Europe suggested that the increase should be deferred, and the Executive Board considered the alternative of keeping the rate unchanged.

The extensive measures implemented by the EU and IMF did little to reassure financial markets in the period to summer. Government bond yields in countries with weak government finances remained high, and money market premiums rose. Several countries in Europe implemented austerity programmes and reforms to improve government finances. These measures appeared to slow activity ahead, impacting the economies of countries inside and outside of Europe. Key rate expectations abroad fell further.

The moderate recovery in the Norwegian economy continued in the period to summer, but with activity increasing at a somewhat slower pace. Norges Bank's regional network contacts reported at the beginning of May low capacity utilisation and moderate growth. Through spring household demand rose less than expected. Underlying inflation, measured by the CPIXE<sup>3</sup>, was 1.9% in May and was expected to fall in the rise in prices for period ahead. A stronger krone and lower price rises on consumer goods abroad contributed to a decline in the rise in prices for imported consumer goods.

At the monetary policy meeting on 23 June the key policy rate was kept unchanged at 2%. In *Monetary Policy* Report 2/10 a key rate increase was deferred further compared with the March Report. Lower interest rates abroad, weaker prospects for Europe, higher money market premiums in Norway, somewhat lower growth prospects for the Norwegian economy and slightly lower wage growth were underlying factors. At the same time, there was a risk that

financial market turbulence would persist, weakening the outlook for inflation, output and employment in the Norwegian economy. This indicated that the key policy rate should be deferred further ahead. On the other hand, the key policy rate in Norway was already low. The consideration of guarding against the risk of future financial imbalances that could disturb activity and inflation somewhat further ahead suggested that the key policy rate should gradually be increase towards a more normal level.

In late summer, activity in the world economy appeared to be picking up again. Although turbulence concerning government finances in several countries in Europe abated, the prospects for the US economy appeared somewhat more uncertain.

In Norway growth continued at a moderate pace in line with the June projections. Norges Bank's regional network contacts reported that growth in the summer had been solid. Business sector investment rose, and corporate credit growth gathered pace. At the same time, household demand for goods and services was fairly low, and credit growth was stable. In August Norges Bank underlying inflation was projected to be below 2%. At the monetary policy meeting on 11 August the key policy rate was kept unchanged at 2%, in line with the Executive Board's strategy in Monetary Policy Report 2/10.

In the period to the monetary policy meeting in September, inflation continued to decrease, and new information indicated that inflation in the coming months would be lower than projected in the June Report. Although activity in the Norwegian economy increased approximately as expected, capacity utilisation appeared to be below a normal level. The key rate was kept unchanged at the monetary policy meeting on 22 September.

# Low inflation

Uncertainty surrounding developments in the global economy persisted through autumn. In the US, growth had been weaker than expected, while strong growth continued in emerging market economies. At the same time, there was an unexpectedly sharp rise in output in some northern European countries. Financial market participants continued to see a risk that some European countries would default on their sovereign debt. CDS prices for government debt, especially for Irish and Portuguese sovereign debt,



The CPIXE is an indicator of underlying inflation published for the first time in *Monetary Policy Report* 2/08. The CPIXE captures the underlying rise in energy prices in the consur price index. Technically, the CPIXE is calculated as the CPI-ATE plus an estimated trend in energy prices in the CPI. Over time the CPIXE will therefore rise at the same rate as the CPI, unless indirect taxes change substantially

# "The projection for the key policy rate was revised down in 2010 and further increases postponed"

climbed to a new high. Moreover, unconventional monetary policy measures in key countries had helped to keep long rates at a very low level.

At the same time, the moderate pace of growth in the Norwegian economy continued into autumn. Economic growth appeared to gain a foothold, but inflation was lower than expected. Underlying inflation measured by the CPIXE was 1.4% in Q3. The fall in consumer prices through the year was due to diminishing wage growth, an appreciation of the krone throughout 2009 and into 2010 and lower external price impulses.

At the monetary policy meeting on 27 October, *Monetary* Policy Report 3/10 was published. According to the report's projections, capacity utilisation in the Norwegian economy would pick up to a normal level during the first half of 2011, broadly in line with the June projections. The inflation forecast was revised down. Underlying inflation was estimated to be at around 1.5% in the period to summer 2011, gradually picking up thereafter. The interest rate forecast was revised down compared with the June Report. Lower inflation and interest rates abroad implied a later rate hike, and the key policy rate was projected to remain at 2% in the next few quarters and then increase gradually to a more normal level.

On the one hand, in an environment of low consumer price inflation or falling prices for imported goods, there was a risk that inflation might remain below target over a longer period. This indicated a low key policy rate. On the other hand, the consideration of guarding against the risk

of future financial imbalances that could disturb activity and inflation somewhat further ahead suggested that the interest rate should not be kept low for too long.

In the period to the monetary policy meeting in December, the recovery in the global economy continued. Growth among Norway's main trading partners was higher than expected in Q3. However, there was still uncertainty surrounding developments in Europe owing to renewed fiscal turbulence in Ireland and several southern European countries. Borrowing rates for these countries were high and there were signs that some vulnerable banks were affected. Nevertheless, contagion to other markets was limited. Equity prices held up, and oil and commodity prices rose. In November Ireland had to request assistance from the EU and the IMF, making it the first country to receive funds from the European Financial Stability Facility (ESFS), a crisis fund established by the euro area countries.

In Norway, economic activity continued to increase as expected. In November, Norges Bank's regional network contacts reported marked growth in output and rising capacity utilisation through autumn, even though the level of activity continued to appear to be somewhat lower than normal. Underlying inflation was approximately as projected and was around 1.5% towards end-2010. At the final monetary policy meeting of the year, on 15 December, the key policy rate was kept unchanged at 2%, in line with the strategy from the October Report.

Table 2.1 Interest rate decisions in 2010

Monetary policy meeting	Change in percentage points	Key policy rate after meeting
February	0	1.75
March	0	1.75
May	0.25	2.0
June	0	2.0
August	0	2.0
September	0	2.0
October	0	2.0
December	0	2.0

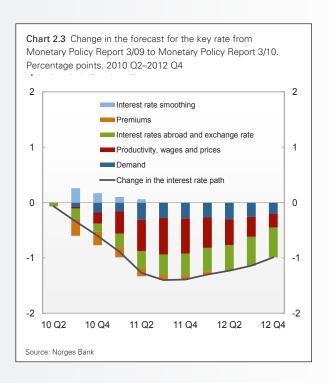
# Changes in the interest rate forecast through 2010

In Monetary Policy Report 3/09, the key policy rate was projected to rise gradually to around 2% in the first half of 2010 and further to 2.5% in the second half. The key policy rate was raised to 2% in May and subsequently kept unchanged. The projection for the key policy rate was revised down in 2010, and further increases deferred. Both inflation and activity in the Norwegian economy were somewhat weaker than projected in autumn 2009. Through autumn, growth in the economy appeared to have gained a foothold, but there were prospects of lower inflation than previously assumed. At the monetary policy meeting in October, the increase in the key policy rate was therefore deferred further ahead. Chart 2.3 shows the changes in the forecast for the key policy rate from 28 October 2009 to 27 October 2010. The bars in the chart provide a technical illustration of the impact of different factors on changes in the forecast.

Central bank key rate expectations abroad fell throughout 2010. Prospects of lower central bank key rates abroad resulted in a higher expected interest rate differential, which would have resulted, ceteris paribus, in a stronger krone, lower inflation and lower activity in the Norwegian economy. In isolation, this pushed down the interest rate forecast (green bars). In addition, the krone appreciated further somewhat from end-2009.

In the first half of 2010 the outlook for activity in the Norwegian economy was somewhat more subdued, with capacity utilisation assessed early in the year as weaker than in the forecast from the previous October. Oil investment showed a decline, and exports and household demand rose less than expected. This also pushed down the interest rate forecast slightly (blue bars).

Norwegian money market premiums declined at the beginning of 2010 but rose again in the face of renewed turbulence in financial markets through spring. Seen in isolation, the increase in premiums pushed the key policy rate down somewhat (yellow bars). It was assumed that premiums would gradually return to a more normal level. The consideration of avoiding abrupt and unexpected changes suggested that the rise in premiums should not be taken into account. This interest rate smoothing is shown by the light blue bars.



Underlying inflation in 2010 was also lower than projected. At the same time, external price impulses were weak and cost inflation low, and the rise in prices for domestically produced goods and services declined as a consequence of slower wage growth and higher productivity growth. Overall, the prospects of lower price and cost inflation pushed the interest rate forecast down by nearly one percentage point (red bars).



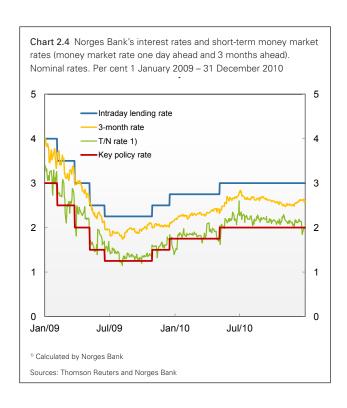
# **LIQUIDITY POLICY IN 2010**

# Norges Bank adopted a new liquidity management system

In 2010 Norges Bank had to maintain high liquidity in the banking system to keep shortterm money market rates close to the key policy rate. The premiums in the longer money market rates were still higher in Norway than in other countries. To curb demand for central bank liquidity and promote greater activity in the money market, in December the Executive Board approved a change in the system for managing bank liquidity.

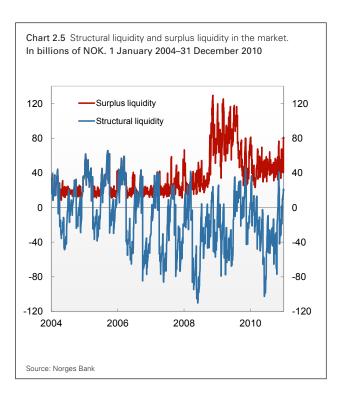
In its conduct of monetary policy, Norges Bank ensures that the supply of liquidity in the banking system is sufficient to bring short-term money market rates down to a level close to the key policy rate set by the Executive Board. Surplus liquidity in the banking system is placed with Norges Bank as overnight sight deposits. Chart 2.4 shows developments in Norges Bank's interest rates, the tomorrow/next (T/N) interest rate and the three-month money market rate.

To guide liquidity in the banking system towards the desired level, Norges Bank prepares forecasts of banks' structural liquidity. Structural liquidity is banks' total sight deposits in Norges Bank before the supply or withdrawal of liquidity through liquidity policy instruments. Structural liquidity is influenced by current ingoing and outgoing payments on the government's account at Norges Bank, government borrowing transactions, Norges Bank's foreign exchange and government securities market transactions and changes in the volume of notes and coins in circulation. When structural liquidity is low, Norges Bank provides liquidity to banks through market operations.



Liquidity in the banking system has increased over time (see Chart 2.5). Under normal market conditions, total surplus liquidity of NOK 20-30bn was previously sufficient to keep short-term money market rates close to the key policy rate. Now more needs to be supplied, with possible inefficiencies in distribution of interbank liquidity. Last year, the short-term market rate often rose whenever total liquidity fell towards NOK 30bn.

This development must be seen in conjunction with the current system for managing bank liquidity, in which banks receive interest at the key policy rate on all deposits at Norges Bank. To dampen demand for central bank liquidity and promote greater interbank market activity, on 15 December 2010, Norges Bank's Executive Board approved an amendment to the Regulation on the Access of Banks to Borrowing and Deposit Facilities in Norges Bank etc. Under the new regulation, only a certain amount of banks' deposits – a quota – will bear interest at the key policy rate. Deposits in excess of this quota will bear a lower interest rate (see separate discussion on page 109).





