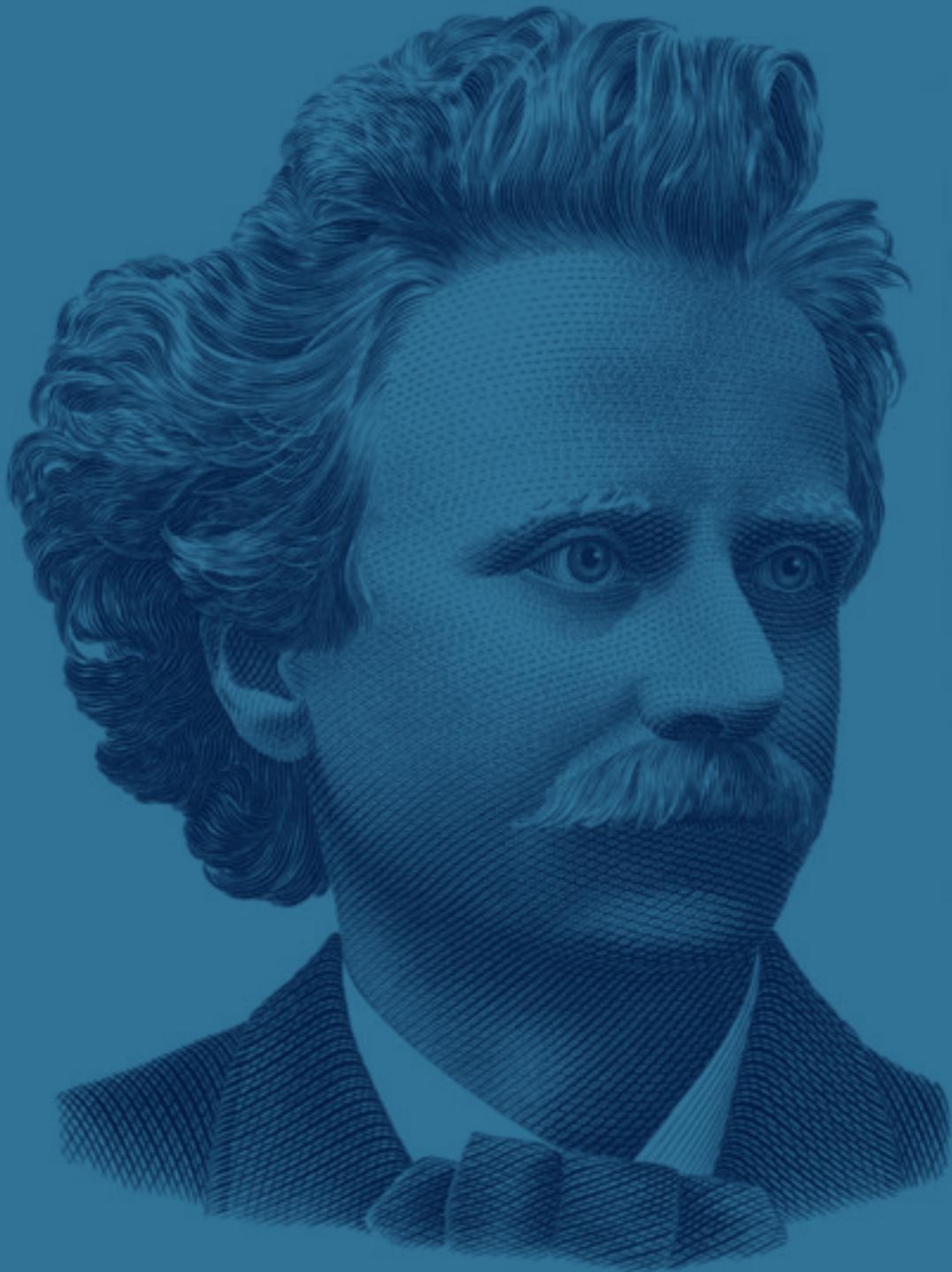


2006

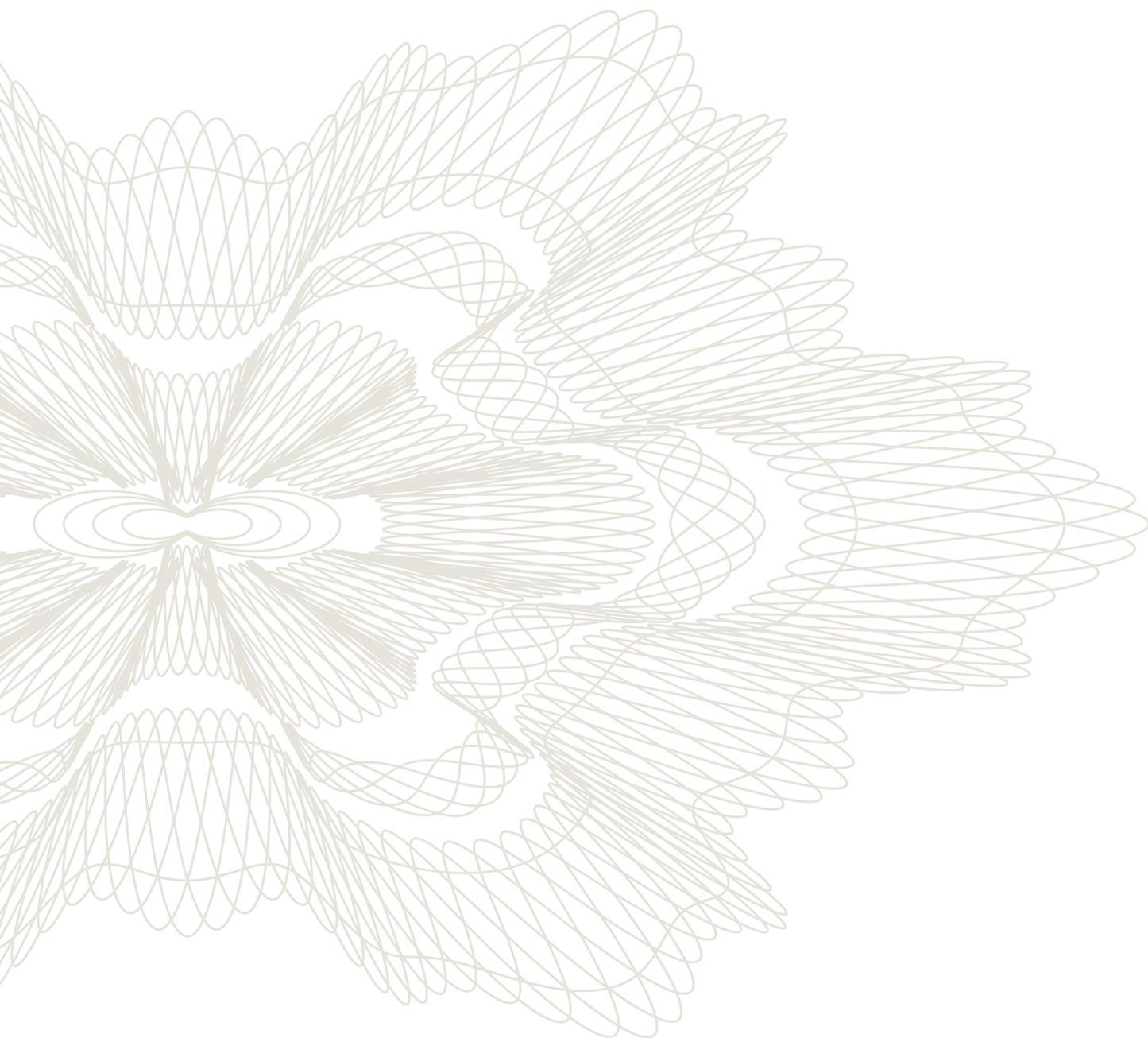
Annual Report 2006



NORGES BANK

2006

Annual Report 2006



Norges Bank (Central Bank of Norway)

Oslo, Norway 2007

Head office: Bankplassen 2
Postal address: P.O. Box 1179 Sentrum, N-0107 Oslo, Norway
Telephone: +47 22 31 60 00
Telefax: +47 22 41 31 05
Registration no. 0629/7
E-mail: central.bank@norges-bank.no
Internet: <http://www.norges-bank.no>

Governor: Svein Gjedrem
Deputy Governor: Jarle Berge

This report was set and printed at Grefslie Trykkeri, Mysen.
The report was bound at Lundebø & Co. Bokbinderi as
The text is set in 10 point Times and printed in offset on Galerie One Silk 115 gram paper.
The cover is printed on Rives Tradition 250 gram paper.
Design, setting and printing: Grefslie Trykkeri
Photo: Arild Yttri

The illustrations show art from Norges Bank's collection.

Cover illustration: Sverre Morken: Edvard Grieg. Graphic art.

Page 5: Trine Lindheim: Nattseiler II (Night-sailor II). Woodcut, 1994. © Trine Lindheim / BONO 2007

Page 9: Håkon Bleken: Fuglen (Bird). Drawing, 1967. © Håkon Bleken / BONO 2007

Page 13: Ludvig Eikaas: Dyr i kamp (Animals fighting). Graphic art, 1956. © Ludvig Eikaas / BONO 2007

Page 15: Sigmund Reite: Dei dansar med attletne auge (Dancing with their eyes closed). Graphic art, 1978. © Sigmund Reite / BONO 2007

Page 35: Inger Sitter: Granitt (Granite). Graphic art, 1956. © Inger Sitter / BONO 2007

Page 37: Anne Katrine Dolven: Pianospill (Playing the piano). Graphic art, 1984. © Anne Katrine Dolven / BONO 2007

Page 41: Erling Enger: Blått landskapVI (Blue landscape VI). Water colour, 1965. © Erling Enger / BONO 2007

Page 56: Dang van Ty: Sint and (Angry duck). Woodcut, 1984 © Dang van Ty / BONO 2007

Page 56: Dang van Ty: Hane (Cock). Woodcut, 1984 © Dang van Ty / BONO 2007

Page 61: Espolin Johnson: Fra Røst (From Røst). Graphic art. © Espolin Johnson / BONO 2007

Page 66: Frans Widerberg: Budbringer (Messenger). Graphic art, 1974. © Frans Widerberg / BONO 2007

Page 70: Borghild Rud: Farmor (Grandmother). Drawing. © Borghild Rud

Page 73: Harald Kihle: Hestehandel (Horse-trading). Graphic art. © Harald Kihle / BONO 2007

Page 77: Jan Roar Flaa: Utsikt Toscana (Tuscan view). Drypoint, 1990. © Jan Roar Flaa

Page 80: Erik Werenskiold: Opus 30. Hånd i hånd (Hand in hand). 1913. Graphic art. © Erik Werenskiold / BONO 2007

Page 84: Paul Rene Gauguin: Spansk pike (Spanish girl). Graphic art, 1956. © Paul Rene Gauguin / BONO 2007

Page 85: Harald Kihle: Johan's. Graphic art. © Harald Kihle / BONO 2007

Table of Contents

Part I	Report of the Executive Board 2006	6
	Monetary policy	6
	Financial stability	8
	Investment management	9
	Organisation and personnel	11
	Use of resources and restructuring	11
	Gender equality	12
	Health, environment and safety	12
	Internal control and risk management	12
	Ethical rules	13
	Profit and loss account and balance sheet	13
	Distribution of profit	14
Part II	Financial statements for 2006	15
	Profit and loss account	17
	Balance sheet	18
	Notes	20
	Auditors' report for 2006	32
	Resolution of the Supervisory Council concerning the financial statements for 2006 ..	33
	The Supervisory Council's statement on the minutes of meetings of the Executive Board and its supervision of Norges Bank	34
Part III	Norges Bank's activities	35
Chapter 1	Monetary Policy	36
	Flexible inflation targeting	36
	Monetary policy in 2006	41
	Developments in the period to 2006	41
	Monetary policy in 2006	43
	Monetary policy meeting on 25 January	43
	Monetary policy meeting on 16 March and <i>Inflation Report 1/06</i>	43
	Monetary policy meeting on 26 April	44
	Monetary policy meeting on 31 May	44
	Monetary policy meeting on 29 June and <i>Inflation Report 2/06</i>	44
	Monetary policy meeting on 16 August	45
	Monetary policy meeting on 27 September	45
	Monetary policy meeting on 1 November and <i>Inflation Report 3/06</i>	45
	Monetary policy meeting on 13 December	46
	The economic situation at the end of 2006	46
	Assessment – use of instruments	49
	Market expectations concerning the key policy rate	49
	Was interest rate setting predictable in 2006?	50
	Other cross-checks	51
	Evaluation – performance over time	53
	Evaluation of inflation and the output gap over time	53
	Inflation expectations	55
	Liquidity management in the money market	55
Chapter 2	Financial stability	57
	Responsibility for the stability of the financial system	57
	Financial markets and financial institutions	57
	Surveillance of financial stability	57
	Financial stability in 2006	58
	Satisfactory outlook for financial stability in the short term	58
	Bank earnings remain solid	59
	Household debt continues to rise	59
	Enterprises' financial position is solid	60
	Global growth remains buoyant, but vulnerabilities are on the rise	60
	Financial market regulation	60
	Capital adequacy rules	61

	Liquidity requirements	61
	Financial markets	61
	Asset management in insurance companies and pension funds	61
	Collateralised bonds	62
	Payment systems	62
	Norges Bank's tasks and responsibilities	62
	Norges Bank's settlement system	62
	Risk in payment systems	63
	Authorisation and overnight supervision of interbank systems	63
	Developments in the use of various payment instruments	64
	International payment systems	65
	Banking services for the government	65
	Notes and coins	66
	Norges Bank's responsibility	66
	Banknotes and coins in circulation	67
	Commemorative coins	67
	Counterfeit money	67
	Organisation of cash handling	67
	Costs	68
	Contingency arrangements in the financial sector	69
	Financial markets and financial institutions	69
	Financial infrastructure	69
Chapter 3	Investment management	71
	Foreign exchange reserves and claims on the IMF	71
	Government Pension Fund – Global	72
	Government Petroleum Insurance Fund	72
Chapter 4	Research and international cooperation	73
	Research in 2006	73
	Participation in the research community	74
	Historical monetary statistics	74
	Support for economic research	75
	International cooperation	76
	Other central banks	76
	Technical assistance to the Reserve Bank of Malawi	76
	International organisations	76
Chapter 5	Other responsibilities	78
	Production of statistics	78
	Transfer of statistics production to Statistics Norway	78
	Financial and securities statistics	78
	Financial sector accounts (FINSE)	78
	International reporting and cooperation	78
	Foreign exchange transactions	78
	Services relating to government debt	79
	Communications activities	79
Chapter 6	Organisation, management and use of resources	81
	Core responsibilities	81
	Developments in the use of resources	81
	Operational areas as core units	82
	High degree of delegation	82
	Management and follow-up	83
	Fundamental values	83
	Distribution of costs by main function	83
	Working conditions	84
Appendices	A. Tables	86
	B. Norges Bank's management and organisation	93

1

REPORT OF THE EXECUTIVE BOARD 2006



Report of the Executive Board 2006

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

The Executive Board seeks to realise the Bank's objectives and values with particular emphasis on achieving price stability, financial stability and prudent and effective asset management that generates added value. The Executive Board continued to focus on organisational development and on the Bank's overall utilisation of resources.

Internal control and risk management are important. In order to strengthen the appurtenant procedures, the Executive Board decided in autumn 2006 to establish an audit committee and organise a separate internal audit unit accountable to the Executive Board. For details, see the section "Internal control and risk management".

The Executive Board held 17 meetings in 2006 and dealt with 117 matters. In addition to ordinary Executive Board meetings, a number of seminars focusing on the Bank's core activities were held. During a study visit to New York, the Executive Board had discussions with financial institutions that perform tasks for Norges Bank Investment Management.

Monetary policy

Viewed over time, inflation has been low and stable and remained fairly close to, but somewhat below, 2.5%. In recent years, the Norwegian economy has been influenced by a number of favourable supply-side disturbances, including strong productivity growth, an ample supply of foreign labour and a slower rise in import prices. This has been reflected in stronger-than-expected growth in the Norwegian economy, coupled with lower-than-expected inflation. As a result, inflation also takes longer than expected to pick up.

The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of approximately 2.5% over time. Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment. Monetary policy operates with a lag. The interest rate is set with a view to stabilising inflation at the target in the medium term. The relevant horizon will depend on the disturbances to which the economy is exposed and how they affect the path for inflation and the real economy ahead.

The Executive Board discusses interest rate setting at the monetary policy meetings, which are normally held every six weeks. The dates of monetary policy meetings are published in advance. The bulk of the material presented to the Executive Board is published. The Executive Board's decision is published at a fixed, predetermined time shortly after the monetary policy meeting. A detailed account of the basis for the interest rate decision and the Executive Board's assessments are included in the press release on the interest rate decision. At the press conference, the central bank governor or deputy governor explains the Executive Board's decision and the points that were given most weight.

Three times a year, following every third monetary policy meeting, Norges Bank publishes the *Monetary Policy Report* (previously the *Inflation Report*). The analyses in the *Report* are based on the Bank's own interest rate forecast. In the view of the Executive Board, the interest rate path provides a reasonable balance between the objectives of monetary policy. At the strategy meeting two weeks before the monetary policy meeting, the Executive Board is presented with and discusses the main points of the *Report*, and it adopts a monetary policy strategy the day the *Report* is published. The strategy applies in the period up to the next *Report*. The analyses and the monetary policy strategy, together with an ongoing assessment of the price and cost outlook and the situation in the money and foreign exchange markets, provide a basis for the interest rate decisions.

Monetary policy is oriented towards providing a reasonable balance between the objective of bringing inflation up to target and the objective of stabilising developments in output and employment. When inflation fell and approached zero while there was spare capacity in the Norwegian economy, the policy rate was reduced by 5.25 percentage points from December 2002 to March 2004, primarily with a view to preventing inflation expectations from becoming entrenched well below target. It was indicated that the interest rate would remain low until there were clear indications that inflation was beginning to rise. Since the early summer of 2005, monetary policy has been oriented towards gradually bringing the key policy rate up towards a more normal level.

Low interest rates, coupled with strong and sustained growth in the global economy and high oil prices, have contributed to solid growth in the Norwegian economy. At the beginning of 2006, the Norwegian economy entered its third year of economic expansion. Capacity utilisation was somewhat above its normal level, while inflation was low. In 2005, consumer prices inflation had risen 1½% compared with the previous year. The rise in prices adjusted for tax changes and excluding energy products was 1%. A gradual interest rate increase – in small, not too frequent steps – towards a more normal level was expected to provide a reasonable balance between the objective of bringing inflation up towards the target and the objective of stabilising developments in output and employment. Inflation

adjusted for tax changes and excluding energy products was expected to be lower than the inflation target again in 2006.