# Supply of NOK liquidity

In 2010, average structural liquidity was NOK –25bn. Norges Bank supplied NOK liquidity by means of ordinary fixed-rate loans (F-loans), bringing total average liquidity in the banking system to NOK 47bn. F-loans are fixed-rate loans with a given maturity and are granted to banks established in Norway against collateral in the form of approved securities. The interest rate on fixed-rate loans is normally determined through a multi-price auction<sup>4</sup>. As a rule, the maturity varies from one day to six weeks, depending on the liquidity situation.

In 2010 42 F-loan auctions were held. Norges Bank's daily provision of liquidity though auctions varied between NOK 5.4bn and NOK 60bn, averaging NOK 28.9bn. Maturities varied from 1 to 37 days.

As part of the government's efforts to bolster banks' especially smaller ones' – funding during the financial turmoil, Norges Bank issued an F-loan with a two-year maturity in November 2008 and one with a three-year maturity in February 2009. All together, 100 banks borrowed just over NOK 35bn through the two long-term F-loans. In November 2010 the two-year F-loan in the amount of NOK 12.6bn matured. The maturity had no major impact on money market rates.

# The swap arrangement

In 2008 a swap facility was established in order to secure longer-term funding for banks. In the swap, banks received government securities in exchange for covered bonds (OMF). The arrangement eventually totalled NOK 230bn. In 2010, approximately NOK 13bn of the swap facility matured.

Under the swap arrangement's original design, swaps could be valid for three years. In March 2009, swaps' term to maturity was extended to up to five years. Under the



In a multi-price auction, also referred to as an American or ordinary auction, banks submit bids for the desired amount and interest rate. Norges Bank determines the total amount to be allotted. Banks' interest rate bids are ranked in descending order and allotments are made until the total amount is reached. Successful bidders pay the price they have bid.

terms of the swap contracts, banks may not repay the loans prior to maturity. In a submission to the Ministry of Finance dated 20 September 2010, Norges Bank recommended that early termination be offered to banks participating in the swap arrangement. Norges Bank pointed out that offering banks early termination might reduce variability of banks' ordinary, long-term borrowing. In view of the recommendation, the Ministry of Finance is assessing whether to offer early termination of swaps.

### Money market premiums

After very high money market premiums<sup>5</sup> during the financial crisis and through 2009, premiums fell to a lower level in the first half of 2010. Nevertheless, in 2010 money market premiums were higher than normal and higher than in other countries. Chart 2.6 shows developments in money market premiums with tomorrow-next (from the following day to the day after), one-month and three-month maturities. In early summer 2010 money market premiums rose,

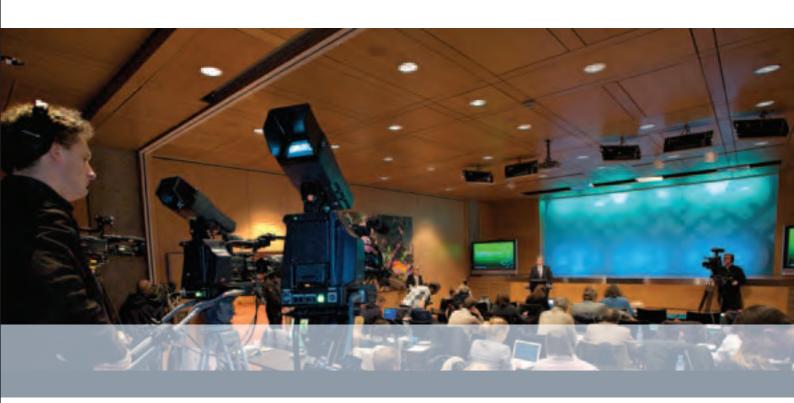
Money market rates minus the expected key policy rate over the same time horizon.

with the premium on three-month rates varying by just over 0.5 percentage point for the remainder of the year.

The increase in premiums coincided with growing turmoil concerning the debt situation in the euro area. Distribution of liquidity in the Norwegian market also appeared to function less efficiently than normal in this period. Even the premiums on the shortest money market rates were higher in periods and fluctuated more than usual despite substantial surplus liquidity in the banking system.

It cannot be ruled out that factors relating to the NIBOR fixing process<sup>6</sup> may also affect money market premiums. In 2010, Norges Bank pointed out to Finance Norway (FNO) that the rules for NIBOR quoting are not very transparent and has taken the initiative to improve the rules.<sup>7</sup>

See Norges Bank's letter of 6 October 2010 to Finance Norway (FNO), available on Norges Bank's website (www.norges-bank.no)



NIBOR is an abbreviation of Norwegian InterBank Offered Rate.

### Changes in the system for managing liquidity in the banking system

On 15 December 2010 Norges Bank's Executive Board approved amendments to the Regulation on the Access of Banks to Borrowing and Deposit Facilities in Norges Bank etc. The background is a change in the system for managing banks' total sight deposits at Norges Bank. In the current system, banks receive interest on all deposits at the sight deposit rate, which is Norges Bank's key policy rate. In the new system, only a certain amount of banks' deposits - a quota - will bear interest at the key policy rate. Deposits in excess of the quota will bear interest at a lower rate than the key policy rate.8

The aim of the change is to correct weaknesses in the current system. At present, the sight deposit rate normally serves as a floor for the shortest money market rates, since banks will not normally lend at a lower rate than they receive at the central bank. A peculiarity of this "floor system" is that it costs banks relatively little to borrow from Norges Bank with securities as collateral. Demand for central bank liquidity is generally high, higher than banks need to execute their payments in Norges Bank's settlement system. Thus, to keep short-term money market rates close to the key policy rate, Norges Bank needs to ensure a substantial liquidity surplus in the banking system.

The low cost of keeping deposits in overnight accounts at the central bank, and the considerable surplus liquidity in

the banking system, result in an inefficient distribution of interbank liquidity. When banks become unwilling to lend to one another, the banking system needs more liquidity to keep short-term money market rates close to the key policy rate. Chart 2.5 shows the total amount of liquidity in the banking system as from 2004. After periods of high liquidity, the "normal" level has trended upward. It appears that banks gradually adjust to that higher level. Incentives to lend to other banks are weak at the outset and appear to be weakened further if overall liquidity in the banking system has been high over a certain period. This means that Norges Bank has less control over the level of liquidity in the banking system.

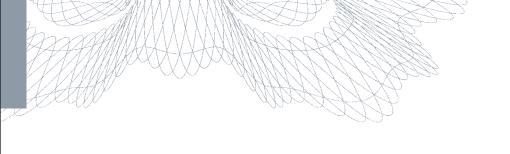
In the new system, banks will not normally want to keep deposits in the central bank in excess of their quota. This will curb demand for central bank liquidity and restrain liquidity growth over time. In addition, banks have stronger financial incentives to redistribute liquidity among themselves. Banks with deposits in the central bank in excess of their quota will have a stronger incentive than in the current system to offer that liquidity in the interbank market. Banks with deposits in the central bank that are below their quota will have a financial incentive to solicit deposits and keep them in the central bank overnight at the key policy rate, which will generate more activity in the interbank overnight market

There is no broad and well developed market for overnight interbank loans in NOK. The most liquid short-term interest rate is the NIBOR tomorrow-next rate, which is the rate on loans from tomorrow until the next business day. This is a swap rate derived from the interest rate on US dollars and the forward premium in the foreign exchange market (determined by the spread between dollar forward and spot rates). Over time, the new system could pave the way for the overnight rate in NOK to be used more widely as a benchmark rate in the market for financial products.

In the new system there will continue to be substantial surplus liquidity in the banking system. This is necessary because of the uncertainty attached to the size of incoming and outgoing payments on the government's account at Norges Bank, payments which result in corresponding changes in the amount of liquidity in the banking system. To make liquidity management more predictable, Norges Bank will publish forecasts of changes in bank liquidity more frequently than previously and, to the degree possible, announce in advance when the Bank intends to carry out liquidity operations (F-loans, F-deposits). If necessary, Norges Bank will fine-tune bank liquidity at short notice (daily) to ensure that the total amount of liquidity in the banking system is at the desired level.



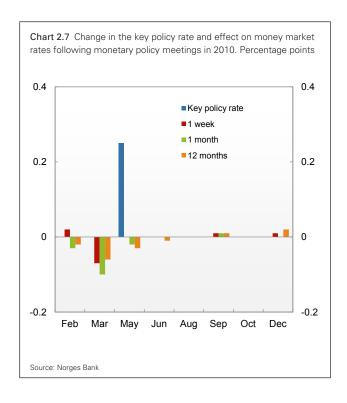
The new system for managing bank reserves was circulated for comment on 6 October 2010. The consultative document. comments by Finance Norway and some banks, Norges Bank's assessments of the comments, a more detailed account of the new system and how the quotas will be calculated can be found on the Bank's website (www.norges-bank.no)



### **EVALUATION – USE OF INSTRUMENTS**

# Minor fluctuations in the money market

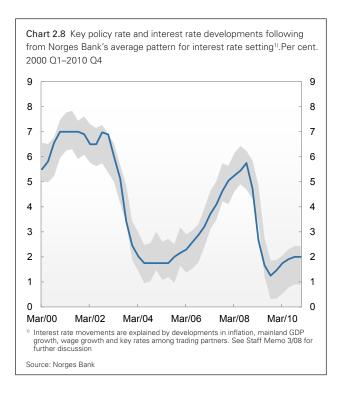
Norges Bank's communication of monetary policy primarily aims to stabilise inflation expectations by providing an account of and explaining interest rate setting. The aim of publishing the Bank's interest rate forecasts and monetary policy strategy is to make it easier for others to anticipate and evaluate monetary policy. When market participants understand the central bank's response pattern, it enhances the stabilising effect of market interest rates' reaction to new information on economic developments.

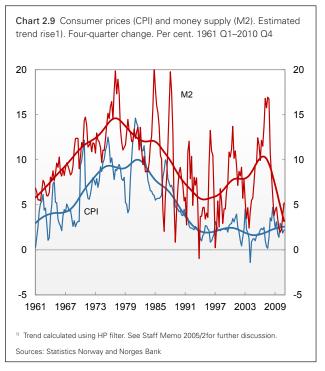


The effects on market rates of the Executive Board's monetary policy decisions are an indicator of market participants' ability to anticipate interest rate setting. Pronounced effects may indicate that the decision was unexpected. During the five-year period from 2006 to 2010, the average change in the one-week rate after the monetary policy meeting was 4 basis points (0.04 percentage point). The average change in the one-month and twelve-month rates was 5 basis points. In 2010, the average change in the oneweek, one-month and twelve-month rates was 1, 2 and 2 basis points, respectively. A lower impact than the historic average may indicate that interest rate setting was largely anticipated by market participants. At the same time, the Norwegian money market stabilised, which probably contributed to the smaller impact on market rates. The key policy rate was increased by 0.25 percentage point in May and otherwise kept unchanged through the year. As the rate hike in May was expected by the market, its impact on money market rates was minimal. The biggest change in market rates came in March, when both the one-week and twelve-month rates fell by 7 and 6 basis points, respectively (see Chart 2.7). From a historical perspective these impacts were also limited. The decision at the monetary policy meeting in March to keep the key policy rate unchanged at 1.75% was in line with what most foreign exchange market participants had expected. Beyond this, short-term market rates only showed small changes. This may indicate that market participants had interpreted developments in both the Norwegian and global economy in line with Norges Bank's assessment, and there were few surprising elements in interest rate setting in 2010.

### Historical response patterns

Market participants will attempt to envisage how the central bank responds to new information and how the key policy rate is set as a result of developments in economic variables. Norges Bank has estimated an interest rate rule that seeks to explain historical interest rate changes on the basis of changes in a few macroeconomic variables. The rule includes inflation developments, wage growth, mainland GDP and central bank key rates abroad. The interest rate in the previous period is also taken into account. Such an esti-





mated reaction function does not capture all the elements that are given weight and can only provide an indication of how Norges Bank has responded to a selection of variables. From autumn 2008 to summer 2009, Norges Bank reduced the key policy rate more rapidly than indicated by the historical response pattern (see Chart 2.8). Since summer 2009 Norges Bank has raised the key policy rate three times. This was closely in line with the historical response pattern.

### Monetary growth and inflation

Historically, there has been a relationship between inflation and growth in money supply (M2)8, (see Chart 2.9). There is a tendency for stronger monetary growth to accompany higher inflation and for weaker monetary growth to accompany lower inflation. Trend monetary growth may serve as a rough cross-check of inflation projections generated by other models.

The ten years up to 2008 saw an increase in trend monetary growth despite large annual fluctuations. Strong growth in the Norwegian economy and high credit growth drove monetary growth up to a particularly high level in the period from 2006 to 2008. At the same time, consumer price inflation was low as a result of favourable supplyside conditions in the Norwegian and international economy. Inflation picked up and exceeded the inflation target in 2008. Since then, monetary growth has fallen quickly, with a clear downward trend towards end-2010. Trend inflation has been relatively stable.



The money supply (M2) consists of banknotes and coins, unrestricted bank deposits, certificates of deposit and units in money market funds owned by the money-holding sector (households, non-financial enterprises, municipal administration and financial enterprises other than state lending institutions, banks and money market funds). Other financial enterprises includes financial enterprises other than banks, state lending institutions and money market funds



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

### **EVALUATION** - PERFORMANCE OVER TIME

### Inflation is low and stable

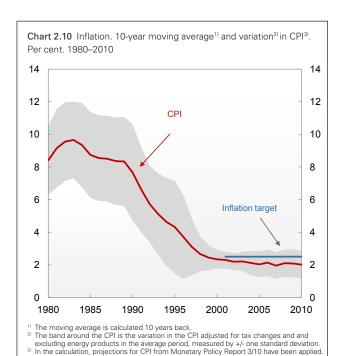
Inflation stabilised in the early 1990s after falling from a high level in the previous decade. Viewed over time, inflation has been low and stable and remained somewhat below, but fairly close to 2.5%.

In accordance with Norges Bank's mandate for monetary policy, the operational target of monetary policy is an annual rise in the consumer price index (CPI) of close to 2.5% over time. CPI inflation over a short period does not provide an adequate basis for assessing whether monetary policy objectives have been achieved over time. Chart 2.10 shows the 10-year moving average for annual CPI inflation.

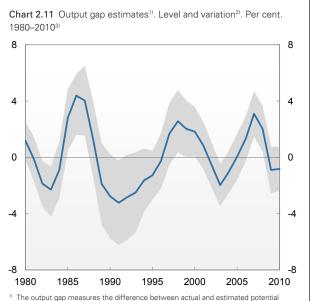
Over the past ten years, average annual CPI inflation has been 2%. The deviation from the inflation target of 2.5% is the result of a number of favourable supply-side shocks to the economy earlier in the decade, including strong growth in productivity, an ample supply of labour from other countries and lower price rises on imported goods. This is reflected in strong growth in the Norwegian economy coupled with a period of lower-than-expected inflation.

Under a flexible inflation targeting regime, monetary policy also gives weight to stabilising developments in output and employment. Chart 2.11 shows the movements in the output gap since 1980. The output gap shows the difference between the actual level and the estimated normal level of mainland GDP. Thus measured, fluctuations in the economy have, on average, been somewhat less pronounced during the last ten years than around 1990. The impact on output in autumn 2008 and spring 2009 was nevertheless greater than it had been for several years.

The band around average inflation in Chart 2.10 shows inflation variability. Over a longer time horizon, inflation variability decreased. Variability in the output gap, shown in Chart 2.11, appears to have been diminishing since the end of the 1990s.



Sources: Statistics Norway and Norges Bank



- $^{\rm 11}$  The output gap measures the difference between actual and estimated potential mainland GDP.
- The band shows the variation in the output gap measured by ± one standard deviation The variation is calculated asthe average standard deviation over a ten-year period, years back and 2 years ahead
- In the calculation, projections from Monetary Policy Report3/10 have been applied Source: Norges Bank

### **EVALUATION** - INFLATION EXPECTATIONS

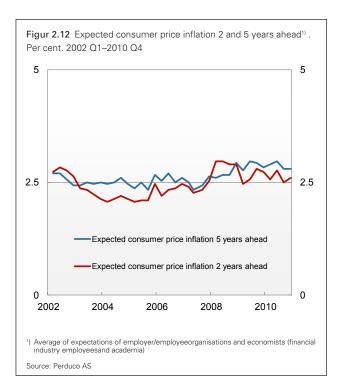
# Confidence in the inflation target

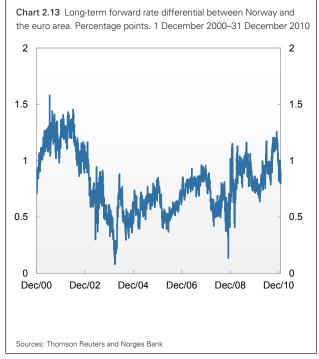
Confidence in achieving the inflation target is a precondition for the stabilising effect of monetary policy on developments in output and employment. Inflation will not be at target at all times, but if there is confidence in monetary policy, expected inflation will be close to the inflation target over time, which in itself contributes to stabilising inflation.

Perduco has been commissioned by Norges Bank to carry out quarterly surveys on inflation expectations. According to these surveys, inflation expectations in 2010 Q4 were fairly close to, but somewhat above 2.5% (see Chart 2.12)

Consensus Forecasts Inc. compares different institutions' forecasts of consumer price inflation in Norway. Both five years and ten years ahead, consumer price inflation is expected to be approximately 2.5%.

An indicator of price expectations among financial market participants is provided by the yield curve in fixed income markets. Long-term forward rates may – under certain conditions – provide an indication of expected inflation. Chart 2.13 shows the long-term forward rate differential between Norway and the euro area. Owing to a higher inflation target in Norway, this differential will normally be in the area of 0.5-1 percentage point, depending on the risk premiums in the fixed income market. This differential was generally close to 1 percentage point in 2010. Towards end-2010, long-term interest rates internationally were unusually low, probably affected by unconventional measures on the part of major central banks, including large government bond purchases. A wider spread can be an indication that price expectations in Norway are higher than implied by the inflation target. Overall, the indicators suggest that there is confidence that inflation over time will be close to 2.5%.







#### **CHAPTER 3:**

# Financial Stability

### WORK ON FINANCIAL STABILITY

Norges Bank contributes to financial stability by monitoring the financial system and providing settlement in the central bank to ensure a robust and efficient payment system. In addition, Norges Bank has the obligation and sole right to issue notes and coins.

The financial crisis revealed serious deficiencies internationally in the system already in place to regulate and oversee the financial system. There are three lessons in particular from the crisis that affected Norges Bank's work on financial stability in 2010:

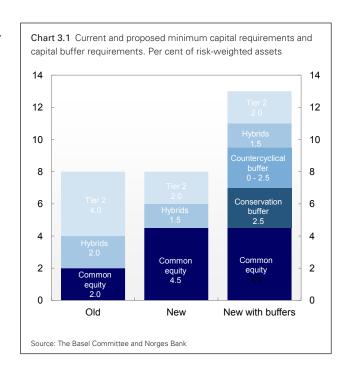
- The financial crisis revealed that banks held insufficient capital, excessive short-term market funding and inadequate liquidity buffers.
- New macroprudential tools must be put in place that can be applied as necessary. The tools must promote robustness in the financial sector, both by reducing the risk of crises and by improving the crisis resilience of financial institutions.
- The authorities must acquire tools that enable banks to be wound up in an orderly manner. Banks must also draw up plans for their own liquidation in the event of difficulties. Owners and creditors – not taxpayers – must bear the losses. The interest rate on banks' funding will then reflect the risk they take rather than an implicit government guarantee.

### New regulation of bank capital and liquidity

After extensive consultation rounds and quantitative impact studies, the Basel Committee on Banking Supervision issued proposals for new bank capital and liquidity standards in December 2010. The proposals entail requirements for increased and higher-quality bank capital and two new bank liquidity requirements, a liquidity buffer requirement and net stable funding ratio requirement. The European Commission has announced that a draft directive to implement the Basel Committee's recommendations in the EU will be presented in 2011 Q1. The recommendations will be transposed into Norwegian law under the EEA Agreement. Chart 3.1 shows the current and new bank minimum capital adequacy and capital buffer requirements. To meet the liquidity standards, banks will need to procure considerably more liquidity and stable funding. At the same time, the Basel Committee's studies show that if the standards are phased in over several years, the macroeconomic costs will not be particularly high. The standards are to be phased in from 2013 to 2019. The Basel Committee will also consider introducing a maximum leverage ratio (ratio of debt to total assets) for banks in 2018.

Norges Bank and Finanstilsynet have submitted several joint consultation responses on the new regulatory proposals, to both the Basel Committee and to the European Commission. The Bank has supported a tighter regulatory regime and has advocated even stricter capital rules, so that, for example, holders of subordinated bank debt will have to take larger haircuts in the event of financial problems in banks, including large banks.

Macroprudential measures aim at increasing the robustness of the financial sector by reducing the risk of crises and improving the crisis resilience of financial institutions. The main measure for restraining the buildup of imbalances is a long-term framework that increases the cost of rapid debt



### What is financial stability and why are financial markets regulated?

Financial stability requires that the financial system is robust and that it functions as intended, even in the event of internal or external shocks to the system. The financial system must be able to channel capital, execute payments and redistribute risk in an effective manner.

Risk in one financial institution can spread to the rest of the financial system. An individual institution may have insufficient incentive to limit risk when other participants in the economy are affected by the risk it assumes. Thus, risks that appear to be isolated to individual financial institutions can develop into risks to the entire financial system.

Furthermore, many financial institutions' creditors expect to be rescued if the institutions they have claims on should fail. This makes it too easy for fi-

nancial institutions to fund their activities with cheap credit rather than with equity. These are some of the reasons that the authorities monitor financial institutions and regulate the risks they may take.

The basis for the responsibilities of Norges Bank, including its responsibility for the stability of the financial system, is primarily provided for in Sections 1 and 3 of the Norges Bank Act. Section 1 states that the Bank shall issue banknotes and coins, 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 notify 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 coins. Pursuant to Section 17, Norges Bank carries out banking services 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 as intended. 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.

growth and induces financial institutions to increase equitybased funding. In its letter to the Ministry of Finance of 29 November 2010, Norges Bank stated that it would regularly assess whether the situation in the Norwegian economy warrants discretionary use of countercyclical measures aimed at the financial sector. In a speech on 17 November, the Governor of Norges Bank said that the Ministry of Finance should define the objective of macroprudential supervision and delegate its use. One alternative is to delegate responsibility for implementing discretionary measures against systemic risk to Norges Bank. Another is that Norges Bank may have the right and a duty to issue an opinion and that Finanstilsynet in principle follows the advice provided by the Bank. If the advice is not followed, an explanation must be provided and made publicly available.