At the monetary policy meeting in January 2006, it was pointed out that there was a high level of activity in some sectors of the economy. At the same time, both imported and domestic inflation had been lower than expected. The Executive Board concluded that the upside and downside risks had become somewhat more pronounced, but on balance this did not provide grounds for changing the assessment of the outlook for the Norwegian economy. The interest rate was left unchanged.

Inflation Report 1/06 was presented in March. The analyses implied that the interest rate should be brought back towards a more normal level. The Executive Board pointed out that the high rate of economic growth implied that price and cost inflation would edge up after a period. Capacity utilisation in the economy was expected to rise over the next two years. A further interest rate increase would gradually stabilise growth in output and employment, and capacity utilisation in the economy might gradually decline somewhat. This would curb the rise in inflation, so that it would stabilise close to target. The Executive Board's monetary policy strategy indicated a sight deposit rate in the interval 2¼ - 3¼% in the period to the publication of the *Inflation Report* at the end of June, conditional on economic developments that were broadly in line with projections. The sight deposit rate was increased by 0.25 percentage point to 2.50% at the monetary policy meeting.

Up to the monetary policy meeting in April, employment rose more rapidly than expected. Credit growth and the rise in house prices had been high. Underlying consumer price inflation had been approximately as expected, but was still low. At the same time, the krone was stronger than assumed. Overall, the Executive Board was of the view that there were insufficient grounds for changing the outlook for inflation and output or the risk assessment. In line with the strategy, the key rate was therefore left unchanged.

New information prior to the monetary policy meeting in May confirmed that activity in the Norwegian economy was high. The Executive Board pointed out that there were now signs of capacity constraints in a number of industries. The rise in consumer prices had been faster than expected because of the marked increase in energy prices. Inflation excluding energy products was still low. The krone had appreciated further. It was likely that continued high growth in output and employment would result in higher price and cost inflation, although this might take time. In line with the strategy, the interest rate was raised by 0.25 percentage point to 2.75%.

At the June monetary policy meeting, the Executive Board pointed out that the unexpectedly low rise in prices for goods and services produced in Norway in recent months might be a sign of solid productivity growth and intensified competition. At the same time, growth in the Norwegian economy was strong and capacity utilisation was higher than previously projected. As a result, the interest rate forecast was revised upward in relation to the previous *Report*, by an average of ¼ percentage point for 2007 and 2008. It was the Executive Board's assessment that the interest rate in the baseline scenario was sufficiently low to contribute to inflation picking up and approaching the target of 2.5%. At the same time, the increase in the interest rate was sufficient to avoid a capacity utilisation level that was too high. According to the monetary policy strategy in the *Report*, the sight deposit rate should be in the interval 2¼ - 3¼% in the period to the publication of the next *Inflation Report* on 1 November, conditional on economic developments that were broadly in line with projections. The key policy rate was kept unchanged at the monetary policy meeting on 29 June.

At the monetary policy meeting in August, the Executive Board pointed out that increasing capacity constraints, very high corporate earnings, high house price inflation and debt growth pointed to a higher interest rate. At the same time, consumer price inflation excluding energy products remained low. The krone exchange rate had depreciated somewhat but was still fairly strong. Overall, the Executive Board was of the view that there were not grounds for changing the outlook for inflation and output or the risk assessment. In line with the strategy, the interest rate was raised by 0.25 percentage point to 3.00%.

New information that emerged prior to the monetary policy meeting in September provided mixed signals. The Executive Board pointed out that there was little spare capacity in the Norwegian economy. Developments in aggregate demand, output and employment suggested a higher interest rate. At the same time, the rise in consumer prices had slowed, and the rise in prices excluding energy products was unexpectedly low. This suggested a continued low interest rate. The strategy published in the *Inflation Report*, coupled with new information, indicated that the interest rate should be left unchanged.

When *Inflation Report 3/06* was published in November, the US economy was showing signs of a slowdown after several years of strong growth. Nevertheless, it appeared that growth in the world economy would be sustained. It was pointed out that the weight of China, India and other Asian economies was rising. Underlying inflation had been lower than expected in recent months. Nevertheless, several factors pointed to a gradual rise in inflation. The upturn in the Norwegian economy was stronger than projected earlier and capacity utilisation in the economy had increased. At the same time, the krone exchange rate had depreciated from strong levels. The interest rate forecast in *Inflation Report 3/06* was approximately ½ percentage point higher than that presented in the previous *Report*, measured as an average for 2007 and 2008. Given this interest rate path, it was projected that capacity utilisation would continue to rise and that the labour market would tighten further. Compared with the previous *Inflation*

Report, inflation was projected to increase at a somewhat later point in time. The Executive Board concluded that the interest rate might gradually be raised to a more normal level at a somewhat faster pace than envisaged earlier, although it was unlikely that rates would be raised at every monetary policy meeting. The Executive Board's assessment was that the interest rate would thus continue to be raised in small, not too frequent steps. According to the monetary policy strategy in *Inflation Report 3/06*, the key policy rate should be in the interval 3¼ - 4¼% in the period to the publication of the next *Report* on 15 March 2007, conditional on economic developments that were broadly in line with projections. The interest rate was increased by 0.25 percentage point to 3.25% at the November monetary policy meeting.

In December, new information since the previous monetary policy meeting was broadly in line with the projections in *Inflation Report 3/06*. Employment was rising rapidly and unemployment had fallen markedly. A steadily rising number of enterprises were facing labour shortages. Wage growth appeared to be on the rise. Underlying inflation was now projected to lie in the interval 1 - 1¼%. The krone exchange rate was somewhat stronger than projected. The strategy published in the *Inflation Report*, coupled with new information, implied that the interest rate should be increased by 0.25 percentage point to 3.5%.

At the end of 2006, capacity utilisation in the Norwegian economy was appreciably higher than normal and higher than expected one year earlier. Because of an unexpectedly strong rise in energy prices, consumer price inflation was higher than expected in 2006. Inflation excluding energy products, on the other hand, had been markedly lower than projected. As anticipated, price impulses from imported consumer goods had been particularly weak. The rise in prices for goods and services produced in Norway had fallen somewhat, despite strong demand growth and a pronounced increase in capacity utilisation. The main reason was favourable supply-side factors in the form of greater efficiency and more intense competition in both the product and the labour market. Low inflation combined with high growth in output and employment therefore remained a challenge to monetary policy in 2006. The objective of bringing inflation back to target and anchoring inflation expectations had to be weighed against the objective of contributing to stability in the real economy. Against the background of high growth in output and employment, accelerating wage growth and a weaker krone, at the end of 2006 there were prospects of an increase in consumer price inflation.

Financial stability

Financial stability implies that the financial system is robust to disturbances in the economy and can channel capital, execute payments and redistribute risk in a satisfactory manner. The Executive Board places emphasis on Norges Bank's role in contributing to financial stability. Norges Bank continuously works to improve the security and efficient use of means of payment. This applies to both banknotes and coins and to deposit money in Norges Bank and in the banking system. Furthermore, Norges Bank monitors the economy and the financial system in order to identify trends that may weaken financial stability. The assessments are published in the *Financial Stability* report, which was published twice in 2006. In its submissions to the Ministry of Finance, the Executive Board provides an assessment of financial stability based on the *Financial Stability* reports. Assessments of the efficiency of and risk associated with the payment system are published in the *Annual Report on Payment Systems*.

At the end of 2006, the financial stability outlook was satisfactory in the short term, but uncertainty concerning financial stability increased somewhat through the year. Norwegian banks' results were solid, mainly as a result of very low loan losses and reduced costs. Capital adequacy ratios are satisfactory. Nonetheless, banks are facing challenges in connection with declining interest margins and prospects of higher interest rates which may reduce lending growth and, accordingly, earnings growth. In 2007, new and in some respects considerably more complicated capital adequacy rules were introduced which give banks more freedom in their choice of risk management systems. The choice has consequences for capital requirements. Adaptation to the rules will be particularly demanding for institutions that use the internal ratings-based approach (IRB approach). However, the IRB approach results in the most efficient use of capital, and requires the most risk management input.

The outlook for the Norwegian economy implies continued low loan losses and strong bank performance in the short term. The financial position of both enterprises and households is generally satisfactory. At the same time, household debt is growing rapidly and the ratio of debt to income has never been higher. House prices have risen sharply in the past decade. The strong rise in debt accumulation and property prices may be a source of future instability in the economy and higher losses and weaker results in the banking sector. As a result, the uncertainty surrounding the longer-term financial stability outlook may have increased somewhat through 2006.

The International Monetary Fund (IMF) assessed the strengths and weaknesses of the financial system in Norway in 2005. One of the IMF's proposals was that regular meetings on financial stability should be held at a high level between the Financial Supervisory Authority of Norway (Kredittilsynet), the Ministry of Finance and Norges Bank. The first meeting was held in October 2006. In future the institutions will assess the financial stability outlook and discuss coordination of contingency measures every six months.

Pursuant to the Act relating to Payment Systems, Norges Bank is the authorisation and supervisory authority for

interbank settlement systems. In 2005, DnB NOR acquired authorisation for its new system, which replaced the authorised systems of Gjensidige NOR Sparebank and DnB, and the new system commenced operations in 2006. In 2006, oversight of settlement systems has broadly continued in line with previous practice.

The work of upgrading Norges Bank's settlement system was continued in 2006. In early 2006, Norges Bank signed agreements for deliveries that are to replace the settlement system that was implemented in the 1990s. There is one agreement for a new operating solution for services involving the central government's consolidated account, and another for a new system of interbank settlements. Separate solutions have been chosen because it is then possible to use mostly standardised operating and system solutions. Suppliers have been selected in compliance with the legislation on public procurement, and there was international competition for the settlement system throughout the European Economic Area.

Towards the end of the year the new system for the central government's consolidated account commenced operations. The work on this system is subject to an agreement with the Ministry of Finance. In the work on a new solution, Norges Bank has been in close contact with the Ministry of Finance and the Norwegian Government Agency for Financial Management (SSØ). The work on the new interbank settlement system will continue in 2007 so that it can be implemented in 2008. The banking industry is the primary user of the settlement system, and Norges Bank has close contact with the industry in the work on the settlement system.

In 2003, Norges Bank decided to discontinue operations at Norges Bank's Printing Works in 2007. In December 2006, agreements were concluded with a French and British printing works for future deliveries of Norwegian banknotes. The security features of banknotes and banknote production are confidential and the requirement of open tendering under public procurement rules therefore does not apply. Norges Bank received tenders from several respected printing works and took into account security, technical requirements and price in its choice of contractual parties. Norges Bank will continue to decide the quality, security and design of Norwegian banknotes, and the expertise in these fields will be maintained after the closure of the Printing Works.

Investment management

Norges Bank manages the Government Pension Fund – Global (previously the Government Petroleum Fund) on behalf of the Ministry of Finance. The Bank also manages its foreign exchange reserves, which in addition to the investment portfolio also contain two smaller sub-portfolios. Moreover, the Bank manages the Government Petroleum Insurance Fund on behalf of the Ministry of Petroleum and Energy. At the end of 2006, Norges Bank managed assets amounting to a total NOK 2 053bn in international capital markets.

In 2006, all portfolios managed by Norges Bank recorded relatively solid returns, as measured in terms of the currency basket corresponding to the composition of the individual portfolio's benchmark index. Owing to equity market advances in 2006, the two large portfolios generated a return of 7.92% for the Government Pension Fund – Global and 7.30% for the foreign exchange reserves investment portfolio. The returns in NOK were somewhat lower at 5.89% and 5.18% respectively, due to the appreciation of the Norwegian krone in relation to the currency



basket. However, the return in terms of international currencies provides the best indication of developments in the two funds' purchasing power. At end-2006, the market value of the Pension Fund was NOK 1 784bn and the market value of the investment portfolio stood at NOK 225bn.

Because of low global inflation, the real return was also relatively high in 2006. Since 1997, the Pension Fund has recorded an average annual real return after fund management costs of 4.58% while the corresponding real return on the investment portfolio has been 4.04% since 1998.

Active management yielded positive results in 2006. The actual gross return on the Pension Fund was 0.15 percentage point higher than the return on the benchmark portfolio defined by the Ministry of Finance. Since 1998, the average annual excess return has been 0.48 percentage point. The gross excess return on the investment portfolio for foreign exchange reserves was 0.13 percentage point in 2006. Norges Bank's objective is to achieve an excess return through active management, while taking account of the costs of phasing in new capital and the operating costs associated with active management. In the three-year period 2004-2006, this net excess return was 0.55 percentage point for the Pension Fund and 0.17 percentage point for the investment portfolio. The objective of both funds is to achieve an excess return of 0.25 percentage point.

Norges Bank's Executive Board has determined a new business strategy for investment management in the period to 2010. During the plan period, capital under management in Norges Bank may double. At the same time, it may be relevant to increase the share of equities in the Pension Fund, and perhaps also to invest in new asset classes such as real estate and private equity. The principal objectives of the plan are to generate substantial value added through active management of the government's and Norges Bank's foreign financial assets, to foster the owners' long-term financial interests through active corporate governance and to implement the owners' management strategy in a cost-effective, prudent and confidence-inspiring manner.

In 2006, the Executive Board established an Advisory Board for investment management, in view of the challenges the Bank will be facing in the years ahead. The Government Pension Fund – Global is expected to grow rapidly and at the same time the capital in the Fund may be invested in less liquid asset classes, as mentioned. The Advisory Board is composed of four internationally respected experts with extensive experience from large investment management institutions, and will meet with the Executive Board two or three times a year.

The Executive Board has determined that remuneration and human resource policy in investment management is to serve as an instrument for achieving performance targets. The labour market for persons with experience in financial and investment management is characterised by a high salary level and significant components of performance-based pay. Many members of the staff of Norges Bank Investment Management therefore receive a salary that depends on their performance. The intention is for Norges Bank to be sufficiently competitive in the Norwegian and global labour market.

The Executive Board has laid down corporate governance guidelines for the equity portfolios as a supplement to the Ministry of Finance's guidelines for the Pension Fund portfolio. Norges Bank's main tasks are twofold: first, ownership rights shall be safeguarded and used to secure and generate financial wealth for future generations. The goal is a high long-term absolute return on the funds under management. Second, Norges Bank shall seek to contribute to a high ethical, social and environmental standard in the companies in which it has invested, and thereby also to sustainable financial developments in the long term. It is regarded as important that companies in which the Bank has equity holdings are aware of Norges Bank's corporate governance principles and that the boards of these enterprises act in accordance with internationally recognised principles of good corporate governance. Norges Bank's corporate governance is anchored in the principles expressed in the UN Global Compact, the OECD Principles of Corporate Governance and Guidelines for Multinational Enterprises, and the new UN Principles for Responsible Investment (UNI-PRI), which Norges Bank has signed and helped to draw up. Norges Bank votes at the general meetings of the vast majority of companies in the portfolios.

In a submission of 10 February 2006 to the Ministry of Finance, Norges Bank proposed that the Ministry should consider increasing the equity portion of the Pension Fund to 50% or 60%. The equity portion of the Fund's benchmark portfolio has remained fixed at 40% since 1998. The allocation to equity is decisive for the return that may be expected on the Fund's investments over time, and for the risk associated with the investments. Norges Bank is of the view that even though a high equity portion will increase risk in the form of higher annual return variability, this can be justified by the increase in the expected return on the assets under management. In the National Budget for 2007, the Ministry of Finance announced that they wish to study the matter in greater depth in order to be sure that all aspects of the matter have been thoroughly examined. Norges Bank has also provided advice about investing in other asset classes, including real estate.

The Executive Board lays down guidelines for the management of the foreign exchange reserves. Benchmark portfolios are used as a basis for managing risk and measuring the performance of operational management. The investment portfolio accounts for the largest portion of the foreign exchange reserves. In November 2005, the Executive Board decided to increase the equity portion of the investment portfolio from 30% to 40%. The phasing-in to increase the equity portion was completed on 30 April 2006.

In 2006, risk exposure in relation to the benchmark portfolio remained well within the limits set by the Executive

Board. The total portfolio risk is determined by the benchmark portfolio and by the magnitude of fluctuations in equity and fixed income markets. According to Norges Bank's risk models, the standard deviation on the total return at end-2006 is estimated at 6.9 percentage points. The standard deviation indicates the width of an interval above and below the expected return. There is a high probability that the actual return will fall within this interval.

The other sub-portfolios in the foreign exchange reserves, the money market portfolio and the buffer portfolio are smaller. There have been no changes in the management of these sub-portfolios.

The Ministry of Finance and the Ministry of Petroleum and Energy have established benchmark indices as a means of managing risk and measuring the performance of Norges Bank's operational management of the Government Pension Fund – Global and the Government Petroleum Insurance Fund. In 2006, risk exposure in relation to the benchmark portfolio remained well within the limits set by the two ministries. In 2006, the Ministry of Finance transferred NOK 288.3bn to the Pension Fund. Management fees for 2005 of NOK 1.2bn were deducted from this amount.

The Ministry of Finance has also established ethical guidelines for the Pension Fund's investments. The Council on Ethics advises the Ministry of Finance on how the guidelines for negative screening and exclusion of companies from the investment universe should be applied. The Executive Board has established similar rules for negative screening and the exclusion of companies from the foreign exchange reserves.

Norges Bank draws up a separate annual report on the management of the Government Pension Fund - Global, the investment portfolio and buffer portfolio in the foreign exchange reserves, and the Government Petroleum Insurance Fund.

Organisation and personnel

Use of resources and restructuring

The Executive Board emphasises that the central bank should discharge its responsibilities in a professional manner and at low cost. Operations should be well managed, reflect a strong ethical awareness and be in line with best international practice. The Bank should show a willingness and capacity to change.

In recent years, the Bank has concentrated its operations on core activities, i.e. monetary policy, financial stability and investment management, including related operational and staff functions. This has resulted in substantial restructuring. Cash handling was spun off into a separate company in 2001, and all the Bank's shares were sold in January 2006. The Royal Norwegian Mint was sold in 2003. Norges Bank's banknote production will be discontinued in the first half of 2007, and in 2006 agreements for delivery of banknotes were concluded with two foreign printing works. Operation of the Bank's settlement system has been outsourced. Through 2006, further organisational changes were made with focus on the Bank's core activities. Norges Bank's statistics activities have been transferred to Statistics Norway with effect from 1 January 2007. Processes designed to reduce the Bank's central staff and support functions towards 2010 have been initiated.

At end-2006, the number of permanent employees at Norges Bank totalled 542, compared with 547 at end-2005. Since the end of the 1990s, the number of employees has been reduced by over 600. This has been accompanied by an increase in the use of resources in the Bank's core areas. The staffing of Norges Bank Investment Management has increased in recent years, particularly as a result of the sharp rise in the capital of the Government Pension Fund – Global, where internal active management has been expanded. The number of permanent employees in Norges Bank Investment Management at end-2006 was 128. As a result of the substantial increase in capital under management in the next few years, and changes in the complexity of the tasks, there will be a sharp rise in the number of employees in this area of the Bank's activities in the years ahead.