In periods when credit growth in Norway is high enough for potential imbalances to build up, a requirement to vary capital requirements according to economic conditions (countercyclical capital buffers (see Chart 3.1)) may be imposed

to ensure that all banks in Norway build up larger buffers against future losses. This may also restrain lending. Foreign banks have a large share of the Norwegian credit market. For the buffer requirement to cover as much of the lending in Norway as possible, it must also apply to foreign banks that lend to Norwegian borrowers. The Basel Committee has proposed that the buffer requirement set by the Norwegian authorities should also apply to credit provided by foreign banks to Norwegian borrowers. In a joint consultation response to the European Commission, Norges Bank and Finanstilsynet emphasised that if the measure is to have the desired effect, it is important that foreign banks' lending to Norwegian borrowers is subject to the same capital standards as Norwegian banks. There has also been substantial activity to strengthen crisis management in cross-border banks and large, systemically important banks. In comments on the Commission proposal on dealing with cross-border bank crises, Norges Bank supported proposals for a new and improved crisis resolution system.



### FINANCIAL INSTITUTIONS AND FINANCIAL MARKETS

# The state of the Norwegian financial system

The international financial crisis has shown how even if financial institutions are individually solid, vulnerabilities can build up at system level. Developments leading up to the crisis followed a familiar pattern with a long period of rapid growth in debt and accelerating asset prices. To identify vulnerabilities, Norges Bank analyses factors such as property price developments and the debt-servicing capacity of banks' borrowers. Model-based stress testing is used to analyse banks' resilience to unexpected shocks to the economy. In 2010 Norges Bank's stress testing system was evaluated by a group of experts from other central banks and from academia. The group found that Norges Bank's system is among the best in this area. In 2010 Norges Bank also started work on more in-depth studies of how the state of the banking sector influences banks' credit provision and the feed-through to the real economy. Norges Bank's bank lending surveys provide qualitative information on demand and supply of and terms for new loans.

Norges Bank monitors banks' funding and recommends measures to bolster banks' balance sheets. Monitoring requires data on banks' asset-liability management, banks' funding instruments, their investment portfolios and the markets for these instruments and securities. The data are gathered from bank statistics, external data providers, contact with banks and other sources. In addition, Norges Bank conducts its own liquidity survey, in which the largest banks report their perceptions of the funding situation. Following the financial crisis, this survey has been expanded in both scope and frequency.

Turbulence in international financial markets due to high sovereign debt in many countries was a recurring topic in 2010. The severe turmoil in spring 2010 also adversely affected Norwegian banks' funding situation. Eventually, investors were largely able to differentiate between banks from different countries, and the funding risk associated with Norwegian banks has been deemed to be lower than that of many other banks. Norwegian

banks' loan losses fell markedly from 2009 to 2010, which boosted earnings. Towards the end of 2009 a number of Norwegian banks increased their capital adequacy by raising new Tier 1 capital. Favourable results and increased capital adequacy are important factors behind Norges Bank's assessment that the financial stability outlook had improved at end-2010 compared with 2009. Looking ahead, the risks facing banks are primarily related to the uncertainty surrounding developments in the global economy and financial markets and the vulnerability associated with the high household debt burden in Norway.

### Norges Bank's recommendations for measures

Norges Bank's assessment of risks to financial stability and recommendations for counteracting these risks are communicated in letters to the Ministry of Finance and Finanstilsynet twice a year in conjunction with the publication of the Financial Stability report.

In a letter of 29 November and in Financial Stability report 2/10, Norges Bank recommended early adoption in Norway of the new international bank capital and liquidity standards. In addition, together with Finanstilsynet, Norges Bank has also argued for early introduction of the countercyclical capital buffer regime and for allowing individual countries to set the requirement higher than 2.5 per cent (see Chart 3.1). Countries such as Norway, which have experienced high credit growth also following the financial crisis, may benefit from having a countercyclical capital buffer regime in place now. Pending the introduction of the buffer, the banks should be subject to higher capital requirements to prevent the buildup of future imbalances.

Norges Bank argued further that in the years ahead when banks are likely to encounter a pickup in credit demand, funding must be structured on a much sounder basis than before the financial crisis. Banks should seek to increase their deposit-to-loan ratios and aim for more long-term market funding. Norges Bank will closely monitor banks' funding in the years ahead. When setting the requirements for banks' access to the central bank's lending facilities, it may be relevant to give weight to their liquidity management. In order to ensure that the general public has access to information about Norwegian banks' funding structure, banks should also be required to disclose quantitative funding data.

# "Norwegian banks' loan losses fell markedly from 2009 to 2010, which boosted earnings"



### Scope for improving the Norwegian system for resolving bank crises

Crises in the financial sector, especially at large banks, are often resolved by the government guaranteeing continuous operation because considerable economic values are often at stake and because time for finding alternative solutions is often short. For that reason, an adequate crisis resolution framework must ensure that key banking services will be maintained without interruption and that guaranteed deposits will be paid expeditiously in the event the bank is liquidated.

An adequate crisis resolution system must be able to manage crises even in the largest and most complex institutions so that those who have contributed to risk-taking will have to bear any losses. Creditors without guarantees must also bear a real risk of losses, even if the bank continues its operations. With such a system, greater prudence on the part of owners and management can be expected. Banks' creditors can also be expected to improve their monitoring of banks' risk-taking and to price funding to better reflect the risks in the banking sector and less so the likelihood of a government bailout. In addition, public spending on crisis resolution measures must be kept to a minimum.

Norges Bank proposed the following instruments for reaching these objecti-

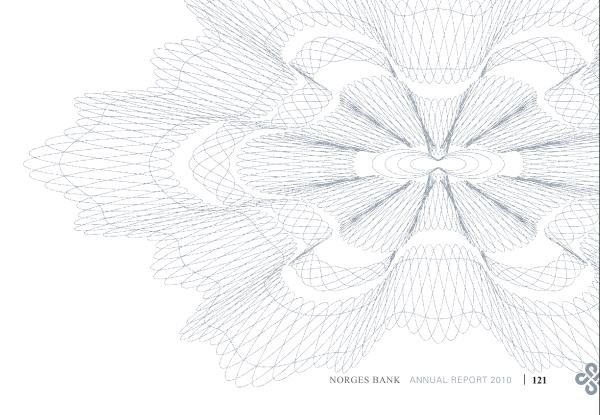
- All Norwegian banks should be required to prepare a "living will", containing contingency plans for weathering a crisis without government support and crisis plans for improved use of the crisis resolution framework.
- It is important for the government to intervene early in a crisis and ensure that the banks take the necessary measures to enable them to weather the crisis. Thresholds that determine when the authorities are to intervene must be at a higher capital level than is the case today. These should be supplemented by stringent thresholds for liquidity.
- Splitting up a crisis bank ensures continued operation of key banking services, while shareholders and unsecured creditors must absorb the losses. The bank's assets can also be better protected. The crisis resolution authorities should therefore be explicitly authorised to split up and sell an institution piecemeal. Shareholders and creditors must not suffer greater losses than in the case of immediate liquidation.

- A bridge bank is a bank that temporarily takes over balance sheet items from a crisis bank and continues to provide key banking services. In addition to maintaining key banking services, the aim is to protect the bank's assets until it can be sold or merged with another bank. The establishment of bridge banks should be provided for in legislation.
- Existing creditors can help to recapitalise the bank through:
  - convertible bonds that are converted to share capital when capital falls below a certain threshold
  - mandatory conversion of debt to equity (bail-ins)
- Such forms of internal recapitalisation of a troubled bank should be studied further.
- The new instruments must be at the disposal of a permanent government body.

It is important to design a system in which owners and unsecured creditors take losses when a bank encounters problems and is subject to government measures. An important consideration in improving the crisis resolution system is a limit on the use of taxpayer funds. This requires a new toolkit that can quickly be deployed to minimise adverse impacts on the economy. The Norwegian crisis resolution system was not really put to the test during the most recent crisis. The system put in place based on our experience of the banking crisis of the early 1990s was effective. Even so, because of structural changes and refinement of crisis management tools in other countries after the most recent financial crisis, it was appropriate to take a closer look at Norway's toolkit and build on the experience recently gained by other countries. Following a review, Norges Bank proposed specific changes to the Ministry of Finance (see separate box). The Ministry of Finance has sent the proposals to the Banking Law Commission, which has already been asked to review the Guarantee Schemes Act.

# Participation in international supervisory bodies

Norges Bank and Finanstilsynet have had observer status on the EU Committee of European Banking Supervisors (CEBS). From 1 January 2011 the EU strengthened monitoring of threats to financial stability by establishing a new microprudential supervisory body (European System of Financial Supervisors, ESFS) and a new macroprudential supervisory body (European Systemic Risk Board, ESRB). Norway will be an observer in the ESFS and will be invited to meetings of the ESRB on an ad hoc basis. Finanstilsynet will be the Norwegian observer on the microprudential supervisory committee for the banking sector, the European Banking Authority (EBA), which will replace the CEBS. In July 2010, Norges Bank, the Ministry of Finance and Finanstilsynet signed a memorandum of understanding on cooperation on cross-border financial stability with their counterparts in the European Economic Area (EEA). The agreement strengthens collaboration in normal times and during cross-border crises or critical situations. In August the agreement was augmented by a separate regional agreement between the Nordic and Baltic countries. Norges Bank meets with the other Nordic central banks to discuss oversight and regulation.



### **PAYMENT SYSTEM**

The Norwegian payment system functioned effectively in 2010. Stable payment system operations are of particular importance for financial stability. All payments between banks and between customers of different banks are cleared and settled in these interbank systems.

### Norges Bank's responsibility and role in monitoring the Norwegian payment system

Norges Bank ensures secure and efficient settlement of interbank payments in banks' accounts at Norges Bank and supplies society with banknotes and coins in a manner that promotes an efficient payment system. Norges Bank also monitors the Norwegian payment system with a view to promoting a robust and efficient payment system, thereby contributing to financial stability. While this work is primarily aimed at minimising risk in the interbank clearing and settlement system, Norges Bank also monitors important trends in the payment system as a whole.

Norges Bank's oversight of authorised interbank systems relies on reporting requirements and supervisory meetings. Oversight and monitoring of interbank systems follow international recommendations, primarily from the BIS Committee on Payment and Settlement Systems (CPSS). Two interbank systems are authorised under the Payment Systems Act: the Norwegian Interbank Clearing System (NICS) and the private settlement bank DnB NOR. The private settlement bank Sparebank1 Midt-Norge is exempt from the authorisation requirement. There were few cases of disruptions in the two authorised interbank systems in 2010. During 2010, NICS introduced a third daily gross clearing (primarily card payments and Internet bank transfers). This reduces time use in the Norwegian payment system. The clearings are settled in Norges Bank. The operation of NICS and associated systems was stable despite this change and other system reconfigurations.

Norges Bank discusses developments in interbank systems and retail payment systems in the Annual Report on Payment Systems. In the most recent report, Norges Bank discussed the costs and prices of payment services.

Norges Bank was of the view that the costs of payment services in Norway are low in an international context. Moreover, it is important that banks' pricing of payment services reflects the costs of providing those services. Earnings from payment services can support banks' willingness to invest in secure and sound payment systems in the future. Payment recipients can charge fees or give discounts that vary according to the costs they incur as a consequence of the means of payment their customers choose. This may help to ensure a more efficient payment system.

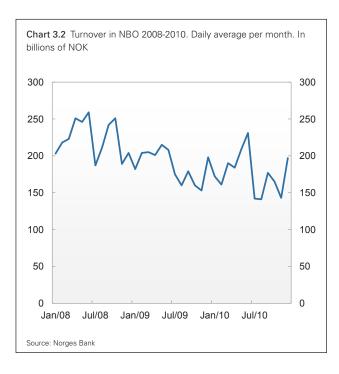
### No disturbances in Norges Bank's settlement system

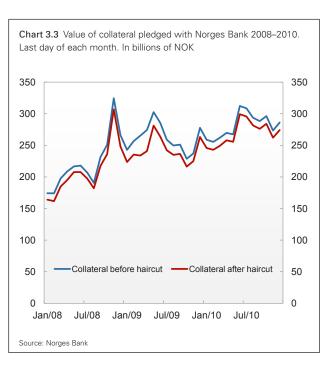
Norges Bank is the system's settlement bank for interbank payments in Norway. This function is associated with Norges Bank's responsibility pursuant to the Norges Bank Act to promote an efficient payment system domestically and vis-à-vis other countries and with banks' accounts in and access to loans from Norges Bank. Because the central bank is the issuer of money, deposits in the central bank are without credit or liquidity risk to banks. Therefore, the interest rate on central bank money provides the basis for interest rate formation in the economy as a whole.

All banks in Norway can have accounts at Norges Bank. At end-2010, 134 banks had accounts at Norges Bank. Of these, 21 banks settled their payments on a daily basis at Norges Bank, either in the form of individual payments or net settlement. The other banks mainly used the account at Norges Bank for payments, primarily associated with loans from Norges Bank. The CLS (Continuous Linked Settlement) Bank has an account that is used for daily settlement of the NOK portion of foreign exchange trades within the international system for settlement of such trades. Two central banks and the Bank for International Settlements (BIS) also have accounts in Norges Bank's settlement system (NBO).

In 2009 a provision was made for companies that are central counterparties in trades in financial instruments to have accounts at Norges Bank if this strengthens financial stability. No overnight loans or deposits are permitted in these accounts. A central counterparty interposes itself in the trade from the instant the trade is agreed, becoming the buyer for the seller and the seller for the buyer. In 2010 one company (Oslo Clearing ASA) opened such an account. In







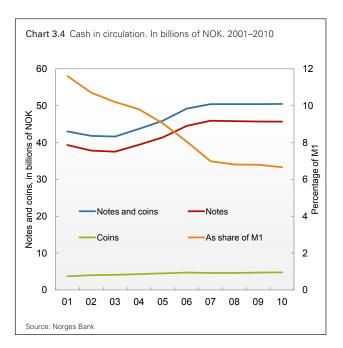
June, Oslo Clearing became a central counterparty to trades in equities listed on Oslo Børs (Oslo Stock Exchange).

In 2010 daily settlement between banks in Norges Bank's settlement system averaged NOK 176bn. Chart 3.2 shows the turnover in Norges Bank's settlement system in recent years.

The IT operations for the settlement system are carried out by ErgoGroup AS under contract to Norges Bank. There were no interruptions in the settlement system's technical operations in 2010. In 2010 ErgoGroup AS merged with EDB Business Partner ASA to form a new company called EDB ErgoGroup ASA. The IT operating contract for Norges Bank will continue with the new company.

Banks pay for the settlement services provided by Norges Bank. Prices are set so that revenue covers the relevant costs Norges Bank incurs in providing these services. In 2010 prices were changed to reflect the cost structure and banks' access to the new settlement system. Prices were set in order to provide overall revenue to Norges Bank of NOK 53m in 2010.

Along with the central banks of Denmark, Iceland and Sweden, Norges Bank participates in a Nordic forum for exchanging experiences concerning settlement systems and solutions for banks' collateral for loans from central banks.

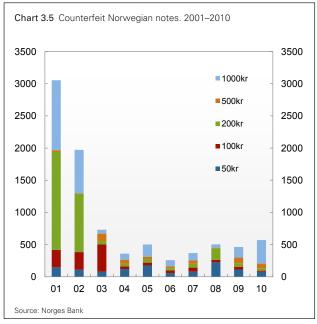


### **Collateral for loans from Norges Bank**

Norges Bank extends loans to banks against collateral in the form of securities. Such loans enhance the efficiency of monetary policy and payment settlement. In order to be eligible as collateral, securities must satisfy a number of requirements. Access to borrowing facilities and collateral requirements are defined in regulations and guidelines issued by Norges Bank.

In 2010 Norges Bank amended the collateral guidelines, including further limits on pledging securities issued by banks as collateral for loans. From December 2010 the limits on bank-issued paper also apply to international banks and financial institutions. From 2012 it will no longer be possible to pledge securities issued by banks as collateral for loans from Norges Bank.

Adjusted for haircuts, the value of banks' total holdings of securities pledged as collateral with Norges Bank was NOK 274bn at end-2010, compared with NOK 263bn at end-2009. The number of securities approved as collateral at Norges Bank was reduced from 1 230 in 2009 to 886 at end-2010. The primary reason for the reduction was that a large number of securities were not pledged during the last six months and thus were removed from the list of approved securities. Chart 3.3 shows the value of banks' collateral at Norges Bank in recent years.



### Securities settlement

Trades in shares, primary capital certificates, notes and bonds are cleared and settled through the Norwegian Central Securities Depository (VPS). VPS registers the changes of ownership of the securities and clears the associated cash

positions between banks before they are settled at Norges Bank. Norges Bank monitors securities settlement in accordance with international recommendations. VPS is authorised to operate as a securities register by the Ministry of Finance. Finanstilsynet supervises the participants in securities settlement (VPO) and has approved the rules in VPO associated with the Payment Systems

The central banks of Denmark, Sweden and Norway allow banks to pledge deposits in one central bank as collateral for loans in one of the other central banks. This arrangement, called the Scandinavian Cash Pool (SCP), may be used only for intraday liquidity. Thus, banks can better manage their liquidity across borders. In 2010 a daily average of approximately NOK 3.3bn was pledged in the SCP system with Norges Bank.

### Centralised securities settlement in Europe

The European Central Bank (ECB) is developing centralised securities settlement for the euro and other currencies known as TARGET2-Securities (T2S). The system is currently scheduled to go live in 2014-2015. The Eurosystem has invited central banks outside the euro area to take part in negotiations on conditions for participation in T2S. These negotiations began in June 2010. Norges Bank is taking part in the negotiations along with the central banks of Denmark, Iceland, Poland, Sweden, Switzerland and the UK. National user groups (NUGs) have been established in all eligible participating countries. An NUG has also been formed in Norway, with participation from the market, the VPS (the Norwegian Central Securities Depository) and headed by Norges Bank.

Norges Bank has for the time being stated that its participation in T2S is conditioned on the desire of the Norwegian market to join. And, because there is currently no other VPS that settles in Norwegian kroner, it would not be appropriate for Norges Bank to join T2S without the VPS. A decision on Norwegian participation in T2S is planned for the second half of 2011.

### Government accounts in Norges Bank

Norges Bank performs tasks relating to the management of the central government's liquid assets and debt in NOK. The legal basis for these responsibilities is provided for in the Norges Bank Act and they are regulated by means of agreements between Norges Bank and the Ministry of Finance. A primary function is to amass government liquidity each day in the government's sight deposit account at Norges Bank. At end-2010 approximately 400 government agencies had a total of about 1 050 accounts at Norges Bank. The sum of deposits on these accounts constitutes the deposit in the government's sight deposit account. The government receives interest on these funds. In addition, the Ministry of Finance also sets internal interest rates for certain government-owned funds and deposits. The Ministry of Finance pays an annual fee on behalf of the government to cover the costs of the banking services performed by Norges Bank for the government.

With certain exceptions, Norges Bank's accounting services for the government were on the whole also stable in 2010.

Payment services for the government are performed by banks under contract to the Norwegian Government Agency for Financial Management. In recent years, DnB NOR Bank ASA, Nordea Bank Norge ASA and SpareBank 1 Alliansen have had such arrangements with the government. As a result of the new agreements, a number of government agencies changed banks. Norges Bank has special agreements with these banks on how the government's funds shall be transferred between banks and Norges Bank each day.



### **NOTES AND COINS**

# No change in cash circulation in 2010

Over the past three years, cash circulation has remained at approximately the same level and averaged just over NOK 50bn in 2010.

The average value of notes and coins in circulation increased each year in the period from 2003 to 2007. Over the past four years, cash circulation has remained stable and amounted to close to NOK 50.4bn in 2010 (see Chart 3.4). However, the value of notes and coins in circulation represents a decreasing share of the value of means of payment used by the public (M1). The value of notes in circulation averaged NOK 45.7bn in 2010, unchanged from the previous year. The value of coins in circulation averaged NOK 4.8bn in 2010, an increase of NOK 0.1bn since 2009.

### Low seizure of counterfeit Norwegian notes

The extent of counterfeiting in Norway is low compared with many other countries. In 2010, just over 500 counterfeit Norwegian notes were seized. This figure corresponds to approximately five counterfeit notes per million notes in circulation and is virtually at the same level as in the other Nordic countries. In the euro area, the number of counterfeit notes per million notes is over ten times as high. In the period from 2002 to 2004, Norges Bank upgraded the smaller denominations in the banknote series, inserting a new holographic feature in the 100-krone and 200-krone notes, for example. These elements are readily discernable by the general public and are difficult to imitate. Following this upgrade, the number of counterfeit Norwegian notes seized has been very low (see Chart 3.5).

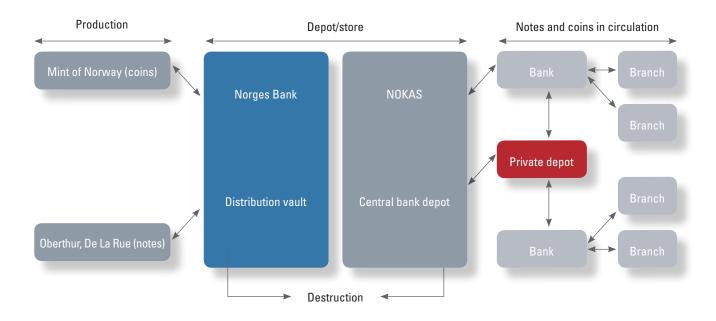


Chart 3.6 The note and coin lifecycle

### Organisation of cash distribution

Pursuant to the Norges Bank Act, Norges Bank has sole responsibility for issuing notes and coins. This involves ensuring that a sufficient quantity of notes and coins is produced to satisfy general demand and made available in a secure and efficient manner. Norges Bank supplies banks with cash, and banks are responsible for further distribution to the general public. The central bank is also responsible for maintaining the quality of notes and coins in circulation through the withdrawal and destruction of worn and damaged notes and coins.

The objective of Norges Bank's cash handling activities is to promote the efficiency of cash distribution and of the payment system as a whole. Various measures have been implemented in recent years in order to ensure the optimal division of responsibilities and duties between operators and a clearer distinction between different types of service. The changes have resulted in a more clearly defined role for Norges Bank as wholesaler, and banks have taken greater responsibility for interbank distribution of cash.

Changes have included reducing the number of central bank depots to five and establishing an arrangement where, subject to certain conditions, banks receive interest compensation for cash held in private depots. At end-2010, a total of 14 private depots were established in different parts of Norway. The depots are operated by Norsk Kontantservice AS (NOKAS) and Loomis Norge AS.