The Bank's restructuring has consequences for many employees, and may have been experienced as a strain by some. Norges Bank is using human resources policy programmes to facilitate the restructuring. In the period 1999 to end-2006, the Bank employed personnel policy programmes in connection with 312 termination agreements. In 2006, applications under these agreements were approved for a further 7 employees in different areas of the Bank, compared with 24 the year before. NOK 127m has been set aside in the accounts to cover future payments related to restructuring.

Restructuring and the reduction in the number of employees has also resulted in vacant office premises at the head office. The Executive Board's aim is the optimal management of the building on a sound and commercial basis. Among other things, the Bank's canteen was relocated to promote the efficient use of premises. In 2006, an agreement was entered into with the Financial Supervisory Authority of Norway (Kredittilsynet) providing for the leasing of office premises that will become vacant when the Printing Works' activities are discontinued in 2007. The leasing agreement requires considerable building activity, including the conversion of the current premises of the Printing Works into offices. During its deliberations on the budget for 2006 and 2007, the Supervisory Council approved several projects for utilising the Bank's premises, to which a total of NOK 305m has been allocated. The converted premises are scheduled to be ready for use in autumn 2008.

Net use of resources for the Bank's own operations has been reduced by about 30% in real terms since 1998. Restructuring costs are not included. Net use of resources shows an increase from 2005 to 2006 (see Chapter 6 for further details).

Gender equality

Women account for 41% of the employees in Norges Bank. In 2006, the share of women recruited to permanent positions was 40%. At the end of 2006, part-time employees, primarily women, accounted for 6% of permanent employees. The share of women is higher in the lower-paid occupational categories than in management positions and in the category economist/senior adviser. The Bank's gender equality programme has set targets for the share of women in different occupational categories. At the end of 2006, the share of women in managerial positions was 30%. The target is 40%. The Executive Board emphasises that there should not be gender-based differences in pay. A comparison shows that on average the salary of women managers in Norges Bank was 95%¹ of the salary of male managers. The percentage for the group economists and senior advisers was 88%. It appears that the differences may largely be explained by factors other than gender, and in particular that female employees are generally somewhat younger than their male colleagues.

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

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

Health, environment and safety

Norges Bank has entered into an agreement to be an inclusive workplace enterprise. In 2006, sickness absence was 3.0% of the total number of working days, compared with 3.7% in 2005. Long-term absences (16 days or more) accounted for 1.5% of total absence, against 2.1% in 2005.

Health, environment and safety surveys are conducted in the Bank's departments at intervals of two to three years. The Executive Board monitors developments in the working environment and the stress experienced in those areas of the Bank undergoing restructuring. Norges Bank has no significant impact on the external environment.

The Executive Board places considerable emphasis on ensuring adequate safety in all parts of the Bank's operations. The objective is to protect the lives and health of the Bank's employees and related parties and protect the considerable assets managed by the Bank. In autumn 2004, the Bank initiated measures to upgrade security at the head office and at the Bank's depots. This work has largely been completed.

Internal control and risk management

Internal control and risk management are essential to the Bank's operations and are an integral part of the Bank's line management and management systems.

In 1998, the Executive Board decided to develop internal control procedures at Norges Bank on the basis of a regulation laid down by Kredittilsynet regarding clearer responsibilities, and more thorough documentation and verification of internal control. The Executive Board has also laid down overarching principles for internal control at Norges Bank.

Norges Bank defines internal control as all measures, arrangements, systems, etc. that contribute to the achievement of the Bank's goals. Requirements are set out regarding the performance and documentation of risk analyses and control measures. The Executive Board receives annual reports on the risk outlook and the quality of the internal control in the various areas of operation.

Developments, particularly in the management of the Government Petroleum Fund – Global, but also in the Bank's other core areas, imply increased operational risk and reputation risk. This poses new challenges to the Bank and the governing bodies. In 2006, the Executive Board accordingly focused attention on the Bank's system of risk management and control of activities as a whole, and their development within the framework of the Norges Bank Act.

In order to strengthen its monitoring of activities, the Executive Board decided in autumn 2006 to establish an audit committee and organise a special internal audit unit accountable to the Executive Board. The audit committee is composed of three of the Executive Board's external members. It is to function primarily as a body that prepares issues in particular areas for the Executive Board, mainly in connection with the Executive Board's supervisory function and responsibility for risk management and control. The internal audit unit will also be accountable to the Executive Board, and will function as secretariat to the audit committee. The internal audit unit is to be operational in the course of 2007. The changes are being made with the approval of the Supervisory Council, but do not in other respects have any connection with the competence and responsibilities of the Supervisory Council pursuant to the Norges Bank Act, which are to supervise the Bank's operations and the organisation of Central Bank Audit's activities.

In parallel with the establishment of the Executive Board's audit committee and internal audit unit, the Supervisory Council conducted a broad review of the Bank's audit system in 2006. In order to enhance their knowledge and address the special challenges associated with the financial auditing of Norges Bank Investment Management, the Supervisory Council supported the work to establish collaboration with one of the large international audit companies.

¹ Excluding executive directors. The salaries for this group are given in Note 8 to Norges Bank's accounts for 2006.

For a more detailed account, see Part II “The Supervisory Council’s statement on its supervision of Norges Bank”.

Ethical rules

For Norges Bank to be able to fulfil its responsibilities, the general public must have complete confidence that the Bank will perform its functions in a professional and independent manner. The Executive Board emphasises that the Bank’s employees must always conduct themselves in an ethical manner. The Executive Board has therefore established ethical rules for the Bank’s employees to prevent them from exploiting their positions to achieve unethical advantages for themselves or others or prevent disloyalty to the Bank. The rules were most recently revised in 2005. Ethical rules have also been established for the members of the Executive Board, cf. Regulation of 7 August 2000 issued by the Ministry of Finance on the relationship of members of Norges Bank’s Executive Board to other credit institutions and enterprises.

Profit and loss account and balance sheet

Net international reserves are Norges Bank’s main assets, excluding the Government Pension Fund – Global, which do not affect the Bank’s results. Norges Bank’s liabilities consist of notes and coins in circulation and domestic deposits from the central government and banks. This balance sheet composition will normally generate a positive return over time, mainly because the Bank has substantial capital in addition to liabilities in the form of notes and coins in circulation. The Bank’s assets primarily consist of investments that generate a return.

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

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

Norges Bank’s annual accounts for 2006 show a surplus of NOK 5.5bn, compared with a surplus of NOK 21.3bn in 2005. Due to the appreciation of the Norwegian krone against most of the main currencies in the foreign exchange reserves, the foreign exchange reserves translated into NOK showed an overall exchange loss of NOK 5.0bn in 2006, compared with exchange gains of NOK 8.1bn in 2005. Exchange losses due to the appreciation of the krone have no effect on the international purchasing power of the foreign exchange reserves.

The rise in prices in international securities markets in 2006 resulted in a capital gain of NOK 6.6bn, compared with a gain of NOK 11.0bn in 2005. Interest income and dividends from foreign investments amounted to NOK 13.0bn, which is NOK 3.8bn higher than in 2005.

Interest payments to the Treasury amounted to NOK 4.6bn compared with NOK 2.6bn in 2005.

The Adjustment Fund stood at NOK 67.5bn at end-2005. After the year-end allocations for 2006, the Adjustment Fund amounted to NOK 73.0bn. 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 (cf. description under 'Distribution of profit' below). For the Adjustment Fund to reflect the ratios in the guidelines for provisions and allocation of profits, it would have to total NOK 101.3bn.

Norges Bank's total balance sheet amounted to NOK 2 196.5bn. The Government Pension Fund – Global is integrated into Norges Bank's accounts, and accounts for 80% of the Bank's balance sheet. The NOK deposits in the Government Pension Fund - Global are a liability item for Norges Bank and at year-end amounted to NOK 1 782.1bn. Norges Bank invests the equivalent of the NOK deposits abroad in an earmarked portfolio. The return achieved on the international portfolio is transferred to the Fund's NOK account. The costs incurred by Norges Bank in connection with management of the Government Pension Fund – Global are covered by the Ministry of Finance subject to an upper limit.

The value of notes and coins in circulation amounted to NOK 54.8bn, i.e. an increase of NOK 2.9bn compared with end-2005. These are recorded as interest-free liabilities in Norges Bank's accounts.

Contracts to purchase and sell financial derivatives and options contracts entered into as at 31 December 2006 are recorded as off-balance-sheet items.

Reference is made to the financial statements for 2006, which include the profit and loss account, the balance sheet and additional information in the notes.

Distribution of profit

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

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

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

If the size of the Adjustment Fund exceeds the corresponding figures mentioned under point 1, first paragraph, the surplus shall be reversed to the profit and loss account.

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

In accordance with a statement from the Ministry of Finance, NOK 37.1m is to be transferred from other capital to cover the write-down on previously revalued assets. The amount will be transferred to profit/loss for allocation for the year.

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

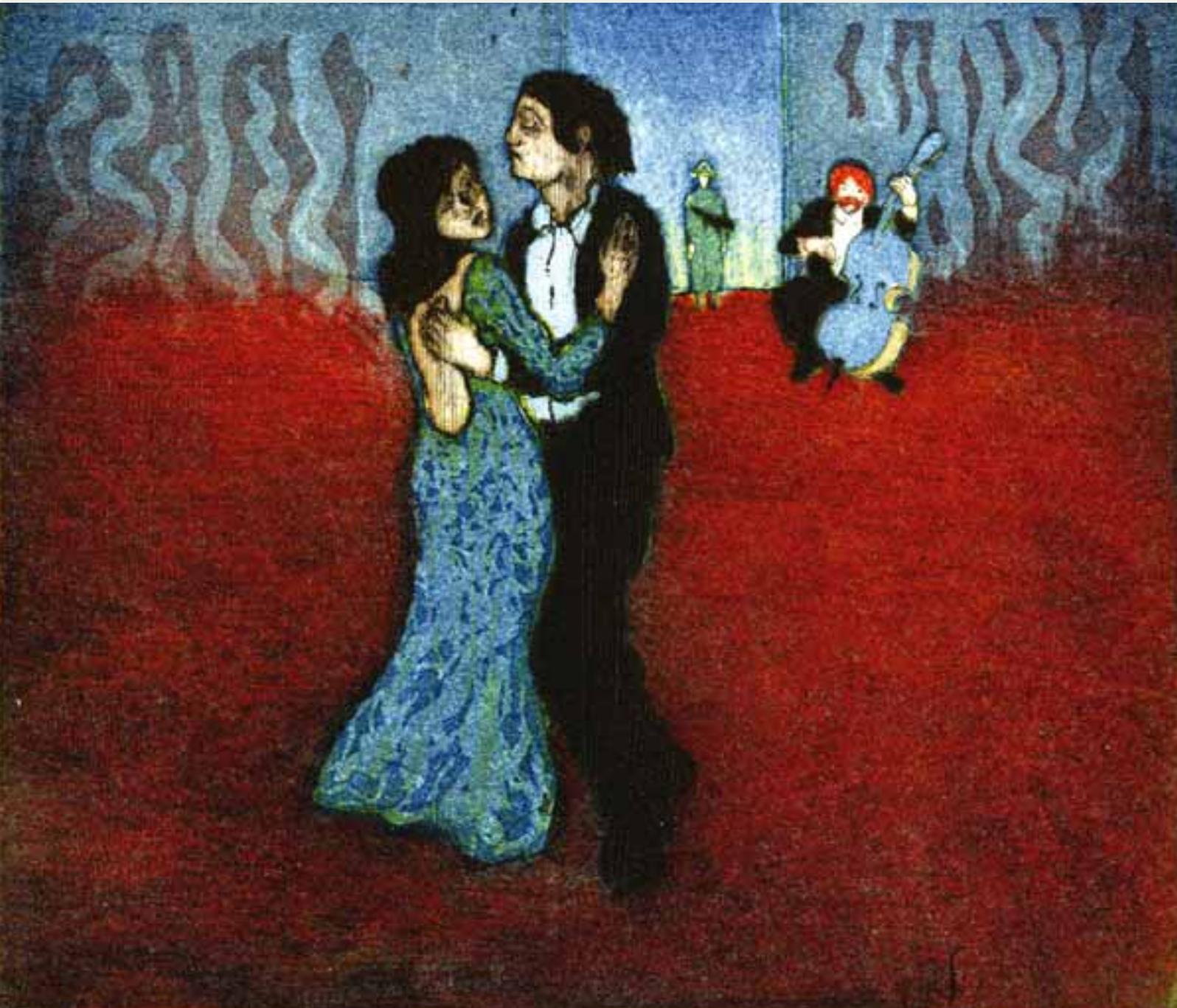
In accordance with point 1, the surplus for the year after allocations, NOK 5 538.2m, will be allocated to the Adjustment Fund. As there are no funds in the Transfer Fund, no transfer will be made to the Treasury.

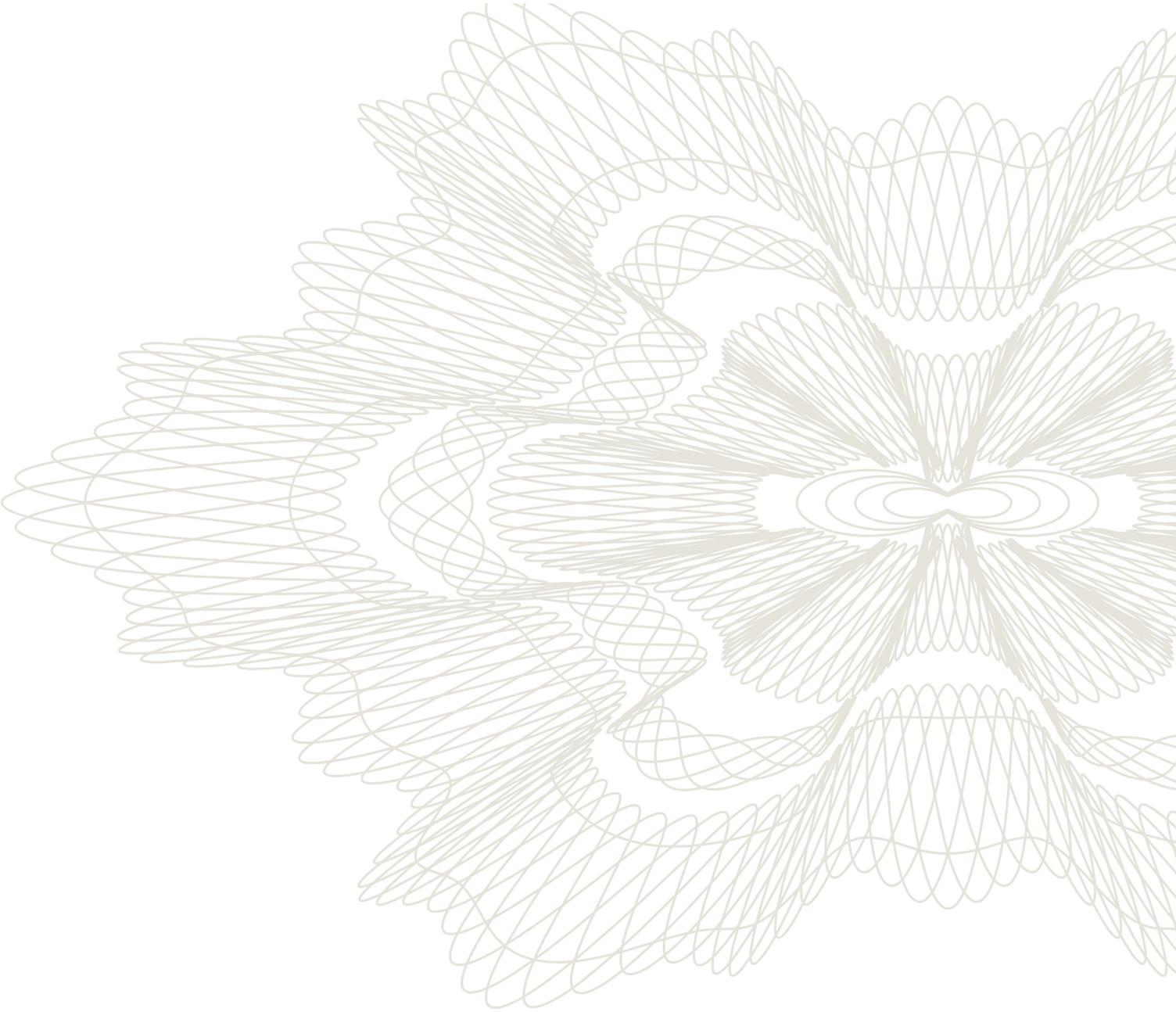
Oslo, February 2007

Svein Gjedrem	Jarle Berge	Liselott Kilaas
Vivi Lassen	Brit K. Rugland	Asbjørn Rødseth
Øystein Thøgersen	Jan Erik Martinsen (Employees' representative)	Torggrim Roll (Employees' representative)

2

FINANCIAL STATEMENTS FOR 2006





Profit and loss account

Figures in millions of NOK

	Note	2006	2005
Interest income and dividends	1	13 025	9 190
Change in value financial instruments	2	6 604	10 985
Valuation adjustment of foreign exchange	3	-4 985	8 051
Return on international reserves		14 644	28 226
Share dividend, BIS	12	19	18
Loss on other foreign financial instruments	4	-4 187	-3 214
Loss on domestic financial instruments	5	-286	-147
Interest expenses to Treasury etc.	6	-4 083	-2 872
Net other financial activities		-8 537	-6 215
Overall return financial activities		6 107	22 011
Return on investments for Government Pension Fund - Global	23	96 236	162 388
Transferred to krone account Government Pension Fund - Global		-96 236	-162 388
Management remuneration Government Pension Fund - Global	7	1 526	1 239
Other operating income		224	145
Total operating income		1 750	1 384
Personnel expenses	7	-580	-563
Depreciation	15	-87	-166
Other operating expenses		-1 688	-1 396
Total operating expenses		-2 355	-2 075
Net operating expenses	7	-605	-691
Profit for the year		5 502	21 320
Transferred from Adjustment Fund		0	0
Transferred from 'Other capital'	25	37	72
Reserves		5 539	21 392
Allocated to Adjustment Fund	24	-5 539	-21 392
Allocated to Transfer Fund		0	0
Allocated to 'Other capital'		0	0
Total allocations		-5 539	-21 392

Balance sheet at 31 December 2006

Figures in millions of NOK

ASSETS	Note	2006	2005
FOREIGN FINANCIAL ASSETS			
Securities and deposits	8	259 093	219 137
Lending	9	90 712	94 489
Claims on the IMF	10	4 132	4 537
Total international reserves	11	353 937	318 163
Other foreign assets	12	146	113
Total foreign fin. assets excl. Government Pension Fund - Global		354 083	318 276
DOMESTIC FINANCIAL AND OTHER ASSETS			
Lending to banks etc.	13	55 647	25 404
Other domestic assets	14	2 937	1 322
Total domestic financial assets		58 584	26 726
Fixed assets	15	1 379	1 386
Gold		291	291
Total other domestic assets		1 670	1 677
Total domestic financial and other assets		60 254	28 403
Total assets excl. Government Pension Fund - Global		414 337	346 679
Investments for Government Pension Fund - Global	23	1 782 139	1 397 896
TOTAL ASSETS		2 196 476	1 744 575

Figures in millions of NOK			
LIABILITIES AND CAPITAL	Note	2006	2005
FOREIGN LIABILITIES			
Deposits	16	87	377
Borrowing	17	99 348	61 002
Other liabilities	12, 18	402	334
Equivalent value of allocated Special Drawings Rights, IMF	10	1 575	1 620
Total foreign liabilities		101 412	63 333
DOMESTIC LIABILITIES			
Notes and coins in circulation	19	54 838	51 910
Treasury deposits	6	159 679	109 627
Deposits from banks etc.	20	24 030	42 699
Borrowing		2	0
Other liabilities	21	252	10 488
Total domestic liabilities		238 801	214 724
Total liabilities excl. Government Pension Fund - Global		340 213	278 057
Deposits in krone account Government Pension Fund - Global	22, 23	1 782 139	1 397 896
Total liabilities		2 122 352	1 675 953
CAPITAL			
Adjustment Fund	24	73 027	67 488
Other capital	25	1 097	1 134
Total capital		74 124	68 622
TOTAL LIABILITIES AND CAPITAL		2 196 476	1 744 575
Obligations	26		
Derivatives and forward contracts sold, international reserves		200 697	137 051
Derivatives and forward contracts purchased, international reserves		203 003	136 670
Derivatives and forward contracts sold, Government Pension Fund - Global		1 228 557	798 223
Derivatives and forward contracts purchased, Government Pension Fund - Global		1 241 246	785 681
Allotted, unpaid shares in the BIS	12	279	287
Rights	27		
Options sold, international reserves		8 851	759
Options purchased, international reserves		21 656	1 448
Options sold, Government Pension Fund - Global		24 154	5 273
Options purchased, Government Pension Fund - Global		131 203	8 578

Norges Bank's Executive Board
Oslo, 7 February 2007

Vivi Lassen	Svein Gjedrem	Jarle Berge
Brit K. Rugland	Liselott Kilaas	Asbjørn Rødseth
Øystein Thøgersen	Jan Erik Martinsen (Employees' representative)	Torggrim Roll (Employees' representative)

Notes

Accounting policies

General

Norges Bank's activities are not taxable, and Norges Bank is not subject to the Accounting Act. The accounts are presented in accordance with laws and regulations and generally accepted accounting principles in Norway, taking into consideration the special conditions applying to a central bank. Norges Bank departs from the rules of the Accounting Act if these differ from the recommendations of the International Monetary Fund (IMF) or the practice in other central banks. The profit and loss account and balance sheet are presented in a manner appropriate to the Bank's activities. Cash flow analyses are not prepared. Norges Bank's accounts are adjusted to incorporate value-dating corrections. Securities trades are registered on the trade date. Income and expenses are recognised as they are earned or accrued, according to the accruals principle. Pursuant to an agreement with the Ministry of Finance, Norges Bank's accounting policies are applied to the portfolio of the Government Pension Fund – Global (formerly the Government Petroleum Fund).

In the event of a change in the classification of accounts, figures from previous years are restated to facilitate comparison.

Currency

Assets and liabilities in foreign currency are translated into NOK at market rates at 31 December 2006 quoted on WM Reuters London at 4 pm on 29 December 2006. Income and expenses in foreign currency are translated into NOK at the exchange rate prevailing on the transaction date.

International reserves

The item 'Norges Bank's international reserves' reflects gross investments with foreign institutions. Reporting takes place pursuant to IMF guidelines.

Securities

The portfolio of foreign and Norwegian securities is carried at fair value at 31 December 2006. It is invested largely in foreign fixed income instruments and equities. Fair value is based on market values provided by recognised international index suppliers. The securities are classified as short-term investments. Accrued interest is included in the securities holdings. Unrealised gains are taken to income.

In the securities management, the securities are sometimes used as underlying assets for financial instruments, for example through the sale of securities with an agreement for repurchase at a later date. The repurchase agreements are presented as borrowing against collateral in securities.

Off-balance sheet financial instruments

Off-balance sheet financial instruments are contracts concerning future delivery of foreign exchange or securities at a predetermined price. In the case of Norges Bank, these comprise forward exchange contracts, financial futures, interest rate swaps, equity swaps and options. Forward contracts are recorded at forward rates. Forward premiums/discounts, futures

contracts, interest rate swaps, equity swaps and options are carried at fair value at 31 December 2006. Fair value is based on market values provided by recognised international index suppliers. Fluctuations in the fair value are recorded in the profit and loss account under 'Valuation changes'.

Valuation of stocks

Stocks of raw materials at the Printing Works are valued at the lower of average purchase price or fair value. Goods in progress and finished goods are valued at full production cost, which includes direct and indirect variable and fixed production costs. Obsolescence is taken into account.

Loan losses/bad debts

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

Fixed assets

On the balance sheet, fixed assets are entered at original cost plus write-ups and less write-downs and linear depreciation. Purchases of fixed assets with a total value of over NOK 100 000 are entered on the balance sheet for depreciation over their economic life.

Gold and other collections

Norges Bank has no gold among its international reserves after these holdings were sold in 2004. A collection of gold coins and gold bars was retained. The collection has been valued at the fair value of gold at 1 January 2004, which is the value at the time it was removed from the international reserves and the purpose changed to long-term ownership. If the fair value becomes persistently and substantially lower over a longer period, the value will be written down. If the fair value of gold rises, the value of the collection is not written up.

Norges Bank has a substantial collection of art, gifts and museum pieces such as medals, banknotes and coins. This collection is registered, but not entered on the balance sheet.

Pension and payment obligations

Pensions and payment obligations are entered in the accounts in accordance with NRS 6 Pension costs.

The Bank's payment obligations are associated with restructuring measures in the form of redundancy pay, early retirement schemes and severance pay. In connection with fund-based schemes through Norges Bank's pension fund, the calculations are based on actuarial assumptions regarding life expectancy, expected wage growth and adjustment of the basic amount in the National Insurance scheme. The estimation of pension costs is based on linear distribution of pension earnings and consists of the year's accrued pension earnings less return on capital allocated for pensions. The economic assumptions forming the basis for the computation of pension obligations change over time. Pursuant to NRS 6 Pension costs, the accumulated effect of changes in estimates and deviations of up to 10% in pension obligations or pension capital, whichever is the larger, may not be recorded in the profit and loss account for the year in order to equalise the results.

Note 1. Interest income and dividends

Figures in millions of NOK

	2006	2005
Interest income on deposits	34	48
Share dividends	2 017	1 467
Interest income on securities	6 502	6 399
Interest income on lending	4 279	2 321
Interest income, IMF and SDR	52	118
Interest income from derivatives	141	-1 168
Other interest income	0	5
Interest income and dividends	13 025	9 190

Note 2. Change in value financial instruments

Figures in millions of NOK

	2006	2005
Realised gains/losses equities and units	5 469	3 093
Unrealised gains/losses equities and units	5 380	7 108
Realised gains/losses fixed income instruments	-844	2 297
Unrealised gains/losses fixed income instruments	-4 115	-1 790
Gains/losses on derivatives	713	277
Change in value financial instruments	6 604	10 985

Note 3. Valuation adjustment of foreign exchange

Figures in millions of NOK

	2006	2005
Realised valuation change in foreign exchange	-3 913	-219
Unrealised valuation change in foreign exchange	-1 072	8 270
Valuation adjustment of foreign exchange	-4 985	8 051

Note 4. Net other foreign financial instruments

Figures in millions of NOK

	2006	2005
Loss on borrowing	-4 147	-3 174
Exchange rate change SDR	46	11
Other losses	-86	-51
Net other foreign financial instruments	-4 187	-3 214

Note 5. Net domestic financial instruments

Figures in millions of NOK

	2006	2005
Interest expenses, borrowing	-306	-95
Exchange rate adjustment	20	-52
Net domestic financial instruments	-286	-147

Note 6. Interest expenses to Treasury etc.

Figures in millions of NOK

	2006	2005
Interest expenses to Treasury	-4 589	-2 648
Interest income on bank deposits	158	23
Interest expenses on deposits from banks	-655	-547
Interest expenses deposits operated by banks	-33	-2
Interest income on lending	1 035	302
Other interest income	1	0
Interest expenses to Treasury etc.	-4 083	-2 872

In 2006, interest on deposits from the Treasury was paid at a rate of 3% per annum in the first quarter, 3.25% in the second quarter, 3.50% in the third quarter

and 3.75% in the fourth quarter. The same interest rates apply to deposits from public account-holders that receive interest on their deposits.

Note 7. Net operating expenses

Norges Bank's net operating expenses amounted to NOK 605m.

The Bank's operating income and operating expenses include income and expenses associated with the management of the Government Pension Fund – Global. These expenses are covered by the Ministry of

Finance up to a certain limit. The expenses associated with management also include distributed indirect and imputed costs.

The table below shows the operating income and expenses associated with the management of the Government Pension Fund - Global.

Figures in millions of NOK

	2006	2005
Remuneration for managing the Government Pension Fund - Global	1 526	1 239
Expenses for managing the Government Pension Fund - Global	1 526	1 239
Internal management fixed income portfolio	264	223
Internal management equity portfolio	320	225
External management	942	791

Included in Norges Bank's operating expenses are the Bank's total personnel expenses, which amount to NOK 580m and consist of the following components:

Figures in millions of NOK

	2006	2005
Personnel expenses		
Salaries and fees	401	403
Employer's social security contribution	67	58
Pension costs (cf. 7.1)	45	33
Restructuring expenses (cf. 7.2)	16	28
Other personnel expenses	51	41
Total personnel expenses	580	563

Salaries, pensions and restructuring

Remuneration to governing bodies

Remuneration to the Supervisory Council totalled NOK 511 300 in 2006. The five external members of the Executive Board receive an annual remuneration of NOK 150 000. Alternates receive a fixed annual remuneration of NOK 30 000 and an additional NOK 4 000 for each meeting in which they participate. Total remuneration amounted to NOK 851 000 in 2006.

Salaries and pensions for the Central Bank Governor S. Gjedrem and Deputy Governor J. Berge

The salaries of the Central Bank Governor and Deputy

Governor are set by the Ministry of Finance and were NOK 1 432 440 and NOK 1 039 714, respectively, in 2006. In addition, they have a company car at their disposal, a free telephone and insurance covered by their employer. The combined value of these benefits are NOK 119 449 and NOK 80 190, respectively.

A full old-age pension for the Central Bank Governor and the Deputy Governor is 2/3 of the prevailing salary for the position in question. Old-age pensions are payable from the date of retirement, albeit not before the age of 65. The earning period for a full pension is 12 years. The pension is subject to coordination with other public pension schemes. At end-2006, these

obligations were determined by actuarial assessment to be NOK 7.1m for the Central Bank Governor and NOK 6.9m for the Deputy Governor, when coordination with the National Insurance Scheme is taken into account. Changes in 2006, which amounted to NOK

2.1m and NOK 1.9m, respectively, were charged to Norges Bank's operations. Coordination with other public pension schemes is not taken into account in the calculations.

Disbursed salaries and pensions for other directors at Norges Bank

Director:	Name:	Salary	Total value of other benefits
Norges Bank Investment Management	K. N. Kjær	2 784 462	15 424
Monetary policy	J. Qvigstad	1 201 828	19 468
Financial stability	K. Gulbrandsen	1 002 736	14 304
Staff and Group Services	H. Bøhn	1 006 048	10 944
Legal Department	M. Ryel	1 019 298	16 335
Communications Department	S. Meisingseth ¹⁾	316 681	4 446

1) Applies to the period 1 September – 31 December 2006.

Salaries of executive directors are set by the Central Bank Governor according to guidelines laid down by the Executive Board along with annual assessments.

The same pension rights apply to Norges Bank's directors as to other employees at the Bank, cf. paragraph on pension schemes. Directors have the same borrowing rights in Norges Bank as the Bank's other employees. Borrowing terms are discussed in Note 13.

Auditing expenses

Total expenses for Central Bank Auditing amounted to NOK 12.5m in 2006, including auditing and certification of the Bank's financial reporting and auditing of the Bank's operations.

Norges Bank's pension schemes

Norges Bank's ordinary pension obligations are covered by the Bank's own pension fund, which is organised as a separate legal entity. Regular retirement age is 68 years, with the right to retire at the age of 65. Pension benefits are equal to 2/3 of the employee's salary at the time of retirement. The earning period for a full pension is 30 years of service. Benefits from the pension fund are coordinated with the National Insurance Scheme. Employees contribute 2% of their gross annual salary to the pension fund. Norges Bank's contribution for 2006 was covered partly by cash payments and partly by capital saved in the premium fund.

Economic assumptions underlying the calculations:

	2006	2005
Discount rate	5.0 %	5.0 %
Pension and basic rate adjustment	3.5 %	2.5 %
Expected wage growth	4.0 %	3.0 %
Expected return on pension capital	5.5 %	5.5 %
Expected annual resignations	2-3 % up to age 50, then 0	2-3 % up to age 50, then 0
Demographic assumptions	K2005 for death, IR73 for disability	K1963/IR73

The payment obligations related to restructuring include the present value of all agreements, including agreements that start disbursements in 2007 or later.

Pension obligations related to secured schemes in Norges Bank amount to NOK 1 796m. The assumptions concerning mortality and other demographic factors are based on the standard K 1963 basis for group pension insurance. The IR 73 rate is used as a basis for calculating disability provisions. A 3% supplement for future administration costs is priced into the pension obligations. The basis for calculating individual pension obligations is the pension benefits the individual has earned or is receiving at 31 December 2006. Pension obligations are equivalent to the calculated cash value of earned benefits.

The Bank's pension scheme covers 2 135 persons, of whom 981 are drawing pensions, 683 are active members (including all those affected by restructuring) and 471 are former members with deferred rights.

Norges Bank's pension and payment obligations

Norwegian accounting standards for pension costs provide the basis for calculating pension and payment obligations. Norges Bank has secured pension schemes associated with membership in Norges Bank's pension fund. In addition, the Bank has unsecured schemes that are funded directly through operations. These are special and allocated pensions, as well as early retirement pensions and redundancy pay agreements associated with restructuring.

In Norges Bank's balance sheet, the item 'Other liabilities' includes the Bank's total pension and payment obligations (including employer's National Insurance contribution) which consist of the following:

Figures in millions of NOK

Pension and payment obligations	2006	2005
Secured schemes through the pension fund (over-financing)	-196	-167
Special pensions and allocated pensions	52	51
Payment obligations associated with restructuring	127	158
Total pension and payment obligations (remainder over-financing)	- 17	42

7.1. Pension costs

At end-2006, schemes secured through the pension fund were over-financed. Pension costs are computed in accordance with Norwegian accounting standards for pension costs and include earnings, interest expenses

and expected return on the capital in the pension fund for the year.

The increase in special and allocated pensions (not secured) is included in the Bank's overall pension costs.

Figures in millions of NOK

Pension costs	2006	2005
Pension expenses secured schemes, which consist of:	34	22
Net present value earnings for the year	44	38
Interest expenses on pension obligations	94	92
Expected return on pension capital	-107	-108
Administration expenses	6	4
Members' contributions	-7	-7
Employer's social security contribution	4	3
Special pensions and allocated pensions	5	5
Reimbursement Norsk Kontantservice AS	6	6
Net pension costs for the year	45	33

7.2. Restructuring expenses

Restructuring expenses are related to study packages, redundancy pay and early retirement pensions. The

change in payment obligations takes account of new agreements in 2006.

Figures in millions of NOK

Restructuring expenses	2006	2005
Change in payment obligation during the period	-31	-22
Disbursements from the scheme	48	50
Restructuring costs including employer's social security contribution	17	28

Note 8. Securities and deposits

Figures in millions of NOK

	2006	2005
Deposits in foreign banks	2 640	1 905
Foreign Treasury bills	1 015	645
Foreign notes and short-term paper	1 719	717
Foreign bonds	161 023	145 314
Foreign equities and units	92 300	70 614
Initiated, not yet settled trades	396	-58
Securities and deposits	259 093	219 137

Note 9. Lending

Figures in millions of NOK

	2006	2005
Lending associated with repurchase agreements	77 501	65 577
Secured lending (triparty)	13 311	29 289
Valuations forward exchange contracts and derivatives	-100	-377
Lending	90 712	94 489

Note 10. Claims on the IMF

Figures in millions of NOK

	2006	2005
Quota in the IMF	15 692	16 147
The Fund's NOK holdings	-14 398	-14 109
Reserve position in the IMF	1 294	2 038
Special drawing rights	2 827	2 074
Loan to the IMF	0	403
Earned interest	11	22
Claims on the IMF	4 132	4 537
Equivalent value of allocated special drawings rights	-1 575	-1 620

The IMF's task is to work for international monetary and financial stability. The Fund gives advice to member countries and provides temporary funding in the event of balance of payment problems. A member's quota (SDR 1 671.7m) determines its 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 (SDR) as an

instrument for supplying international liquidity. The value of SDRs is calculated as a basket consisting of US dollars, euros, sterling and the Japanese yen.

The equivalent value of allocated special drawing rights in the IMF shows total allocations of SDRs since the scheme entered into force in 1970. No SDR allocations have been made since 1990. The change in the item is an expression of a change in the exchange rate for SDR (9.37 at 31 December 2006).

Note 11. International reserves, by portfolio

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

Figures in millions of NOK

	Investment portfolio	Money market portfolio	Buffer portfolio	IMF reserves	Total
Securities and deposits	257 089	1 562	440	3	259 094
Other foreign exchange reserves	77 400	4 801	8 510	0	90 711
Foreign exchange reserves according to IMF definition	334 489	6 363	8 950	3	349 805
IMF reserve position/SDRs	0	0	0	4 132	4 132
International reserves	334 489	6 363	8 950	4 135	353 937
- IMF reserve position/drawing rights and loans	0	0	0	-4 132	-4 132
Borrowing (foreign exchange liabilities)	-99 348	0	0	0	-99 348
Foreign exchange reserves according to Norges Bank's accounts	235 141	6 363	8 950	3	250 457
Foreign currency claims on residents	-2	0	3	0	1
Outstanding accounts between separate portfolios under management	-10 654		12 004		1 350
Claims withholding tax	32				32
Unrecorded unsettled cash agreements			2 731		2 731
Foreign exchange for management	224 517	6 363	23 688	3	254 571

Percentage distribution of foreign exchange reserves for management by currency

Currency	2006	2005
USD	32.1	36.6
CAD	2.6	1.9
Asian currencies	6.7	6.6
GBP	12.4	9.7
EUR	40.4	39.8
Other currencies	5.8	5.4
Total	100.0	100.0

Note 12. Other foreign assets

Figures in millions of NOK

	2006	2005
BIS shares	94	94
Other assets	52	19
Other foreign assets	146	113

Norges Bank has been allocated a total of 8000 shares at SDR 5000 in the Bank for International Settlements (BIS). 25% of the shares, valued at NOK 25m, have been paid for. Norges Bank has not paid up the share capital for 75% of the shares. There is a limited liability amounting to NOK 320m attached to shares purchased in 2006 plus previously allocated shares.