Although production, destruction and distribution of notes and coins may be performed by others, Norges Bank must ensure that these operations are carried out in accordance with the requirements that it imposes. Norges Bank has outsourced a number of operations in the area of cash handling (see Chart 3.6). Notes and coins are produced by external suppliers. Cash handing services associated with central bank responsibilities (destruction, etc.) and services associated with the management of central bank depots are performed by NOKAS.

### The musician Ole Bull honoured by a commemorative coin in 2010

Pursuant to Sections 13 and 16 of the Norges Bank Act, Norges Bank issues commemorative coins to mark important national events. In 2010, it was 200 years since the birth of the violinist and composer Ole Bull. To mark this occasion, Norges Bank issued a special edition 10-krone circulation coin on 5 February, the musician's birthday.

A competition was held for the design of the coin's reverse. The winning design was created by the sculptor Wenche Gulbransen and features Ole Bull's portrait fused with part of a sheet of the music of "Seterjentens søndag", one of Bull's most famous compositions. The portrait of H.M. King Harald V on the obverse side was created by Ingrid Austlid Rise, designer at Det Norske Myntverket AS (Mint of Norway). The coin was issued as part of the Ole Bull 2010 project established by the Art Museums of Bergen foundation



# Investment management

At the end of 2010, Norges Bank managed assets amounting to a total of NOK 3 342bn in international capital markets. The assets consisted mainly of the Government Pension Fund Global (GPFG), which is managed on behalf of the Ministry of Finance. The Bank also manages its own international reserves. The Government Petroleum Insurance Fund, which the Bank managed on behalf of the Ministry of Petroleum and Energy, was closed at the end of 2010, and the fund assets were transferred to the GPFG9.

Management guidelines and performance reports are published on Norges Bank's website.

### Foreign exchange reserves and claims on the IMF

Norges Bank's international reserves consist of the foreign exchange reserves and claims on the International Monetary Fund (IMF). The foreign exchange reserves accounted for 84% of the Bank's total international reserves at year-end.

The market value of foreign exchange reserves in the accounts, less borrowing in foreign currency, stood at NOK 259bn at the end of 2010. 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 issues guidelines for the management of the foreign exchange reserves and has delegated responsibility to the Governor for issuing supplementary rules in certain areas. The reserves are divided into a money market portfolio and an investment portfolio. In addition, capital is accumulated in a petroleum buffer portfolio for transferring foreign exchange to the GPFG.

The money market portfolio and the petroleum 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. The main strategy for both the investment portfolio and the money

The investment portfolio accounts for the largest portion of the foreign exchange reserves, and amounted to NOK 225bn at end-2010. The objective of management of the investment portfolio is a high long-term return, but it should also be possible to use the portfolio for monetary policy purposes or to promote financial stability if deemed necessary.

An expected level has been set for how far the actual portfolio may deviate from the benchmark portfolio. The expected level for the investment portfolio is set in the form of an overall risk measure (relative volatility). The Bank uses a model based on historical market fluctuations to calculate relative volatility. Under normal market conditions, the difference between the return on the actual portfolio and the return on the benchmark portfolio will generally be small. During the financial crisis, market conditions were far from normal and the differences wider than model-based expectations. The expected level of relative volatility is 1.0 percentage point. In 2010, relative volatility averaged 0.52 percentage point.

In 2010 the Executive Board issued new investment guidelines for the investment portfolio. The financial crisis revealed a need to improve the degree of liquidity. The benchmark index for bonds was restructured to include only government securities and securities issued by international organisations with the highest credit rating, denominated in four currencies (USD, JPY, EUR and GBP). The allocation to equities was kept at 40%, but the least liquid markets were removed and the regional weights were replaced with global market weights. In addition, the maximum limit of 1.5 percentage points for expected relative volatility was replaced with an expected level of 1.0 percentage point.

The return on the investment portfolio for 2010 was 8.7%, measured in terms of the benchmark portfolio's currency basket. Measured in NOK, the return was 6.5%.

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 reserve management.

See Storting Resolution 34 (2010-2011).



The difference is due to appreciation of the Norwegian krone in relation to the benchmark portfolio's currency basket.

In the past 10 years, the annual nominal return has been 4.8%, measured in terms of the benchmark portfolio's currency basket. Net of management costs and adjusted for inflation, the annual return has been 2.8%. In 2010, the investment portfolio outperformed the benchmark portfolio by 1.32 percentage points.

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. The same applies to agreements entitling the holder to achieve such an ownership position. Norges Bank's investments are not strategic, but are purely financial. The Executive Board has issued common guidelines for the exercise of ownership rights for the foreign exchange reserves and the GPFG.

The money market portfolio is invested in short-term money market instruments, primarily secured lending to approved international banks, and government securities with a residual maturity of less than one year. The money market portfolio is to be invested in such a way that it can be used at short notice for monetary policy purposes or to promote financial stability. The money market portfolio is also used to meet Norges Bank's international obligations, including transactions involving the IMF and loans to individual countries.

In addition to issuing new guidelines for the investment portfolio, the Executive Board revised the guidelines for the money market portfolio in 2010. It was decided that the size of the portfolio is to be between the equivalent of SDR 2bn and SDR 3bn. The Executive Board also decided that government securities in the portfolio are to have a residual maturity of less than one year and that the currency composition of the benchmark portfolio is to be 50% in USD and 50% in EUR. It is to be composed of overnight money market indices and Treasury bill indices. In keeping with the new guidelines, assets equivalent to NOK 31bn were transferred from the money market portfolio to the investment portfolio on 31 March 2010.

As with the investment portfolio, limits have been set for how far the actual portfolio may deviate from the benchmark portfolio. The limit on relative volatility has been set at 1.0 percentage point, and the Bank uses a model that takes account of historical market fluctuations. Relative volatility averaged 0.11 percentage point in 2010.

In 2010, the return on the portfolio was 0.70%, measured in terms of the benchmark portfolio's currency basket, while the benchmark portfolio returned 0.63%. A large portion of the positive excess return of 0.07 percentage point reflects a slight difference between the currency composition of the actual portfolio and the benchmark portfolio in 2010 Q1. At end-2010, the money market portfolio stood at NOK 24.3bn (SDR 2.7bn), a decrease of NOK 27.3bn (SDR 3.0bn) from end-2009.

When gross income in foreign currency is transferred from the Norwegian State's Direct Financial Interest in petroleum activities (SDFI) to Norges Bank, the amount is transferred to the petroleum buffer portfolio. In some periods, Norges Bank may also purchase foreign currency directly in the market in order to cover the amount that is to be allocated to the GPFG. The routines for these transactions are described in Chapter 6.

Since all transfers to the GPFG are made in cash, the petroleum buffer portfolio is invested exclusively in money market instruments. At end-2010, the size of the portfolio was NOK 15.5bn. Transfers from the petroleum buffer portfolio to the GPFG are normally made each month with the exception of December, when no transfers are made. As a result, the portfolio will normally be larger at yearend than the average value at other month-ends (after transfers). In 2010, the return on the petroleum buffer portfolio was negative 2.34% in NOK terms.

Claims on the IMF consist of Special Drawing Rights (SDRs), the reserve position and Norway's bilateral loans to the IMF. Norges Bank has been allocated SDR 1 563m by the IMF. Norges Bank has entered into an agreement with the IMF on voluntary purchase and sale of SDRs, bringing actual SDR holdings to between SDR 782m and SDR 2 345m. At end-2010, SDR holdings amounted to 1 594m, equivalent to NOK 14 461m (exchange rate at 31 December 2010). The reserve position in the IMF amounted to NOK 3 546m. Norway has concluded two loan agreements with the IMF. Norges Bank has entered into an agreement entitling the IMF to draw up to SDR 3 000m to fund its general loan schemes, while the Ministry of Finance has agreed to make up to SDR 300m available for the IMF's loan schemes for low-income countries. At end-2010, the IMF had drawn a total of SDR 296m under these agreements.

### **Government Pension Fund Global**

Norges Bank is responsible for the operational management of the GPFG on behalf of the Ministry of Finance pursuant to the mandate for the management of the Government Pension Fund Global.

At end-2010, the market value of the GPFG was NOK 3 077bn before deduction of Norges Bank's management fee. In 2010, the Ministry of Finance transferred a total of NOK 182bn to the Fund.

The Ministry of Finance has established a strategic benchmark portfolio of equities and fixed income instruments. The benchmark portfolio consists of equity indices for 46 countries and fixed income indices in 11 currencies. The benchmark portfolio reflects the Ministry's investment strategy for the GPFG and is an important basis for managing the risk associated with the operational management of the GPFG and for evaluating Norges Bank's management performance. The Ministry of Finance has set limits for how far the actual portfolio may deviate from the benchmark portfolio.

In 2010, the GPFG achieved a return of 9.62%, measured in terms of the benchmark portfolio's currency basket. It is this measure of return that provides the best indication of the international purchasing power of the GPFG. In NOK terms, the return on the GPFG was 9.49%.

Measured in terms of the currency basket, the return on the equity portfolio was 13.34%, while the fixed income portfolio returned 4.11%.

Since 1998, the annual nominal return has been 5.04%, measured in terms of the currency basket. Net of management costs and adjusted for inflation, the annual return has been 3.05%.

The return in 2010 was 1.06 percentage points higher than the return on the benchmark portfolio. The fixed income portfolio outperformed the benchmark by 0.63 percentage point and the equity portfolio by 0.42 percentage point.

For a more detailed presentation of investment management in 2010, see the annual report of the GPFG.

### **Government Petroleum Insurance Fund**

The Government Petroleum Insurance Fund was closed at the end of 2010, and its capital was transferred to the GPFG<sup>10</sup>. When this capital was transferred, on 31 December 2010, its market value was NOK 20bn.

In 2010, the return was 2.93%, measured in terms of the benchmark portfolio's currency basket. In NOK terms, the return was negative 0.12%. The return was 0.22 percentage point higher than the return on the benchmark portfolio.

See Storting Resolution 34 (2010-2011). The Government Petroleum Insurance Fund was owned by the Ministry of Petroleum and Energy, and its purpose was to support the government's role as self-insurer of ownership interests in petroleum activities. The needs that led to the Fund being established are no longer present, especially given the size of the GPFG

# International cooperation

# Loans and support in connection with the international financial crisis

### Loan agreements with the International **Monetary Fund (IMF)**

On the initiative of the G20 countries, at its meeting of 25 April 2009 the International Monetary and Financial Committee (IMFC) submitted a number of proposals for strengthening the IMF's lending capacity and the financial safety net for member countries of the IMF. In the short term, the most rapid means of increasing the IMF's financial resources was that the IMF received bilateral loans from member countries. The aim was for the bilateral loans to gradually be replaced by an enlargement of the multilateral New Arrangements to Borrow (NAB). With the consent of the Ministry of Finance, a loan agreement between Norges Bank and the IMF was signed on 26 June 2009. The agreement is in force for five years and authorised the IMF to draw up to SDR 3bn to fund its general lending facilities. As of 10 January 2011 the IMF had drawn on the facility ten times, for a total amount of SDR 306m.

It was assumed that Norges Bank's bilateral loan to the IMF would be transferred to an enlarged NAB, once it goes into effect. Subsequently it has emerged that the IMF may experience liquidity problems, if funds from the bilateral agreements are transferred to the NAB in the absence of transitional arrangements. In consultation with the Ministry of Finance, Norges Bank has conveyed to the IMF its willingness to continue the bilateral loan agreement with the IMF for a period after the new NAB goes into effect. The condition is that Norges Bank's loan may be used only to fund IMF loans granted prior to the date the NAB goes into effect. Furthermore, the total amount drawn under the bilateral loan agreement and under the NAB may not exceed Norway's commitments under the NAB.