The portion of the conditional liability corresponding to the value of the shares at the time of allotment, i.e. NOK 23m, is recorded under the item 'Other foreign liabilities'. The remainder of the conditional liability, NOK 279m, is shown as an off-balance sheet item. In 2006, dividends on BIS shares amounted to NOK 19.4m.

Note 13. Lending to banks etc.

Figures in millions of NOK

	2006	2005
Lending to banks, overnight loans	0	3
Lending to banks, fixed-rate loans	55 170	24 914
Lending to own employees	477	487
Lending to banks etc.	55 647	25 404

Fixed-rate loans to banks are the result of an ordinary F-loan auction which applies from 20 December 2006 until 3 January 2007. Average interest rate on the 9 accepted loans is 3.57%.

The Bank's loan scheme for its own employees includes housing loans and consumer loans. Housing loans are extended in accordance with guidelines from the Supervisory Council as first mortgages within 85%

of estimated value, limited to NOK 1 890 000.

Consumer loans are limited to a maximum of four times the monthly salary. The loan schemes apply to all employees. In 2006, 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 2006 interest rates increased from 2.5% to 3.75%.

Note 14. Other domestic assets

Figures in millions of NOK

	2006	2005
Remuneration for management of the Government Pension Fund - Global	1 526	1 239
Outstanding accounts between separate portfolios under management	1 350	0
Domestic deposits	21	20
Other domestic assets	29	34
Inventories, banknote production	11	12
Shares in Norsk Kontantservice AS	0	17
Other domestic assets	2 937	1 322

Note 15. Fixed assets

Figures in thousands of NOK

	Vehicles machinery IT	Security system	Machinery, fixtures	Buildings with installations	Bank building Head office Bankplassen 2	Plant under construction	Dwellings, Bank's holiday cabins	Land	Total
Original cost at 1.1.	198 414	76 714	44 484	473 182	1 556 606	25 113	3 386	59 881	2 437 780
+ Transfers from plant under construction	10 367	677	0	928	0	-11 972	0	0	0
+ Additions	6 812	8 992	118	9 110	0	56 502	1 421	0	82 956
- Disposals	15 068	809	2 336	10	0	0	414	0	18 637
Adjustments	0	0	0	0	0	-1 118	0	0	-1 118
Original cost at 31.12.	200 526	85 573	42 266	483 211	1 556 606	68 525	4 394	59 881	2 500 982
- Accum. depreciation and write-downs	138 171	39 202	30 480	417 015	496 830	0	0	0	1 121 698
Book value at 31.12	62 355	46 372	11 786	66 195	1 059 776	68 525	4 394	59 881	1 379 284
Undepreciated remainder of previously revalued assets	0	0	0	5 399	1 032 305	0	2 950	56 580	1 097 235
Ordinary depreciation for the year	31 796	9 246	3 080	5 372	37 272	0	0	0	86 765
Of which depreciation of revalued assets	0	0	0	871	36 243	0	0	0	37 114
Depreciation rate	20.00	15.00	10.00	5.00	2.00	0.00	0.00	0.00	

Note 16. Deposits

Figures in millions of NOK

	2006	2005
Banks	87	96
Other customers	0	281
Deposits	87	377

Note 17. Borrowing

Figures in millions of NOK

	2006	2005
Funding related to repurchase agreements	97 386	60 996
Other borrowing	1 962	6
Borrowing	99 348	61 002

Note 18. Other liabilities

Figures in millions of NOK

	2006	2005
Share capital in BIS not paid up (see Note 12)	23	24
Other foreign debt	379	310
Other liabilities	402	334

Note 19. 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 recorded at NOK 54 838m, consisting of NOK 50 175m in banknotes and NOK 4 663m in coins.

Norges Bank is obliged to redeem notes and coins for 10 years following the decision that they are no longer legal tender. Norges Bank has been flexible about redeeming expired notes after the expiry of the 10-year deadline. In 2006, redeemed/invalidated banknotes and coins amounting to NOK 4.7m were charged as an expense in Norges Bank's accounts.

As of 1 March 1993, the 10-øre coin was no longer legal tender, but was redeemed by Norges Bank until 1 March 2003. The outstanding amount of the 10-øre coin, equivalent to NOK 128m, was recorded as income in the accounts in August 2006.

At 31 December 2006, there were a total of approximately 5.3m commemorative coins in circulation with a nominal value of about NOK 468m. This amount is not included in the item 'Notes and coins in circulation'. Norges Bank is obliged to redeem the coins at their nominal value.

Note 20. Deposits from banks etc.

Figures in millions of NOK

	2006	2005
Banks	23 956	42 653
Other deposits	74	46
Deposits from banks etc.	24 030	42 699

Note 21. Other liabilities

Figures in millions of NOK

	2006	2005
Outstanding accounts between separate portfolios under management	0	10 232
Pension and payment obligations (see Note 7)	-17	42
Other domestic liabilities	269	214
Other liabilities	252	10 488

Note 22. Deposits in krone account Government Pension Fund - Global

The Government Pension Fund – Global's krone account in Norges Bank is composed of deposits and returns earned from the time the Fund was established

in 1996 to end-2006. Management fees are deducted from the increase in value.

Figures in millions of NOK

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Tot.
Krone account 01.01	0.0	47.5	113.3	167.6	222.3	386.1	613.3	608.5	844.6	1 015.5	1 397.9	0.0
Total krone deposits	47.5	60.9	32.8	24.5	150.0	251.5	125.8	104.5	139.0	221.3	289.5	1447.3
Increase in value, return	0.0	4.9	21.5	30.2	13.8	-24.3	-130.6	131.6	31.9	161.1	94.7	334.8
Krone account 31.12	47.5	113.3	167.6	222.3	386.1	613.3	608.5	844.6	1 015.5	1 397.9	1782.1	1782.1

Note 23. Return on investments for the Government Pension Fund - Global

Figures in millions of NOK

Result	2006	2005
Interest income	43 014	27 815
Dividends	14 232	10 308
Exchange rate adjustments	-24 232	33 610
Unrealised gains/losses on securities	13 592	36 521
Realised gains/losses on securities	47 482	49 908
Brokers' commissions	-6	-19
Gains/losses on futures	-3 329	1 250
Gains/losses on options	126	0
Gains/losses on equity swaps	2 174	1 239
Gains/losses on interest rate swaps	3 183	1 756
Transferred to krone account	96 236	162 388
Accrued management remuneration	-1 526	-1 239
Consulting services	-5	0
Net transfer to krone account	94 705	161 149

Investments	2006	2005
Short-term assets, incl. deposits in foreign banks	6 918	23 784
Money market investments in foreign financial institutions against collateral in the form of securities	619 746	558 979
Borrowing from foreign financial institutions against collateral in the form of securities	-728 414	-438 717
Foreign fixed income securities	1 166 941	682 024
Foreign equities	720 256	576 683
Adjustment of forward contracts and derivatives	-1 777	-3 618
Total portfolio before management fees and consulting services	1 783 670	1 399 135
Accrued management remuneration	-1 526	-1 239
Consulting services	-5	0
Net portfolio	1 782 139	1 397 896

At 31 December 2006, the Government Pension Fund – Global had krone deposits in Norges Bank amounting to NOK 1 782.1bn. The equivalent of the NOK amount is managed by Norges Bank and has been invested in foreign currency in an earmarked portfolio. The return on the portfolio is added to the Government Pension Fund – Global's krone account as

return on this account. The investments, which account for about 80% of Norges Bank's balance sheet, therefore represent no financial risk to Norges Bank.

The Government Pension Fund – Global has obligations and rights which are shown as off-balance sheet items. These are specified in Notes 26 and 27.

Currency distribution of the Government Pension Fund - Global. Per cent

Currency	2006	2005
USD	31.8	34.4
CAD	1.9	2.0
Asian currencies	8.4	11.1
GBP	12.5	11.6
EUR	39.0	35.9
Other currencies	6.4	5.0
Total	100.0	100.0

Note 24. Adjustment Fund

Figures in millions of NOK

	2006	2005
Adjustment Fund balance at 01.01.	67 488	46 096
Allocation for the year	5 539	21 392
Adjustment Fund balance at 31.12.	73 027	67 488

Note 25. Other capital

In accordance with a statement from the Ministry of Finance, an item called 'Other capital', which includes the former Revaluation Fund, may be used. 'Other

capital' includes the undepreciated components of capitalised fixed assets expensed in 1994.

Changes in 'Other capital' in 2006:

Figures in millions of NOK

	2006	2005
Revaluation Fund balance at 01.01.	1 134	1 206
Reversals from the Fund in 2006	-37	-72
Revaluation Fund balance at 31.12.	1 097	1 134

Note 26. Obligations

Figures in millions of NOK

	2006	2005
International reserves		
Forward exchange contracts sold	8 928	18 639
Futures sold	28 117	27 959
Equity swaps sold	2 041	988
Interest rate swaps sold	161 611	89 465
Obligations sold, international reserves	200 697	137 051
Forward exchange contracts purchased	9 057	18 639
Futures purchased	29 609	27 891
Equity swaps purchased	2 647	1 059
Interest rate swaps purchased	161 690	89 081
Obligations purchased, international reserves	203 003	136 670
Government Pension Fund – Global		
Forward exchange contracts sold	49 313	32 348
Futures sold	119 085	88 091
Equity swaps sold	18 847	27 628
Interest rate swaps sold	1 041 312	650 156
Obligations sold, Government Pension Fund – Global	1 228 557	798 223
Forward exchange contracts purchased	49 313	32 348
Futures purchased	121 183	74 221
Equity swaps purchased	30 709	33 201
Interest rate swaps purchased	1 040 041	645 911
Obligations purchased, Government Pension Fund – Global	1 241 246	785 681

Norges Bank uses forward exchange transactions, listed futures contracts, interest rate swaps, equity swaps and options as part of its management of interest rate and exchange rate risk.

Forward exchange contracts

Forward exchange transactions are agreements for the purchase or sale of foreign exchange at an agreed future time at a predetermined rate.

Financial futures:

Listed futures contracts are agreements to purchase or sell a standardised quantity of a financial instrument, the value of an equity index or foreign currency, at a future date at a price set at the time of signing the contract. Collateral in the form of securities was pledged for changes in the daily market value settlement. The market value of these securities was NOK 1 757m at 31 December 2006.

Interest rate swaps:

A swap is an agreement between two parties to exchange payments at a number of given future times in accordance with a set of rules specified in the agreement. An interest rate swap is an agreement in which the payment obligations of both parties are determined either by interest rates which are fixed or by movements in a specific reference rate, multiplied by a notional principal. Net market value is calculated by discounting future cash flows in the interest rate swaps.

Equity swaps:

An equity swap is an unlisted agreement between two counterparties to exchange payment flows on the basis of changes in the underlying securities. In addition, payments are received in connection with dividends and corporate events. The underlying security may be an equity, a group of equities or an index. Collateral is required in the form of bank deposits.

Note 27. Rights

Figures in millions of NOK

	2006	2005
International reserves		
Futures options sold	3 451	759
Equity options sold	175	0
Swap options sold		5 225
Rights sold, international reserves	8 851	759
Futures options purchased	18 928	1 448
Equity options purchased	115	0
Swap options purchased	2 613	0
Rights purchased, international reserves	21 656	1 448
Government Pension Fund – Global		
Futures options sold	23 090	5 144
Equity options sold	1 065	0
Swap options sold	0	129
Rights sold, Government Pension Fund – Global	24 155	5 273
Futures options purchased	123 937	8 546
Equity options purchased	1 040	0
Swap options purchased	6 226	32
Rights purchased, Government Pension Fund - Global	131 203	8 578

Options:

An option is an agreement to buy or sell a right to buy or sell a standardised quantity of a financial instrument

on a future date at a price set at the time of signing the contract. Options may be listed or unlisted.

To the Supervisory Council of Norges Bank

Auditors' report for 2006

We have audited the annual financial statements of Norges Bank for 2006, which show a profit of NOK 5 502m. We have also audited the information in the Executive Board's report concerning the financial statements and the proposal for the allocation of the profit. The financial statements comprise the profit and loss account, balance sheet and notes to the accounts. Norges Bank's accounting policies, which are based on the Norwegian Accounting Act and on generally accepted accounting principles in Norway (see note to the financial statements), are used when preparing the financial statements. The financial statements and the Executive Board's report are the responsibility of the Executive Board. Our responsibility is to express an opinion on the financial statements and other information, in accordance with the requirements of the Norges Bank Act.

We have conducted our audit in accordance with the Norges Bank Act, instructions issued by the Supervisory Council and good auditing practice in Norway, including audit standards adopted by Den norske revisorforening (the Norwegian Institute of Public Accountants). These audit standards require that we plan and perform the audit so as to obtain reasonable assurance that the financial statements are free of material misstatements. An audit comprises a verification, on a test basis, of evidence supporting the amounts and disclosures in the financial statements, an assessment of the accounting principles and significant estimates applied, and an evaluation of the overall financial statement presentation. To the extent required by good auditing practice and our audit instructions, our audit also comprises a review of Norges Bank's capital management and accounting and internal control systems. We believe that our audit provides a reasonable basis for our opinion.

In our opinion,

- the financial statements have been presented in accordance with laws and regulations, and provide a true and fair view of the financial position of the Bank as of 31 December 2006 and of the results of its operations for the financial year in accordance with Norges Bank's accounting principles.
- the management has fulfilled its duty of producing a proper and clearly set out registration and documentation of accounting information in accordance with the law and good bookkeeping practice in Norway.
- the information in the Executive Board's report concerning the financial statements and the proposal for the allocation of the profit are consistent with the financial statements, and comply with the laws and guidelines adopted in the Council of State.

Oslo, 8 February 2007

Svenn Erik Forsstrøm
Central Bank Auditor
State Authorised Public Accountant (Norway)

Resolution of the Supervisory Council on the financial statements for 2006

In accordance with the prevailing guidelines for the allocation and distribution of Norges Bank's profit or loss, originally adopted by the Council of State on 7 February 1986, and most recently amended by Royal Decree of 6 December 2002, the Supervisory Council adopted the following resolutions at its meeting on 15 February 2007:

1. The Supervisory Council takes note of the Executive Board's annual report for 2006.
2. The Supervisory Council adopts, with reference to the Auditors' Report, the financial statements presented for 2006 and approves the following allocation of the profit for the year:
 - In accordance with a statement from the Ministry of Finance, the sum of NOK 37.1m is to be transferred from 'Other capital'. The amount is to be transferred to profit/loss for the year.
 - In accordance with point 1 of the guidelines, NOK 5 538.2m is to be allocated to the Adjustment Fund.
3. The Supervisory Council submits Norges Bank's financial statements for 2006 and the Executive Board's report for 2006, the auditors' report and the Supervisory Council's statement on the minutes of meetings of the Executive Board and its supervision of Norges Bank in 2006 to the Ministry of Finance for submission to the King and communication to the Storting.

The Supervisory Council's statement on the minutes of meetings of the Executive Board and its supervision of the Bank in 2006

Pursuant to Section 5, third paragraph of the Act relating to Norges Bank and the Monetary System (Norges Bank Act), the Supervisory Council adopted at its meeting on 15 February 2007 the following resolution, which, with reference to Section 30, second paragraph of the Norges Bank Act, is to be submitted to the Ministry of Finance for submission to the King and communication to the Storting.

The Supervisory Council supervises the Bank's operations and ensures that the rules governing the Bank's activities are observed. It organises the auditing of the Bank, including the appointment of a central bank auditor, and draws up instructions for Central Bank Audit. The Supervisory Council adopts the Bank's annual accounts and, on the recommendation of the Executive Board, approves the budget. It supervises companies owned wholly or partially by Norges Bank. In accordance with the Norges Bank Act, the Executive Board has executive and advisory authority in Norges Bank. The Executive Board is in charge of the Bank's operations and manages its resources. The Executive Board has the overriding responsibility for internal control in the Bank. The Supervisory Council supervises the Executive Board's exercise of its responsibility for management and control. Supervision does not include the Executive Board's exercise of its discretionary authority pursuant to the Act.

In 2006, the Supervisory Council supervised the Bank in accordance with the Norges Bank Act. As a basis for its supervision, the Supervisory Council has examined:

- the minutes of the Executive Board's meetings
- matters submitted by the Executive Board
- the Bank's budget and accounts
- Central Bank Audit's plan and budget
- audit reports and matters submitted by Central Bank Audit
- matters taken up by the Supervisory Council itself

The Supervisory Council has received all the information requested.

In 2006, the Supervisory Council had no comments concerning the minutes of Executive Board meetings. Nor has its supervision of the Bank's operations revealed circumstances that constitute grounds for special remarks pursuant to Section 30, second paragraph of the Norges Bank Act.

Ongoing changes in the Bank's organisation of control and auditing arrangements

Pursuant to the Norges Bank Act, the Supervisory Council organises the Bank's auditing and appoints the Central Bank Auditor. The Executive Board has not had its own auditing resources but has based decisions on the work conducted by Central Bank Audit.

Norges Bank has undergone substantial changes in recent years and is facing considerable challenges, not least as a result of its tasks relating to the management of the Government Pension Fund - Global. These tasks entail considerable challenges for the Bank's governing bodies relating to control and supervision of activities. At the same time, interest has increased and expectations are higher in society with regard to corporate governance and control.

Against this background, the Executive Board and the Supervisory Council have assessed in tandem important aspects of the Bank's control and audit arrangements within the framework of the Norges Bank Act. As a result of these assessments, the Executive Board, in consultation with the Supervisory Council, established an Audit Committee in 2006 and approved the establishment of an internal audit unit. At the same time, the Supervisory Council approved a new strategy for Central Bank Audit which involves developing it to become the Bank's statutory (external) auditor. In order to enhance Central Bank Audit's expertise, particularly in relation to investment management, cooperation with an international auditing company will be established.

The approved changes will be put into operation in the course of 2007. In the opinion of the Supervisory Council, this will contribute to strengthening the control and supervision arrangements of both the Supervisory Council and the Executive Board, not least in relation to investment management. The changes also involve an adaptation to internationally recognised principles of corporate governance and control.

Please refer to the discussion in the Report of the Executive Board.

Oslo, 15 February 2007
Norges Bank's Supervisory Council

Mary Kvidal
Chairman of the Supervisory Council

Liv Røsland
Deputy Chairman of the Supervisory Council

3

NORGES BANK'S ACTIVITIES



Chapter 1 Monetary policy

Flexible inflation targeting

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

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

Monetary policy influences the economy with a lag. Norges Bank sets the interest rate with a view to stabilising inflation close to the target in the medium term. The horizon will depend on the disturbances to which the economy is exposed and the effects on prospects for the path for inflation and the real economy.

The mandate for monetary policy in Norway

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

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

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

Norges Bank is responsible for the implementation of monetary policy.

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

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

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

The key policy rate – the monetary policy instrument

At the monetary policy meetings, the Executive Board sets the interest rate on banks' overnight deposits in Norges Bank – the sight deposit rate. Experience shows that the sight deposit rate has a fairly pronounced impact on the shortest money market rates, i.e. overnight and 1-week rates. Market rates for loans with longer maturities are influenced by the level of the sight deposit rate and by market expectations concerning developments in the sight deposit rate. Market expectations concerning the key policy rate reflect economic agents' perception of Norges Bank's monetary policy response pattern and economic developments. The purpose of Norges Bank's communication on monetary policy, which includes Norges Bank's interest rate projections in the *Monetary Policy Report* (previously *Inflation Report*), is to make it easier for economic agents to anticipate Norges Bank's response pattern. When Norges Bank's response pattern is predictable, the reaction of economic agents to new information about economic developments will have a stabilising effect.

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

It is important for Norges Bank that economic agents are able as far as possible to anticipate monetary policy decisions. Norges Bank regularly publishes assessments of the outlook for the global and Norwegian economy and the key key policy rate. When market participants understand the central bank's response pattern, the reaction of market rates to new information about economic developments has a stabilising effect.

Interest rate setting must be viewed in the context of Norges Bank's assessment of the current economic situation, inflation expectations and future developments in interest rates, inflation, output and employment. There is considerable uncertainty surrounding developments in these variables. Monetary policy cannot fine-tune

economic developments, but it can prevent the largest effects from occurring when the economy is exposed to disturbances. In some situations, it may be appropriate to guard against particularly adverse developments.

Decisions concerning interest rates and other important changes in the use of instruments are normally taken at the Executive Board's monetary policy meeting every sixth week. The basis for the Executive Board's decisions and assessments are made public through a press release and a press conference. The press release includes a detailed account of the main aspects of economic developments that have influenced the decision. The interest rate decision is published at a pre-announced time.



Transparency

According to Section 3 of the Norges Bank Act, Norges Bank shall inform the public about the monetary, credit and foreign exchange situation and about the assessments on which monetary policy decisions are based. According to Section 2 of the Regulation on Monetary Policy, Norges Bank shall regularly publish the assessments that form the basis for the implementation of monetary policy.

Table 1 provides an overview of the publications associated with the Executive Board's monetary policy decisions. The material is published in Norwegian and English simultaneously. In 2006, there were some minor changes in the procedure for publication of the background data.¹

Information for monetary policy meetings and time of announcement

Material	Announcement
The report with the Executive Board's monetary policy assessments and strategy and Norges Bank's interest rate projections is published three times a year and is the reference document for the interest rate decisions made during the following four months.	2 pm on the same day as the monetary policy meeting
Press release with an account of the assessments underlying the interest rate decision	2 pm on the same day as the monetary policy meeting
Charts presented at the monetary policy meeting by the central bank governor or the deputy governor ²	2 pm on the same day as the monetary policy meeting
A press conference where the central bank governor or deputy governor provides a more detailed explanation of the Executive Board's decision and the reasons for the decision. The press conference is accessible via live webcast, mobile TV and podcast.	2:45 pm on the same day as the monetary policy meeting
Report from the regional network ³	2 pm on the same day as the monetary policy meeting

¹ The English version of the reports from the regional network is published 2-3 days following the monetary policy meeting. In 2006, the press conferences were also made accessible via mobile TV and podcasts.

² Charts containing confidential information, such as forecasts from the OECD and the IMF which are not published, wage growth estimates for various groups based on confidential information from employers or employee organisations, data from specific enterprises or new, preliminary analyses from Norges Bank are not published.

³ The report is not published in its entirety as it contains confidential information about individual enterprises.

Three times a year, following every third monetary policy meeting, the *Monetary Policy Report* (previously *Inflation Report*) is published at the same time as the interest rate decision. In the Report, Norges Bank analyses the current economic situation and publishes its economic forecasts. Since *Inflation Report 3/05*, Norges Bank has published its own interest rate forecast. From using technical assumptions or others' assessments, Norges Bank has now taken ownership of the interest rate path. This interest rate forecast, which is published in the *Monetary Policy Report*, provides a reasonable balance between the objective of bringing inflation up towards the target and the objective of stabilising developments in output and employment.

Important elements in assessing whether an interest rate path is appropriate – that underline the importance of professional judgment in this assessment – are reflected in a set of criteria that should be satisfied. These criteria, which are listed in the *Monetary Policy Report*, form an important guide in forecasting an interest rate that provides a reasonable balance in monetary policy.

The central bank determines the shortest money market rates via the key policy rate. However, interest rate expectations are even more important for economic

agents' consumption and investment decisions. To be successful, monetary policy must influence these expectations. Norges Bank's publication of its interest rate forecast may make it easier for economic agents to understand the Bank's intentions in its interest rate setting. Transparency surrounding Norges Bank's assessments on monetary policy trade-offs makes monetary policy more predictable and effective. This may promote stability in output and employment and in inflation. Forecasts based on an interest rate path that is most realistic in Norges Bank's view also make it easier to interpret and evaluate the Bank's projections. Market participants may nevertheless have a different perception of the prospects for inflation and output and hence the interest rate.

The forecasts for the interest rate and other economic variables are based on incomplete information about the current economic situation and the functioning of the economy. If developments in the economy's driving forces differ from the assumptions or if the central bank changes its view of the functioning of the economy, developments in the interest rate and other variables will deviate from the forecasts. This is illustrated in the fan charts.¹ The wider the fan, the more uncertain the forecasts.

¹ The uncertainty associated with the forecasts is discussed in more detail in *Inflation Report 3/05*.

Uncertainty surrounding the current situation

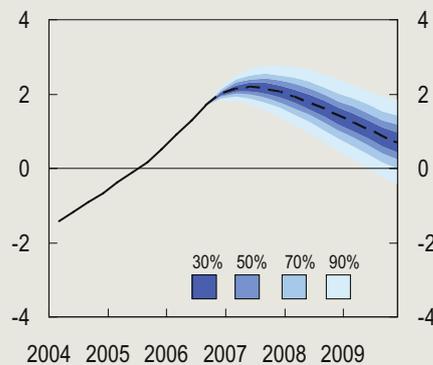
The output gap represents a summary and quantification of resource shortages in the economy. A period with a positive output gap is normally referred to as a boom, while a negative output gap indicates that there is spare capacity in the economy. In a more technical sense, the output gap may be described as the difference between actual output in the economy and potential output. Potential output is usually defined as the level of output that is consistent with stable inflation over time.

The output gap is not observable and must be estimated. Different calculation methods and fairly extensive data revisions entail substantial uncertainty surrounding the estimates, not only the estimates of the future output gap but also today's output gap.¹

Norges Bank's estimate of the output gap is based on an evaluation of the driving forces in the economy, different calculation methods and information from alternative indicators. The overall assessment is based on professional judgment. This reduces the uncertainty of the estimates.

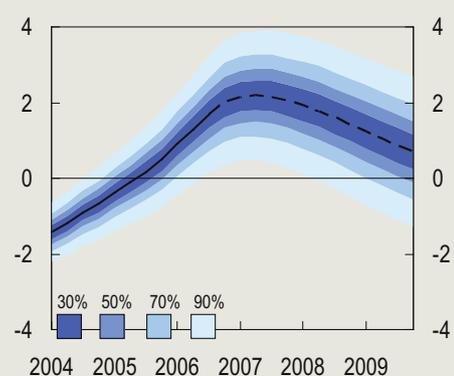
The fan surrounding the estimates of the future output gap in Chart A illustrates that future developments are uncertain. The calculations, which have been made using a small macroeconomic model, are based on recent years' experience (see box in *Inflation Report 3/05*). Chart B shows the uncertainty surrounding the output gap when we also take account of the uncertainty surrounding the current situation and the historical output gap. Historical output gaps may have a somewhat lower standard deviation because over time it is easier to distinguish between changes in potential output and temporary disturbances to output. Therefore, uncertainty declines when moving backwards in time.

Chart A Estimated output gap in IR 3/06 with a fan chart illustrating uncertainty. Per cent. 2004 Q1–2009 Q4



Source: Norges Bank

Chart B Estimated output gap in IR 3/06 with a fan chart illustrating uncertainty about the past, present and future. Per cent. 2004 Q1–2009 Q4



Source: Norges Bank

¹ See box "Output gap uncertainty" in Inflation Report 3/06.

On the basis of the analysis in the *Monetary Policy Report*, the Executive Board adopts a monetary policy strategy every fourth month for the next four months. The strategy is published at the beginning of the relevant strategy period, and it is based on the assumption that economic developments will be broadly in line with projections. Interest rate decisions taken at the monetary policy meetings held during the strategy period are based on this monetary policy strategy.

The conduct of monetary policy requires a reliable stream of information concerning economic developments. In 2006, approximately 1500 private and public enterprises in Norges Bank's regional network were interviewed about output and price developments and plans for investment and employment. Combined with available official statistics, the reports from the regional network form an important part of the decision-making basis. The reports are published in connection with

the *Monetary Policy Report* (see box).

Norges Bank exercises professional judgment in interest rate setting. As a guide in the exercise of this judgment, Norges Bank uses analytical tools and economic models that describe relationships in the economy. The models combine and apply empirical and theoretical knowledge on the functioning of the Norwegian economy, contributing to a consistent analysis of the interaction between different economic variables. Through 2006, Norges Bank further developed these models and used them among other things to discuss the effects of different types of disturbances to both the supply and demand side of the Norwegian economy. In the *Inflation Reports* in 2006, emphasis was also placed on illustrating the uncertainty surrounding the projections and on analysing the mone-

etary policy response if the Bank should be mistaken about key developments in the Norwegian economy, or if particular risk factors should become dominant.

To assure the quality of the analyses and the basis for decisions, the Bank maintains close contact with other central banks and the international academic community. Economists from other central banks and academic institutions in Norway and abroad are regularly invited to Norges Bank to evaluate the quality of the Bank's monetary policy analysis. In 2006, in connection with the publication of the *Annual Report* for 2005, Norges Bank arranged a conference on evaluating monetary policy. The keynote speakers included representatives of the Bank of England, Sveriges Riksbank, the European Central Bank and London School of Economics.

Work on macroeconomic models

Norges Bank's forecasts constitute an important component in the conduct of monetary policy. Since *Inflation Report 3/05*, demand, output and inflation forecasts have been based on Norges Bank's own interest rate forecasts. The forecasts of the interest rate and other economic variables are interdependent. Current information about economic developments, judgment and various economic models are all employed in the forecasting work. Economic models are therefore useful tools in the conduct of monetary policy. The development of economic models is a continuous process governed by what we know at any given time about the economy and the functioning of monetary policy, and the relationships we wish to examine using the models. Like most other central banks, Norges Bank uses several models. The various models are used to analyse different issues and are therefore based on different theoretical and empirical methods.

In recent years, Norges Bank has focused on developing both existing and new models. In autumn 2003, Norges Bank began work to establish models in a new forecasting and analysis system. In 2004, a small, calibrated macro model was developed to provide support for the macroeconomic and monetary policy analysis.¹ This model is an important tool in Norges Bank's work on the *Monetary Policy Report*.²

The Bank continued its work to develop the model system through 2006. In autumn 2004, the Bank initiated a project to develop NEMO, a somewhat larger macro model for the Norwegian economy. This model is based on newer macroeconomic research and model development in other central banks and in academia. The development and documentation of the model were completed in 2006.³ The model has the same fundamental properties as the small, calibrated model, but it describes more fully the effects of monetary policy on output and prices. It allows us to discuss the impact of various types of disturbances to both the supply and demand side of the Norwegian economy. In 2006, the model served as a supplement to the ordinary model-based analyses. NEMO will gradually be put to use in the Bank's analyses as we gain experience.

In autumn 2006, the Bank started constructing several kinds of empirical models as a further support in forecasting the current situation and short-term developments. Norges Bank has already begun using ARIMA and VAR models and different indicator models (see box in *Inflation Report 2/06*). The new project involves a more systematic and thorough review of different empirical forecasting models. Norges Bank is also developing factor models which have not been used previously by the Bank. These types of models have been found to have good forecasting properties and are used by other central banks.

¹ See Staff memo no. 3, 2004 for documentation of this model. <http://www.norges.bank.no/english/publications>

² See article in Economic Bulletin 3/06, "Forecasting in Norges Bank" for a description of how the model is used in a larger system of forecasting and monetary policy analysis.

³ For documentation of NEMO, see Staff memo, no. 6, 2006. <http://www.norges-bank.no/english/publications>

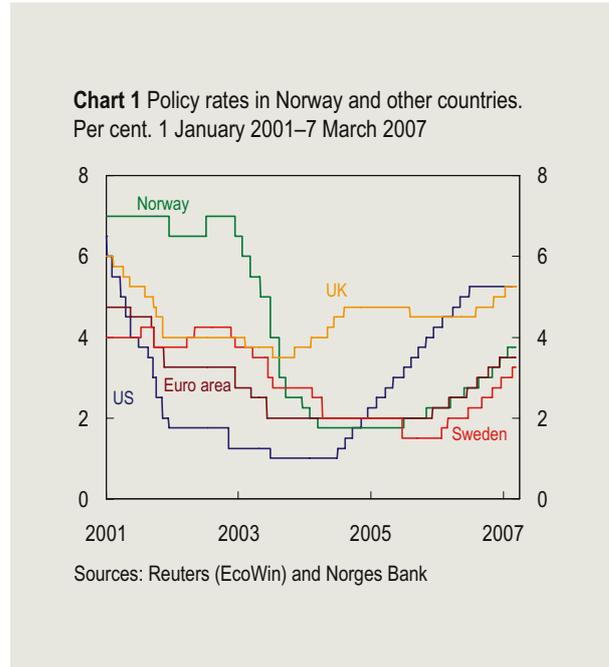
Monetary policy in 2006

Developments in the period to 2006

Monetary policy influences the economy with a lag. Inflation and output and employment in 2006 are the result of monetary policy trade-offs made in the previous years and unforeseen disturbances to the economy.

When inflation fell and approached zero in tandem with spare capacity in the Norwegian economy, the key policy rate was reduced by 5.25 percentage points from December 2002 to March 2004, primarily with a view to preventing inflation expectations from becoming entrenched well below target. Weak growth in the world economy led to low interest rates in many other countries (see Chart 1). Norges Bank indicated that the interest rate would remain low until there were clear indications that inflation was beginning to rise.

Since early summer 2005, monetary policy has been oriented towards a gradual increase in the key policy rate – in small, not too frequent steps – towards a more normal level.

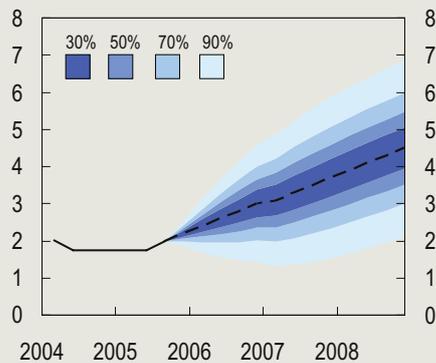


Low interest rates, coupled with strong and sustained growth in the global economy and high oil prices, have contributed to solid growth in the Norwegian economy. At the beginning of 2006, the Norwegian economy entered its third year of a clear economic upturn. Capacity utilisation was somewhat above its normal level.

In 2005, overall consumer prices had increased by 1½% from the year before. Consumer price inflation adjusted for tax changes and excluding energy products was 1%. The rise in prices for both imported and domestically produced goods and services had been weaker than expected. The key policy rate was 2.25%. The interest rate forecast in *Inflation Report 3/05* implied that the interest rate would be increased gradu-

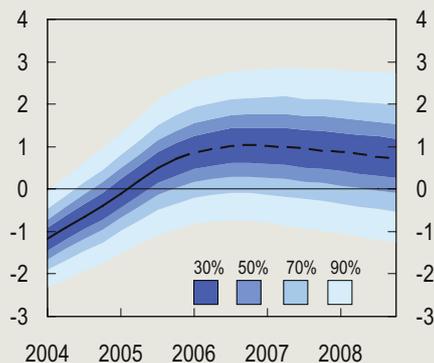
ally towards a more normal level (see Chart 2). In the Executive Board's view, this interest rate path would provide a reasonable balance between the objective of bringing inflation up towards the target and the objective of stabilising developments in output and employment. The output gap was expected to increase to about 1% in 2006 and then to edge down again (see Chart 3). Consumer price inflation (CPI) was expected to rise to just under 3% in the period to the first quarter of 2006, and then fall somewhat again through the rest of the year (see Chart 4). This path was marked by the expected increase in energy prices. Inflation adjusted for tax changes and excluding energy prices (CPI-ATE) was expected to edge up gradually and approach 2½% in 2008 (see Chart 5).

Chart 2 Inflation Report 3/05: Sight deposit rate in the baseline scenario with a fan chart illustrating uncertainty. Per cent. 2004 Q1–2008 Q4



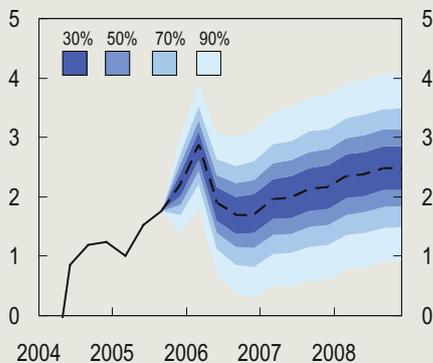
Source: Norges Bank

Chart 3 Inflation Report 3/05: Estimated output gap in the baseline scenario with a fan chart illustrating uncertainty about the past, present and future. Per cent. 2004 Q1–2008 Q4.



Source: Norges Bank

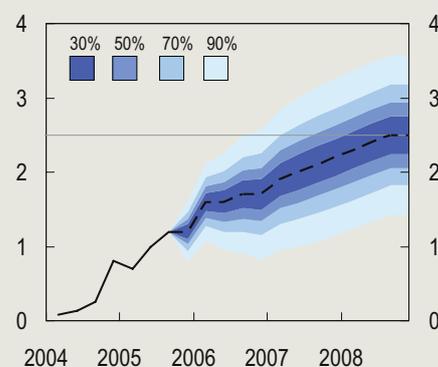
Chart 4 Inflation Report 3/05: Projected CPI in the baseline scenario¹⁾ with a fan chart illustrating uncertainty. Per cent. 4-quarter rise. 2004 Q1–2008 Q4



¹⁾ In IR 3/05, projections are published on a monthly basis. The quarterly path is calculated on the basis of these projections.