Norway is committed to contributing SDR 3 870.94m to the new NAB (see Proposition No. 58 (2010-2011) to the Storting). Norges Bank will continue to administer Norwegian participation and will provide foreign exchange reserves in accordance with Section 25 of the Norges Bank Act.

In June 2010 the Ministry of Finance concluded an agreement with the IMF to provide a total of SDR 300m in loan resources to the IMF's low-income country (LIC) facilities. In a letter dated 15 July 2010, the Ministry of Finance requested pursuant to Section 25 of the Norges Bank Act that Norges Bank meet Norway's commitments under the agreement by making funds available though transfers of the foreign exchange reserves. Thus, Norges Bank is responsible for the practical implementation and follow-up of the agreement.

### Loan agreement with Seðlabanki Íslands

On 19 November 2008, the IMF authorised a loan to Iceland of USD 2bn under a 2-year stand-by arrangement. The programme was based on additional external funding to the IMF totalling USD 3bn. Loan agreements between Iceland and the Nordic lenders, including Norges Bank, were signed on 1 July 2009. The Ministry of Finance approved a loan from Norges Bank to the Icelandic central bank and provided a government guarantee for the loan in its letter of 22 June 2009. The Icelandic government has guaranteed repayment of the loan to Norges Bank. The loan agreement authorises Seðlabanki Íslands to draw up to EUR 480m. As of 31 December 2010 Seðlabanki Íslands had drawn EUR 240m.

Under the terms of the loan agreement, a tranche shall be disbursed after each review of Iceland's stabilisation programme by the IMF Executive Board, but before end-2010. The review of Iceland's stabilisation programme by the IMF Executive Board has been postponed. In view of this, towards end-2010, Iceland requested an extension of the disbursement period for the Nordic loans to end-2011. The Nordic lenders, including Norges Bank, in consultation with the Ministry of Finance, have stated that they are in favour of such an extension.



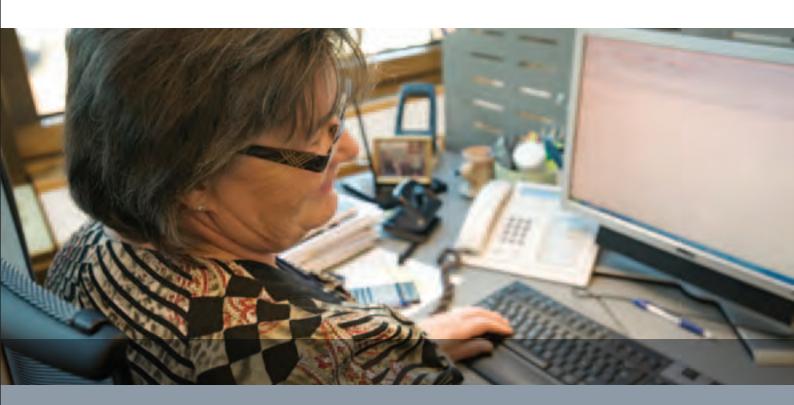
# Regular contact and cooperation with other central banks and international organisations

Norges Bank is a co-owner 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 discussion forum for its 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 the corresponding obligations ensuing from membership of 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. The Government's annual Finansmarknadsmeldinga (Financial Market Report) to the Storting provides a detailed account of IMF activities.

The highest decision-making body of the IMF is the Board of Governors. In 2010 Norway was represented by Governor of Norges Bank Svein Gjedrem and the Secretary General of the Ministry of Finance, Tore Eriksen, was his alternate. When Øystein Olsen assumed the position of governor on 1 January 2011, he became at the same time the Norwegian representative on the Board of Governors. The Board normally meets once a year at the Annual Meeting of the IMF. Apart from 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 a single constituency with a joint representative on the board. The office of board member is rotated among the Nordic countries. Denmark holds this position in the period 2010–2012.

The countries in the Nordic-Baltic constituency primarily coordinate their views on important IMF matters



through the Nordic-Baltic Monetary and Financial Com-The Bank also has regular contact with the European

mittee (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. Coordination between the countries is aimed at arriving at a common stance, which the board member representing the group then presents to the IMF Executive Board. Norwegian policy on matters to be brought before the IMF Executive Board is set by the Ministry of Finance on the advice of Norges Bank. The division of responsibility between the Ministry and the Bank is set out in a written joint understanding.

The International Monetary and Financial Committee (IMFC) has a key function as an advisory body to the Executive Board. The IMFC meets twice a year. The Committee provides policy guidelines for the activities of the IMF. The IMFC's members are ministers or central bank governors who represent either a country or a constituency composed of several countries. Finland represented the constituency at the IMFC meeting in April, while Minister of Finance Sigbjørn Johnsen represented the constituency in October 2010.

An important part of the activities of the IMF involves monitoring economic developments in member countries, with particular emphasis on economic conditions and financial stability. The main emphasis is on bilateral surveillance through Article IV consultations, which take place annually for most countries. Norway holds such consultations every two years unless special circumstances call for annual consultations. In the intervening years, the IMF conducts a simplified consultation, and no written report is submitted to the Executive Board of the IMF. The IMF conducted a simplified consultation with Norway in 2010. The conclusions were published on 16 November 2010.

Norges Bank cooperates extensively with the other Nordic central banks. The annual meeting of Nordic central banks in 2010 was organised by Norges Bank. 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.

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

# Technical assistance to the Reserve Bank of Malawi

For many years, Norges Bank has provided various kinds of technical assistance to central banks in developing countries. In order to promote more efficient and performanceoriented technical assistance to such central banks, since 2006 Norges Bank has agreed to assume responsibility for the IMF's technical assistance to the Reserve Bank of Malawi. 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. It was agreed early in 2010 that the agreement will be extended with somewhat reduced scope until the end of 2011. After that the work will be concluded.

Norges Bank has placed up to 2 FTEs annually at the disposal of the Reserve Bank of Malawi, consisting of 1 FTE in the form of a long-term assignment as adviser to the Reserve Bank and up to 1 FTE in the form of shortterm assignments. Short-term assignments cover a broad range of central bank tasks. In 2010, a total of four shortterm visits of approximately two weeks each were completed within a broad range of external and internal central bank activities. The IMF has conducted an evaluation of the technical assistance to the Reserve Bank of Malawi during the period from October 2006 to December 2008. Norges Bank's technical assistance was assessed in general as performance-oriented and successful. A new evaluation in September 2010 reached the same conclusion. The cooperation with the Reserve Bank of Malawi is documented in detail in Norges Bank's Occasional Papers No. 40, Central Bank Modernization. In October 2009, Executive Director Asbjørn Fidjestøl took over the post of Monetary and Central Bank Operations Advisor.



# Other functions

# Foreign exchange transactions

In 2010, Norges Bank's commercial foreign exchange transactions mainly comprised foreign exchange purchases to build up the Government Pension Fund Global (GPFG). In addition, Norges Bank executed some transactions on behalf of the Government Petroleum Insurance Fund.

The GPFG is built up through transfer 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 the SDFI and calculating Norges Bank's foreign exchange purchases was most recently changed in 2004. The Ministry of Finance stipulates the monthly allocation to the GPFG. Any foreign exchange required by Norges Bank in excess of the transfer from the SDFI is purchased in the foreign exchange market. Daily foreign exchange purchases are then fixed for a month at a time and are announced on the final working day of the previous month. The actual transfers may differ from the estimates. Adjustments are made for any differences when foreign exchange purchases are made in the following month. As a result, Norges Bank's foreign exchange purchases may vary somewhat from month to month.

Capital is not normally transferred to the GPFG in December and foreign exchange is therefore not normally purchased by Norges Bank in this month. Foreign exchange income from the SDFI may nevertheless be transferred to Norges Bank in order to minimise the Government's exchange costs.

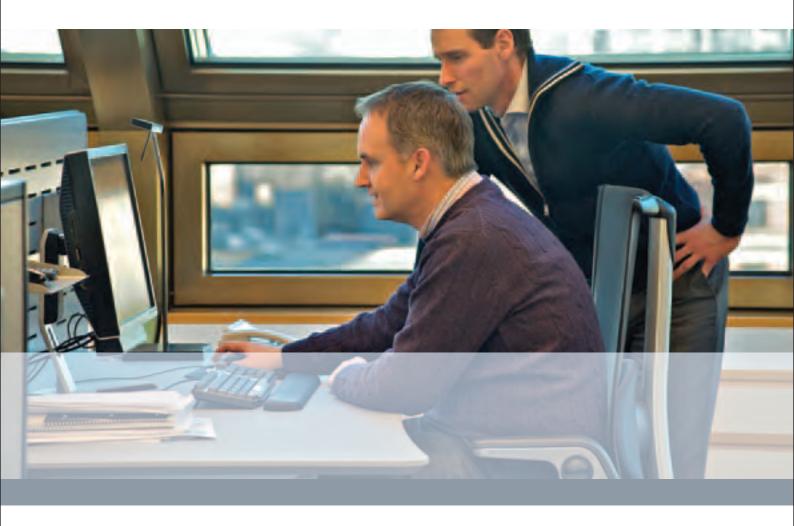
Norges Bank purchased NOK 43.5bn in the foreign exchange market in 2010 (see Table 6.1). Transfers from the SDFI amounted to NOK 129.3bn.

### Government debt 2010

According to an agreement between the Ministry of Finance and Norges Bank, the Bank shall provide services as adviser, facilitator and payment agent in connection with raising and managing domestic government loans.

Table 6.1: Norges Bank's daily foreign exchange purchases for the GPFG in 2010.

Month	Daily amounts (millions of NOK)	Total per month (millions of NOK)
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	135	2 970
September	470	10 340
October	600	12 600
November	800	17 600
December	0	0
2010		43 510



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 to the Ministry of Finance.

The Government's schedule for the issue of short- and long-term securities in 2010 was published in an auction calendar in December 2009. Seven auctions of government bonds and 11 auctions of short-term government paper (Treasury bills) were held in 2010. Ad hoc auctions were not held. The total volume issued, excluding the Government's own purchases in the primary market, amounted to NOK 24bn in government bonds and NOK 45bn in Treasury bills.

The 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 2010. No government bonds matured in 2010.

According to the issue programme for short government paper, new Treasury bills are issued on IMM dates11 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, averaged 2.39 for government bonds and 2.83 for Treasury bills.

Norges Bank has entered into agreements with six primary dealers, who are under the obligation to furnish binding bid and offer prices for agreed minimum amounts of government bonds and Treasury bills on Oslo Stock Exchange. In return for furnishing these binding bid and offer prices, the primary dealers may borrow government paper for a limited period. In 2010, lending limits for the shortest bonds were NOK 6bn and between NOK 4 and



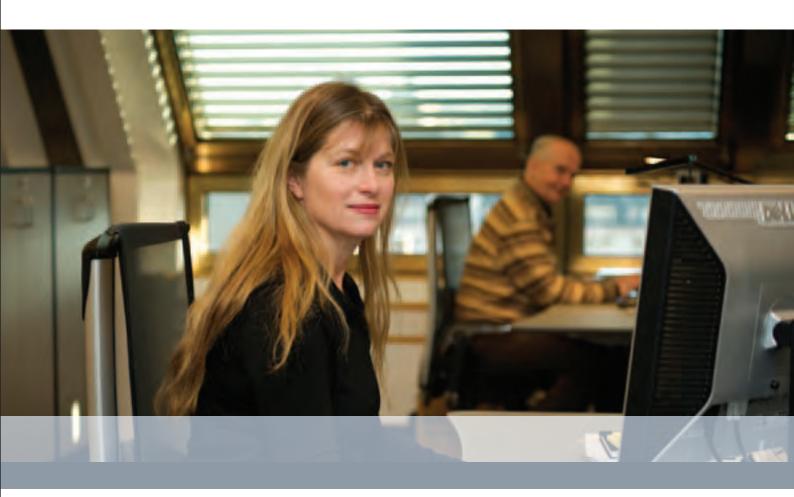
International Monetary Market dates: the third Wednesday in March, June, September and

5bn for other bonds. For Treasury bills, the lending limits were NOK 6bn for each loan.