Sources: Statistics Norway and Norges Bank

Chart 5 Inflation Report 3/05: Projected CPI-ATE in the baseline scenario¹⁾ with a fan chart illustrating uncertainty. 4-quarter growth. Per cent. 2004 Q1–2008 Q4

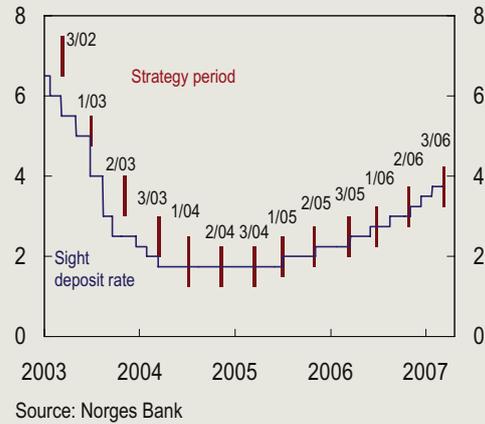


¹⁾ CPI-ATE: CPI adjusted for tax changes and excluding energy products

Sources: Statistics Norway and Norges Bank

Monetary policy in 2006

Chart 6 Interval for the sight deposit rate at the end of each strategy period and actual developments. Per cent. 1 January 2003–15 March 2007



The monetary policy meeting on 25 January

In the period to the monetary policy meeting at the end of January, the fall in registered unemployment and the increase in the number of vacancies could have indicated that the labour market was tightening more rapidly than expected. House prices continued to rise and credit growth had accelerated further. These factors indicated a high level of activity in some sectors of the economy. On the other hand, both imported and domestic inflation had been lower than expected. The Executive Board concluded that the upside and downside risks had become somewhat more pronounced, but that this did not as a whole provide grounds for changing the assessment of the outlook for the Norwegian economy. The analyses in *Inflation Report 3/05* implied an increase in the interest rate in the first quarter of 2006 at the monetary policy meeting in January or March, and a further increase thereafter. New information that emerged in the period to the monetary policy meeting on 25 January provided mixed signals. In line with the strategy, the interest rate was left unchanged at 2.25%.

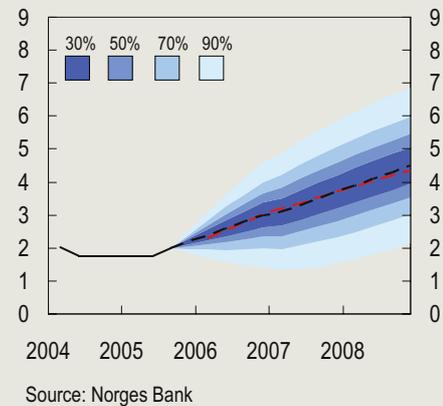
The monetary policy meeting on 16 March and *Inflation Report 1/06*

In the period to the monetary policy meeting in March, consumer price inflation had been lower than expected. Output growth was strong, and employment was rising more rapidly than expected. *Inflation Report 1/06* was presented in March. The analyses implied that the interest rate would be brought back towards a more normal level. The Executive Board pointed out that continued high growth in output and employment would result in higher price and cost inflation, although this might take time. The objective of bringing inflation back towards the target and anchoring inflation expecta-

tions implied a continued expansionary monetary policy.

In isolation, the unexpectedly low inflation at the beginning of the year had pushed down the interest rate forecast compared with the forecast in *Inflation Report 3/05*. At the same time, the interest rate forecast was in isolation pushed up by unexpectedly rapid economic growth, prospects of higher petroleum investment and the increase in government revenues resulting from higher oil prices and a weaker-than-assumed krone exchange rate. On the whole, this indicated an interest rate path close to the path which was projected in *Inflation Report 3/05* (see Chart 7).

Chart 7 Sight deposit rate in the baseline scenario in IR 3/05 (black) with a fan chart illustrating uncertainty and the projected sight deposit rate in IR 1/06 (red). Per cent. 2004 Q1–2008 Q4



With this development in the interest rate, capacity utilisation was expected to increase over the next two years (see Chart 10). Consumer price inflation (CPI) was expected to fall somewhat in the period to winter and thereafter to edge up (see Chart 11). Inflation adjusted for tax changes and excluding energy products was expected to increase from the current level of 1¼% to 2% at end-2007 (see Chart 12). A further interest rate increase would stabilise growth in output and employment, and capacity utilisation in the economy might gradually decline somewhat. This would curb the rise in inflation, so that it would stabilise close to target.

One of the risk factors highlighted by the Executive Board was that consumer price inflation excluding energy products had been unexpectedly low in recent years. Persistently low inflation might imply that the interest rate should be increased more slowly than in the baseline scenario. It was also pointed out that real interest rates had been very low for a period. If economic growth proved to be stronger than projected, this would in isolation suggest a more rapid rise in interest rates to prevent increased resource shortages.

The Executive Board's monetary policy strategy

implied a sight deposit rate in the interval 2¼ - 3¼% in the period to the publication of the next *Inflation Report* on 30 June 2006, conditional on economic developments being broadly in line with the projections. The sight deposit rate was increased by 0.25 percentage point to 2.50% at the monetary policy meeting.

The monetary policy meeting on 26 April

In the period to the monetary policy meeting in April, employment rose more rapidly than expected. Credit growth and the rise in house prices had accelerated. Prices for oil and other commodities had picked up further. Consumer price inflation had been as expected. CPI inflation had edged up as a result of a marked rise in energy prices. The year-on-year rise in the CPI-ATE remained low at 0.9% in March. A similar rise in indicators that place less emphasis on extreme price changes had been around 1½%. At the same time, the krone was stronger than expected. Overall, the Executive Board was of the opinion that there were insufficient grounds for changing the outlook for inflation and output or the risk assessment. In line with the strategy, the interest rate was therefore left unchanged at 2.50%.

The monetary policy meeting on 31 May

New information prior to the monetary policy meeting in May confirmed that activity in the Norwegian economy was high. Employment was increasing faster and unemployment had fallen more than expected. The Executive Board pointed out that there were now signs of capacity constraints in a number of industries. Equity prices fell somewhat in May, but so far there were no indications that financial market turbulence would have substantial negative effects on domestic or global economic growth. There were expectations of a further increase in interest rates among our trading partners. Consumer price inflation had increased more rapidly than expected due to a marked increase in energy prices. Inflation, excluding energy products, remained low. The krone had appreciated further. It was likely that continued high growth in output and employment would result in higher price and cost inflation, although this might take time. In line with the monetary policy strategy, the interest rate was raised by 0.25 percentage point to 2.75%.

The monetary policy meeting on 29 June and *Inflation Report 2/06*

At the monetary policy meeting in June, the Executive Board pointed out that the unexpectedly slow rise in prices for domestically produced goods and services might be a sign of solid productivity growth and intensified competition. Economic growth was strong and capacity utilisation was higher than previously expected. Employment had accelerated and unemployment was now falling rapidly.

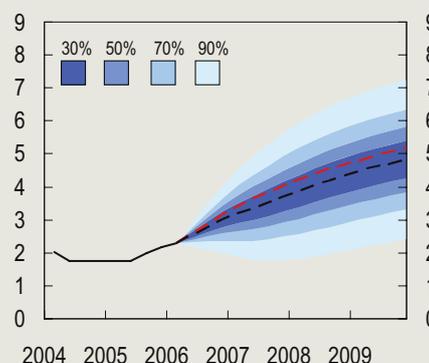
In *Inflation Report 2/06*, the interest rate forecast was somewhat higher than in the previous *Report*, i.e. an average of ¼ percentage point higher for 2007 and 2008, primarily due to strong growth and labour market tightening (see Chart 8). In addition, high oil prices had influenced the outlook for fiscal policy. In isolation, low inflation and the stronger-than-expected krone had lowered the interest rate path. This effect was partly offset by lower spare capacity in the global economy and high commodity prices that could result in higher-than-expected imported price inflation.

It was the Executive Board's assessment that the interest rate in the baseline scenario was sufficiently low to allow inflation to pick up and approach the target of 2.5%. At the same time, the increase in the interest rate was sufficient to avoid a capacity utilisation level that was too high. The output gap was expected to remain positive through the period (see Chart 10). A gradual increase in the interest rate would curb demand growth after a period. High electricity prices and high oil prices were expected to keep overall consumer price inflation (CPI) above 2% through 2006. In 2007, consumer price inflation would slow as a result of a fall in energy prices (see Chart 11). Inflation adjusted for tax changes and excluding energy products was expected to increase towards 1¾% at end-2007 (see Chart 12). Inflation was expected to approach the target of 2.5% at the three-year horizon.

It was pointed out that pronounced shifts in the import pattern, a strong krone and intensified domestic competition might lead to lower-than-projected inflation. However, a long period of low real interest rates might result in more rapid output and employment growth and higher-than-projected price and cost inflation.

The Executive Board's monetary policy strategy implied a sight deposit rate in the interval 2¼ - 3¼% in the period to 1 November, conditional on economic

Chart 8 Sight deposit rate in the baseline scenario in IR 1/06 (black) with a fan chart illustrating uncertainty and the projected sight deposit rate in IR 2/06 (red). Per cent. 2004 Q1 – 2009 Q4



Source: Norges Bank

developments being broadly in line with projections. The Executive Board's assessment was that the interest rate should gradually - in small, not too frequent steps - be brought back towards a more normal level. In the first six months of 2006, the interest rate was increased in two increments of 0.25 percentage point. The Executive Board's assessment was that the interest rate would increase further at approximately the same pace. The interest rate was left unchanged at 2.75% at the monetary policy meeting on 29 June.

The monetary policy meeting on 16 August

At the monetary policy meeting on 16 August, the Executive Board pointed out that capacity constraints and a shortage of skilled labour posed a mounting challenge to a number of industries. Corporate earnings were very high. Household and corporate borrowing remained high and property prices had risen markedly. These factors pointed to a higher interest rate. Overall consumer price inflation had developed approximately as expected. The year-on-year rise in the CPI was 2.2% in June. The rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) was 0.6%, which was lower than expected. Indicators that place less emphasis on extreme price changes were stable at around 1½%. The krone exchange rate had depreciated somewhat but was still fairly strong. On balance, the Executive Board was of the view that there were not sufficient grounds for changing the outlook for inflation and output or the risk assessment. In line with the strategy, the interest rate was raised by 0.25 percentage point to 3%.

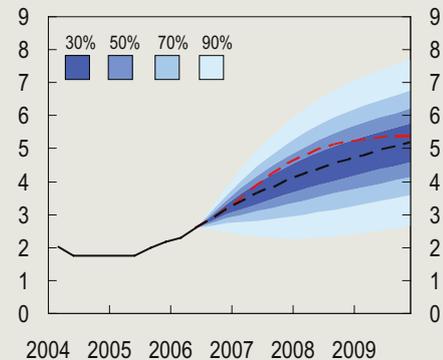
The monetary policy meeting on 27 September

New information that emerged in the period to the monetary policy meeting in September provided mixed signals. The Executive Board pointed out that there was little spare capacity in the Norwegian economy. A steadily rising share of enterprises lacked the capacity to accommodate increased demand, largely due to labour shortages. The labour market had become considerably tighter and there were signs that wage growth was picking up. Developments in aggregate demand, output and employment implied a higher interest rate. At the same time, the rise in consumer prices had slowed, and the rise in prices excluding energy products was unexpectedly low. This implied a continued low interest rate. The strategy published in the *Inflation Report*, coupled with new information, indicated that the interest rate should be left unchanged at 3%.

The monetary policy meeting on 1 November and *Inflation Report 3/06*

When *Inflation Report 3/06* was published in November, the US economy was showing signs of a slowdown after several years of strong growth.

Chart 9 Sight deposit rate in the baseline scenario in IR 2/06 (black) with a fan chart illustrating uncertainty and projected sight deposit rate i IR 3/06 (red). Per cent. 2004 Q1 – 2009 Q4



Source: Norges Bank

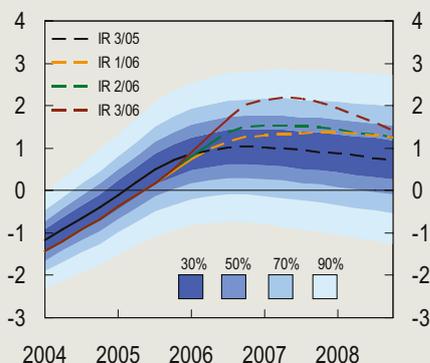
Nevertheless, it appeared that growth in the world economy would remain buoyant. It was pointed out that the weight of China, India and other Asian economies in the world economy was rising. In the euro area, and to some extent in Japan, the upturn had broadened, and dependence on the US economy had been reduced somewhat. Underlying inflation had been lower than expected in recent months, although several factors pointed to higher inflation ahead. The upturn in the Norwegian economy was stronger than projected earlier, and capacity utilisation in the economy had increased. Employment was rising rapidly and unemployment was now at the level prevailing during the last boom at the end of the 1990s. The krone exchange rate had depreciated from strong values.

The interest rate forecast in *Inflation Report 3/06* was approximately ½ percentage point higher than that presented in the previous *Report*, measured as an average for 2007 and 2008 (see Chart 9). In isolation, low inflation and prospects of relatively moderate growth in labour costs in 2006, strong competition in product markets, high productivity growth and an increase in the share of imports from low-cost countries pointed to a lower interest rate path.

The unexpectedly strong upturn and high capacity utilisation in the Norwegian economy nevertheless pointed to prospects of higher cost inflation. Combined with a weaker krone, this pointed to a higher interest rate path.

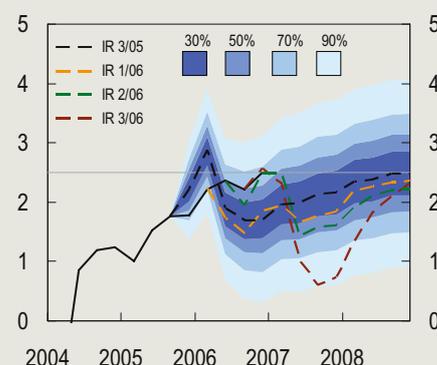
Given the interest rate path in the central projection, a continued rise in capacity utilisation and a further tightening of the labour market were expected (see Chart 10). Compared with the previous *Inflation Report*, inflation was projected to increase at a somewhat later point in time. The output gap was expected to reach 2¼% in 2007 and to fall gradually thereafter.

Chart 10 Estimated output gap in IR 3/05 with a fan chart illustrating uncertainty about the past, present and future, and projections in Inflation Reports in 2006. Per cent. 2004 Q1–2008 Q4



Source: Norges Bank

Chart 11 Projected CPI¹⁾ in IR 3/05 with a fan chart illustrating uncertainty and projections in Inflation Reports in 2006. Per cent. 2004 Q1 – 2008 Q4



¹⁾ In IR 3/05 and IR 1/06 quarterly figures are based on monthly projections.

Sources: Statistics Norway and Norges Bank

High capacity utilisation, rising wage growth and somewhat slower productivity growth were expected to lead to higher inflation, particularly from the second half of 2007 and into 2008. High electricity prices could keep overall inflation, measured by the CPI, above 2% until summer 2007 (see Chart 11).

Subsequently, energy prices were expected to fall, resulting in a marked fall in CPI inflation. Inflation adjusted for tax changes and excluding energy products (CPI-ATE) was expected to increase from 0.7% to nearly 2% in the first half of 2008 (see Chart 12). Inflation was then likely to approach the target of 2.5% at the three-year horizon.

The Executive Board pointed out that new information might reveal aspects of economic developments that could indicate that the Norwegian economy was moving on a different path than projected. On the one hand, stronger shifts in trade patterns, increased competition, weaker global growth or a stronger krone exchange rate might result in low inflation. On the other hand, low real interest rates or a further depreciation of the krone might lead to a higher-than-projected rise in output and inflation.

The Executive Board's monetary policy strategy implied a sight deposit rate in the interval 3¼–4¼% in the period to the publication of the next *Inflation Report* on 15 March 2007, conditional on economic developments being broadly in line with the projections. The interest rate might gradually be raised to a

more normal level at a somewhat faster pace than the Executive Board had envisaged earlier, although it was unlikely that the key policy rate would be raised at every monetary policy meeting. The Executive Board's assessment was that the interest rate would thus continue to be raised in small, not too frequent steps. The interest rate was increased by 0.25 percentage point to 3.25% at the monetary policy meeting.

The monetary policy meeting on 13 December

New information since the previous monetary policy meeting was broadly in line with the projections in *Inflation Report 3/06*. Employment was rising rapidly and unemployment had fallen markedly. A steadily rising number of enterprises were facing labour shortages. Wage growth appeared to be on the rise. Inflation had been somewhat higher than expected. The krone exchange rate was somewhat stronger than assumed. The strategy published in the *Inflation Report*, coupled with new information implied that the interest rate should be increased by 0.25 percentage point to 3.50%.

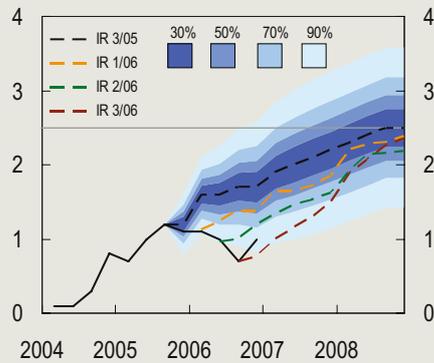
The economic situation at the end of 2006

Economic growth was considerably higher than expected in 2006. The first national accounts figures published for 2006 show annual growth in mainland GDP of 4.6%. This is 1¼ percentage points higher than pro-

Table 1 Annual projections for 2006 in various Inflation Reports

	IR 3/05	IR 1/06	IR 2/06	IR 3/06	Actual
Growth in mainland GDP	3 ¼	3 ½	3 ¾	4	4.6
Registered unemployment	3 ¼	2 ¾	2 ¾	2 ½	2.6
Output gap	1	1	1 ¼	1 ½	
Rise in CPI	2	1 ¾	2 ¼	2 ¼	2.3
Rise in CPI-ATE	1 ¾	1	¾	¾	0.8

Chart 12 Projected CPI-ATE¹⁾ in IR 3/05 with a fan chart illustrating uncertainty and projections in Inflation Reports in 2006. Per cent. 2004 Q1–2008 Q4



¹⁾ CPI-ATE: CPI adjusted for tax changes and excluding energy products. An adjustment is also made for the estimated effect of a reduction in maximum day-care rates from January 2006.