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. 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 counterparties. Norges Bank performs 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-2010, the average fixed-rate period for government debt was 3.6 years. If existing interest rate swaps are taken into account, the fixed-rate period was 1.3 years 12

Total government domestic debt securities registered in the Norwegian Central Securities Depository (VPS) at end-2010 amounted to NOK 516bn, calculated at face value. Of this, the volume of Treasury bills used in the swap arrangement amounted to NOK 217bn. Foreign investors hold approximately 48%, while life insurance companies and private pension funds hold approximately 9% of total government debt securities. For government bonds, the proportion of holdings is 65% for foreign investors and 12% for life insurance companies and private pension funds. Government domestic debt securities came to approximately 21 % of GDP in 2010.

The fixed-rate period does not apply to the outstanding volume of Treasury bills issued under the swap arrangement



### Research in 2010

Research at Norges Bank contributes to the basis for the Bank's decisions. Research at the Bank focuses on the fields of monetary policy and financial stability. It is the Bank's aim that research should have a firm basis in the international and Norwegian research community and maintain the standard required for publication in international or national journals where researchers' articles are reviewed by their peers in the field. In 2010, 11 articles were accepted for publication in peer-reviewed journals, including the highly respected journal The Journal of Finance. Due to the length of time often involved in publication, the list of published articles includes research carried out several years ago. Current research activity is documented in the Bank's Working Papers series and 31 papers were published in this series in 2010. Norges Bank's Working Papers were downloaded 2 550 times from the Internet portal Research Papers in Economics (RepEc).

### Participation in the research community

Norges Bank hosted a number of research seminars and conferences in 2010. In June, Norges Bank organised a workshop on developments in econometric modelling in the fields of macroeconomics and finance. The seventh annual monetary policy conference, entitled "Simple rules as guidelines for policy decisions", was also held in June. The purpose of the conference was to bring economists together to discuss how monetary policy decisions can be made more robust and to what extent simple monetary policy rules can guide decision-making. In September, the Bank hosted a conference on government intervention and moral hazard in the financial sector. The theme of the conference was whether the large-scale interventions in the financial sector that had recently taken place in a number of industrialised countries could contribute to moral hazard in the financial sector and thereby lay the foundations for future financial crises. Towards the end of the year, a symposium was held to mark the end of Svein Gjedrem's tenure as governor of Norges Bank. The symposium was entitled "What is a useful central bank?", and Norges Bank's responsibilities were discussed both against the background of the central bank's historical origins and

in the light of modern theory and practice. A complete list of conferences and conference papers are available on the conference pages of the Bank's website.

A number of the Bank's research projects have been presented at Norwegian and international conferences and seminars. As part of an international research community, Norges Bank has extensive contact with researchers at universities and other central banks. Norges Bank hosts research seminars with guest lecturers who present their work and take part in seminars and workshops. Norges Bank arranged 38 seminars in 2010 where invited guest lecturers presented their research and took part in meetings and discussions with the Bank's staff.

A list of published articles, working documents, seminars and conferences, and links to researchers' websites is available on the research pages of the Bank's website.

### Support for economic research

Norges Bank supports economic research in a number of ways. The endowed chair established by Norges Bank at Oslo University fosters greater awareness about macroeconomics and monetary policy issues. Norges Bank's Economic Research Fund provides financial support for researchers studying abroad or attending international conferences to present their own research work and for research conferences in Norway.



# Norges Bank's bicentenary project

In connection with Norges Bank's bicentenary in 2016, the Executive Board decided in December 2007 to launch a major research project in two parts, to be published in book form. "Norges Bank's bicentenary project 1816-2016" will be a joint project with contributions from the Norwegian and international research community. The steering committee comprises the international experts Professor Michael Bordo of Rutger's University, New Jersey, Professor Marc Flandreau of the Graduate Institute in Geneva, Deputy Governor of Norges Bank Jan F. Qvigstad and Director Øyvind Eitrheim.

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 the centenary year. The project will also serve to highlight the role of Norges Bank as a public institution from a historical perspective. The project is progressing as planned and on budget.

The three books have the following working titles:

- The History of Norges Bank 1816–2016
- The Monetary History of Norway 1816–2016
- Topics in Central Banking

The books are also intended to meet the required standards of an internationally recognised academic publisher. The first two books will be published in both Norwegian and English, the third book in English only. In 2010, the Bank appointed Professor Einar Lie, University of Oslo and Professor Jan Tore Klovland, Norwegian School of Economics and Business Administration (in collaboration with Øyvind Eitrheim) as project coordinators for the first two

In 2010, researchers at the Norwegian School of Economics and Business Administration, the University of Oslo and the Norwegian School of Management have conducted research into the history of Norges Bank in Oslo during WWII, 1940-45, the Bank's role in financial crisis situations and the Bank's governance structure during different periods. Norges Bank has also provided funding for a three-year doctoral project on the first three decades of the history of Norges Bank in connection with the Norwegian Constitution bicentennial project. In 2010 international cooperation was strengthened by the funding of a one-year post-doctoral scholarship at the Graduate Institute in Geneva and an international conference on "The sub-prime crisis and how it changed the past", to be held in Geneva on 3–4 February 2011. In June, Norges Bank arranged a week-long seminar on economic history for young researchers in collaboration with the University of Venice and the Graduate Institute in Geneva.

Work continued in 2010 on the online documentation of Norges Bank's history in the form of a timeline showing developments in Norges Bank's organisation and governance structure, means of payment (notes and coins), price and financial stability and investment management. A first version of the timeline will be published on the Bank's website in 2011. A page on the Bank's website has been established for Norges Bank's bicentenary project 1816-2016. Information on conferences and published research papers will also be made available here. Four such papers were published in 2010.

# Appendix

## Governing bodies, management and organisation

### The Executive Board

Øvstein Olsen, Chair.

Appointed Governor of Norges Bank 1 January 2011 for a term of up to six years.

Jan F. Qvigstad, Deputy Chair.

Appointed Deputy Governor of Norges Bank 1 April 2008 for a term of up to six years.

**Ida Helliesen** 

(Appointed 1 January 2010 – 31 December 2013)

Liselott Kilaas

(Reappointed 1 January 2008 – 31 December 2011)

Brit K. Rugland

Appointed 1 January 2004 – 31 December 2005 Reappointed 1 January 2006 – 31 December 2009 and 1 January 2010 – 31 December 2013

Asbjørn Rødseth

(Reappointed 1 January 2008 – 31 December 2011).

Eirik Wærness

(Appointed 1 January 2010 – 31 January 2013)

**Alternates:** 

Gøril Bjerkan

(Appointed 1 January 2010 – 31 December 2013)

Egil Matsen

(Appointed 1 January 2010 – 31 December 2013)

**Employee representatives:** 

Jan Erik Martinsen

(Appointed 1 January 2001 - )

Gøril Bjerkhol Havro

(Appointed 1 January 2011 – 31 December 2012)

Petter Nordal (Alternate)

Jens Olav Sporastøyl (Alternate)

**Supervisory Council** 

Reidar Sandal, 2010-2013 (Chair 2010-2011) Alternate: Ola Røtvei, 2010-2013 (reelected)

Frank Sve, 2010-2013

(Deputy Chair 2010-2011, reelected) Alternate: Tone T. Johansen, 2010-2013 Terje Ohnstad, 2008–2011 (reelected)

Alternate: Anne Grethe Kvernrød, 2008-2011

Eva Karin Gråberg, 2008–2011 Alternate: Jan Elvheim, 2008–2011

Tom Thoresen, 2008–2011

Alternate: Hans Kolstad, 2008-2011 Runbjørg Bremset Hansen, 2008-2011 Alternate: Camilla Bakken Øvald, 2008-2011

Kåre Harila, 2008-2011

Alternate: Liv Sandven, 2008-2011 Tormod Andreassen, 2008-2011 Alternate: André Støylen, 2010-2011

Gunvor Ulstein, 2008-2011

Alternate: Beate Bø Nilsen, 2008-2011

Morten Lund, 2010-2011

Alternate: Torunn Hovde Kaasa, 2008-2011

Synnøve Søndergaard, 2010-2013 Alternate: **Britt Hildeng** 2010-2013

Reidar Åsgård, 2010-2013

Alternate: Kari-Anne Opsal, 2010-2013

Erland Vestli, 2010-2013

Alternate: Jan Blomseth, 2010-2013

**Marianne Lie**, 2010-2013

Alternate: Lars Gjedebo, 2010-2013

Monica Salthella, 2010-2013

Alternate: Lars Haakon Søraas, 2010-2013

Office of the Supervisory Council

Svenn Erik Forsstrøm, Director



### **Executive management**

Øystein Olsen, Governor Jan F. Qvigstad, Deputy Governor

### **Norges Bank Monetary Policy**

Jon Nicolaisen, Executive Director Amund Holmsen, Deputy Executive Director

### **Department for Market Operations and Analysis**

Kristine Falkgård, Director

**Economics Department** 

Marianne Sturød, Director

**International Department** 

Jan Reinert Kallum, Director (acting)

**Monetary Policy Department** 

Anne Berit Christiansen, Director

**Research Department** 

Øistein Røisland, Director

Staff

Ilse Bache, Director

### **Norges Bank Financial Stability**

Kristin Gulbrandsen, Executive Director Birger Vikøren, Deputy Executive Director

### **Regulatory Policy**

Arild J. Lund, Director

**Payment Systems** 

Knut Sandal, Director

**Liquidity Surveillance** 

Sindre Weme, Director

Macroprudential

Ingvild Svendsen, Director

**Research Department** 

Farooq Akram, Director

**Interbank Settlement Department** 

Kjetil Watne, Acting Director

Cashier's Department

Trond Eklund, Director

**Staff** 

Ragnhild L. Solberg, Director

### **Norges Bank Administration**

Jannecke Ebbesen. Executive Director

### **Communications Department**

Siv Meisingseth, Director of Communications

### **Economy Department**

Per Arne Eriksen, Director

**Facility services** 

Marit Kristine Liverud, Director

**General Secretariat** 

Bjarne Gulbrandsen, Director

HR

Jane K. Haugland, Director

Ola Jan Bjerke, Director (acting)

**Legal Department** 

Marius Ryel, Executive Director

**Security Department** 

Arne Haugen, Head of Security

### **Internal Audit**

Ingunn Valvatne, Head of Internal Audit

### **Norges Bank Investment Management**

Yngve Slyngstad, Chief Executive Officer

Trond Grande, Chief Risk Officer

Jan Thomsen, Chief Compliance Officer Dag Dyrdal, Chief Strategic Relations Officer Bengt O. Enge, Chief Investment Officer Jessica Irschick, Chief Treasurer Mark Clemens, Chief Administrative Officer Age Bakker, Chief Operating Officer