Sources: Statistics Norway and Norges Bank

jected in *Inflation Report 3/05*. Employment growth was considerably stronger than expected in 2006 (see Chart 13), and unemployment fell more than expected. In addition, the supply of foreign labour increased.

Economic growth was projected to be considerably higher than growth in potential output through 2006. According to Norges Bank's assessment, capacity utilisation increased more than assumed in *Inflation Report 3/05*. The estimate for the output gap in 2006 was revised upwards by ½ percentage point to 1½%.

Due to a stronger-than-expected rise in prices for energy products, the rise in the overall consumer price index in 2006 was somewhat higher than projected in *Inflation Report 3/05*. Low inflows to water reservoirs pushed up consumer prices for electricity throughout

the year in spite of normalised reservoir levels towards the end of the year. Petrol prices also contributed to pushing up overall inflation in the period to autumn.

Inflation excluding changes in energy prices was markedly lower than expected, in spite of strong developments in the real economy. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) was 0.8% in 2006, while the projection in *Inflation Report 3/05* was approximately 1¼%. Other indicators of underlying inflation were somewhat higher than the CPI-ATE. At the end of 2006, underlying inflation was estimated to lie in a range of a little less than 1¼% and up to 1¾%.

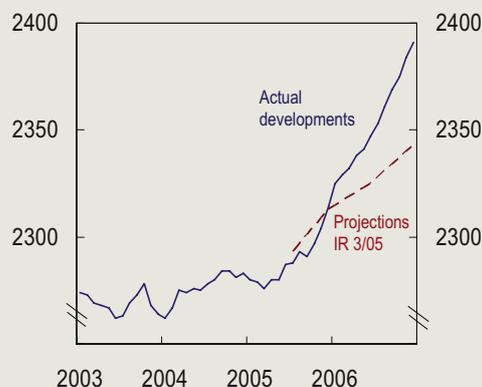
Prices for imported consumer goods fell by 0.5% from 2005 to 2006. This was broadly in line with expectations. However, the rise in prices for domestically produced goods and services was considerably lower than projected. In *Inflation Report 3/05*, Norges Bank envisaged domestic inflation of about 2.5% in 2006. Actual inflation was 1.6%, adjusted for the effect of the introduction of maximum day-care rates from January 2006.

Historically, there has been a close relationship between the rise in prices for domestically produced goods and services and the level of the output gap. This relationship was broken in 2006 (see Chart 14).

Surprisingly low inflation through 2006, in spite of considerably stronger growth in output and employment, may indicate that developments have been marked by conditions on the supply side of the economy.

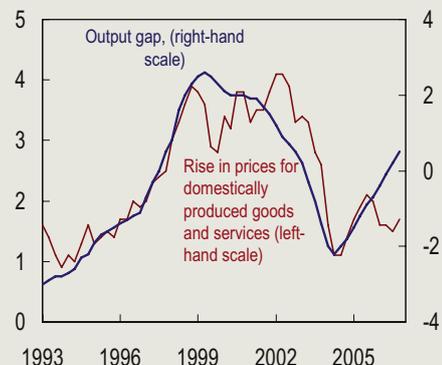
Competition has increased in Norway in a number of industries. Increased inward labour migration in recent years has probably curbed wage growth in sectors where activity is high, e.g. in the construction industry. In recent years, new operators have entered markets that were previously fairly sheltered from competition. Examples include the grocery trade, building materials,

Chart 13 Employment (LFS). Actual developments and projections in IR 3/05. In thousands. Seasonally adjusted. Monthly figures. January 2003–December 2006



Sources: Statistics Norway and Norwegian Labour and Welfare Organisation (NAV)

Chart 14 Rise in prices for domestically produced goods and services in the CPI-ATE¹⁾ (4-quarter rise) and output gap level (lagged by 4 quarters). 1993 Q1–2006 Q4



¹⁾ Adjusted for tax changes and excluding energy products

Sources: Statistics Norway and Norges Bank

The regional network in 2006

Norges Bank's regional network was established in autumn 2002 and consists of enterprises, local authorities and regional health enterprises. The network is nationwide and is divided into seven regions. Five times in 2006, representatives from Norges Bank have interviewed business and community leaders concerning developments in their enterprises and industries. Each round of talks has comprised about 290 visits. The network comprises approximately 1500 individuals who reflect the production side of the Norwegian economy, both in terms of industry sector and geographic area. For six of the regions, Norges Bank has engaged regional research institutions to be responsible for the network in their respective regions. The research institutions are the The National Centre for Innovation and Entrepreneurship in Bodø, the Centre for Economic Research at the Norwegian University of Science and Technology (NTNU), Møreforskning in Molde, International Research Institute of Stavanger (IRIS), Agder Research and the Eastern Norway Research Institute (ENRI). In addition, Norges Bank covers a region consisting of four counties in Eastern Norway.

Some of the main impressions from the network in 2006 are:

- In 2006, there was solid growth in demand and output in all industries. Growth was expected to slow somewhat in the first half of 2007 primarily due to capacity shortages.
- The export industry reported solid growth in 2006. The engineering industry, shipbuilding, fish farming and furniture manufacturing reported strong growth.
- Demand for domestically manufactured goods was solid through the year. Domestic manufacturing supplying goods to building and construction, the petroleum sector and fish farming reported the strongest growth.
- Suppliers to the petroleum industry experienced strong growth throughout 2006, with the strongest growth in the first half of the year. This strong growth was a result of high oil prices and record-high investment in the petroleum sector. Growth was expected to be somewhat lower in the period ahead, partly because activities at the Ormen Lange and Snøhvit fields have passed the peak and partly because of capacity constraints.
- Growth in the building and construction sector was solid but slowed through 2006. Labour shortages seemed to be curbing growth in this industry.
- Retail trade reported solid growth in 2006. Growth was particularly strong for consumer durables such as kitchens, furniture, electrical goods and building materials. Service industries reported solid growth throughout 2006. Corporate services reported the strongest growth. Commercial services reported particularly strong growth.
- Capacity utilisation increased through 2006. In November 2006, 66% of the companies reported that they would have some or considerable problems in accommodating an increase in demand. In February 2006, the share was 49%, primarily due to labour shortages.
- Investment increased in all industries in 2006, in pace with increased activity. Services and the local government and hospital sectors expected the strongest growth in investment.
- The high activity level resulted in marked employment growth in 2006. Employment growth was strongest in building and construction and services.
- The labour market tightened through 2006. In November, 56% of the companies reported that labour shortages would impose a constraint if demand increased. In February, the share was 34%. Constraints due to labour shortages were most pronounced in building and construction, although the problem increased in other industries through the year. Engineers in particular were in short supply, followed by skilled workers for manufacturing and building and construction.
- Expectations concerning annual wage growth in 2006 increased through the year. In November 2006, annual wage growth was expected to be 4¼% on average. The rise in selling prices gathered pace through the year, and in November price increases were the highest ever registered in the regional network. Building and construction, manufacturing and corporate services reported the sharpest rise in prices. A majority of companies expected a higher rise in prices in 2007 than in 2006.
- Profitability improved in all industries in 2006.

In 2006, the network was also used to examine a number of current issues. A price-setting survey was conducted and companies were asked about their use of foreign labour and whether they hedged against currency fluctuations. The contacts were also asked how they solved the problem of labour shortages.

telecommunications and banking and insurance. At the same time, productivity growth has been high both in Norway and abroad. Purchasing schemes in retail trade have become more efficient. The number of chains has increased and competition has intensified.

The integration of new large emerging economies such as China and India into world trade, in conjunction with lower tariffs and reduced trade barriers, also contributed to a decline in prices for imported finished goods in 2006. New producer countries with very low cost levels and increasingly efficient production have contributed to a low rise in prices for other goods as well. Global competition has increased.

When the economy is exposed to unexpected disturbances, monetary policy must be oriented towards bringing inflation back to target over time while avoiding wide variations in output and employment. It takes time for interest rate changes to affect developments in the real economy, and it takes even longer for the changes to have a clear impact on inflation. How long Norges Bank takes to reach the inflation target depends on the nature of the disturbances to which the economy has been exposed. In this context, it is important to differentiate between supply-side disturbances and demand-side disturbances.

When low inflation is primarily a result of favourable developments on the supply side in both the international and Norwegian economy, the challenges facing monetary policy are different from those arising when developments are marked by demand-side conditions. A favourable supply-side shock may result in both lower inflation and higher output. In this situation, the interest rate should be set at a low level that generates sufficient demand to use the increased production capacity in the economy. In practice, it may be difficult in real time to identify the kind of disturbances to which the economy has been exposed. Favourable supply-side

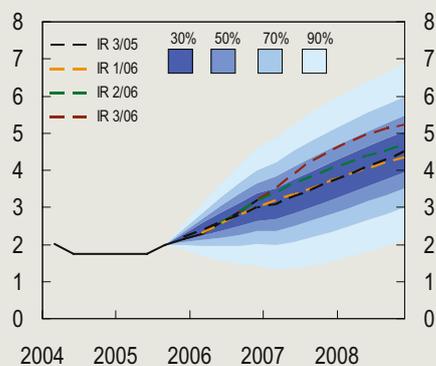
developments in some sectors of the economy may occur in tandem with high demand and production constraints in other sectors of the economy.

The interest rate was reduced to a very low level when inflation fell and approached zero. At the same time, Norges Bank indicated that the interest rate would remain low until there were clear signs of a pickup in inflation. If low inflation had been linked to an economic downturn, the interest rate would have been reduced even further and kept at a low level for a longer period. Changes in the interest rate and Norges Bank's interest rate forecast must be seen in the light of both actual inflation and the outlook for inflation, output and employment.

In spite of low inflation, it became clear in 2006 that the Norwegian economy was experiencing capacity constraints. Growth was considerably higher than expected. Unemployment fell markedly. Many enterprises reported high capacity utilisation and labour shortages. Wage growth accelerated.

Against the background of high growth in output and employment, accelerating wage growth and a weaker krone, there were prospects of a gradual increase in consumer price inflation at the end of 2006. Because of these changes in the outlook, the key policy rate was increased and the projections for the interest rate path were raised through 2006 (see Chart 15). Interest rate setting through 2006 shows how Norges Bank weighed the objective of stabilising inflation at target against the objective of stabilising developments in output and employment. A lower interest rate might have pushed up inflation more rapidly, but pressures on production capacity would then have become even stronger. This would have resulted in more unstable developments in inflation and output and employment in the period ahead. On the other hand, a higher interest rate could have curbed the impact on the real economy, but inflation would then have been even lower and it would have taken longer to bring inflation up towards the target.

Chart 15 Sight deposit rate in the baseline scenario in IR 3/05 with a fan chart illustrating uncertainty and the projected sight deposit rate in Inflation Reports in 2006. Per cent. 2004 Q1 – 2008 Q4



Source: Norges Bank

Assessment – use of instruments

Market expectations concerning the key policy rate

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

Under certain circumstances, forward rates may provide an indication of market expectations concerning future interest rate levels. If this is the case, they will provide a cross-check of the Bank's interest rate forecast. If we use forward rates as a measure of the sight deposit rate, this provides an indication of market

expectations concerning the future key policy rate. If Norges Bank's interest rate forecast deviates from market expectations, the Bank should be able to explain this satisfactorily in order to influence money market rates. Deviations may indicate that the central bank and market participants have differing perceptions of future economic developments. It may also reflect differing views concerning future monetary policy trade-offs. In the following, the interest rate paths in the three *Inflation Reports* published in 2006 are compared with the interest rate paths expected by the market in the periods just before publication of the Reports.

In *Inflation Report 1/06*, long-term forward rates had risen somewhat since the November *Inflation Report*. This might indicate that market participants expected a gradual increase in the key policy rate to 4% towards the end of 2008. Norges Bank's interest rate path was largely in line with expectations until mid-2008 (see Chart 16). Thereafter, Norges Bank's interest rate path was somewhat higher than forward rates. This might have been because market participants had a different perception of the interest rate path that was required to stabilise inflation at target. It might also reflect the downward pressure exerted on long-term interest rates in many countries by extraordinary conditions in international capital markets.²

Until the publication of *Inflation Report 2/06*, forward rates had risen somewhat. Long-term forward rates had risen most, about ½ percentage point. This could indicate expectations of a gradual increase in the key policy rate to 4½% in 2009. Norges Bank's interest rate forecast was broadly in line with forward rates

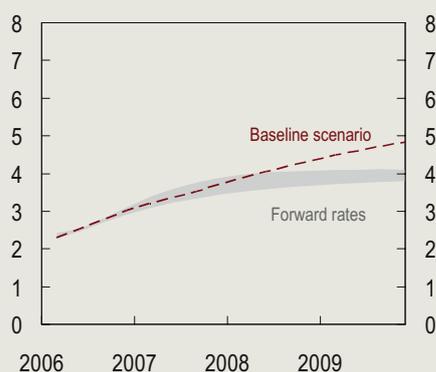
until the second half of 2008, but was somewhat higher thereafter (see Chart 17). The deviation in long-term interest rate expectations was roughly unchanged since *Inflation Report 1/06*.

In the period to *Inflation Report 3/06*, long-term forward rates in Norway fell by ¼ percentage point. This probably reflected expectations of slower growth in the US and continued strong demand for US government bonds from central banks in Asia, among others. Forward rates were approximately unchanged since end-June and might have indicated a gradual rise in the key policy rate to 4¼% at end 2008. Norges Bank's interest rate forecast was broadly in line with forward rates up to summer 2007 (see Chart 18). Thereafter, it was somewhat higher. This could have been because market participants had a different perception of the interest rate path that was necessary to stabilise inflation at target and to achieve stable developments in output and employment. The difference between the central interest rate projection and forward rates was larger than in the previous *Report*, partly because the central interest rate projection was higher and partly because long-term forward rates had declined. At the end of the year, forward rates had increased and approached Norges Bank's central interest rate projection (see Chart 19). In the longer term, forward rates were still lower than the central interest rate projection.

Was interest rate setting predictable in 2006?

One indicator of predictability in interest rate setting is the impact on money market rates around the Executive Board's monetary policy meetings.

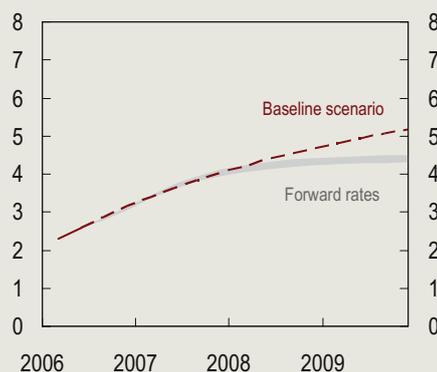
Chart 16 IR 1/06: Sight deposit rate and forward rates¹⁾. Per cent. 2006 Q1 – 2009 Q4



¹⁾ In the absence of forward premia and other risk premia, forward rates derived from returns at different maturities will normally reflect the market's short-term interest rate expectations. A credit risk premium and a technical difference of 0.20 percentage point were deducted in calculating the sight deposit rate. The grey shaded interval shows the highest and lowest interest rates in the market's interest rate path 10 business days before publication of the *Inflation Report*.

Source: Norges Bank

Chart 17 IR 2/06: Sight deposit rates and forward rates¹⁾. Per cent. 2006 Q1 – 2009 Q4

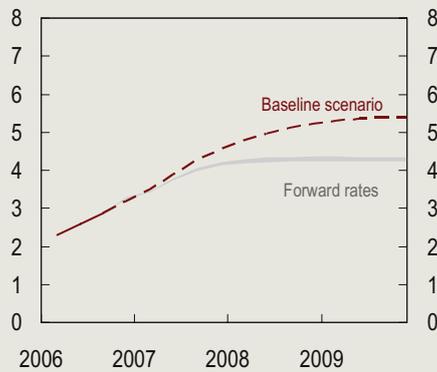


¹⁾ See footnote in Chart 16

Source: Norges Bank

² For more detailed information, see Section 2 of *Inflation Report 1/06*

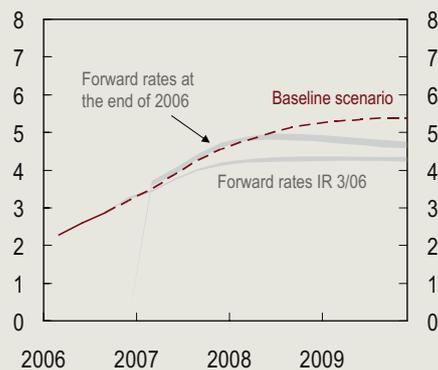
Chart 18 IR 3/06: Sight deposit rate and forward rates¹⁾. Per cent. 2006 Q1 – 2009 Q4



¹⁾ See footnote in Chart 16

Source: Norges Bank

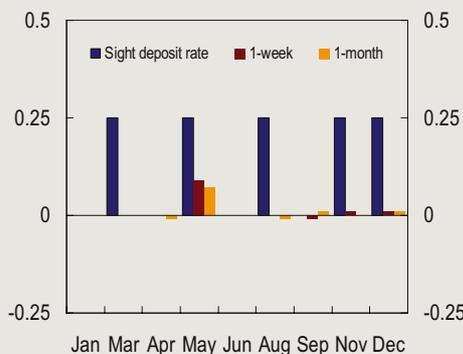
Chart 19 Inflation Report 3/06: Sight deposit rate and forward rates¹⁾. Per cent. 2006 Q1–2009 Q4



¹⁾ See footnote in Chart 16. Forward rates at the end of 2006 show the highest and lowest interest rates in the market's interest rate path 14-29 December 2006.

Source: Norges Bank

Chart 20 Change in sight deposit rate and effect on money market rates (1-week and 1-month) following monetary policy meetings in 2006. Percentage point



Source: Norges Bank

Substantial changes in market rates may indicate that the decision was unexpected.

As Chart 18 shows, the interest rate decisions in 2006 were largely expected by both market makers and the majority of macroeconomists in Norwegian financial institutions. This resulted in relatively modest fluctuations in fixed income and foreign currency markets. The largest fluctuation was in May when the key policy rate was increased by 0.25 percentage point. Following this decision, money market rates increased somewhat, but the effect was modest.

Other cross-checks

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

Chart 21 shows the interest rate path that follows from the Bank's average response pattern from 2000 to 2006, and the actual path of the sight deposit rate. The estimated equation includes developments in inflation, wage growth, Norges Bank's projections for mainland GDP growth and money market rates abroad. The interest rate in the previous period is also important. Chart 19 shows that interest rate developments through 2006 have been in line with Norges Bank's average interest rate setting pattern.

Interest rate setting may also be assessed in the light of simple monetary policy rules. The rules must be interpreted with caution and only provide a rough indication of the recommended interest rate level. Common to many simple monetary policy rules is that the interest rate is set with a view to maintaining inflation around a specific target over time, while contributing to stabilising output.

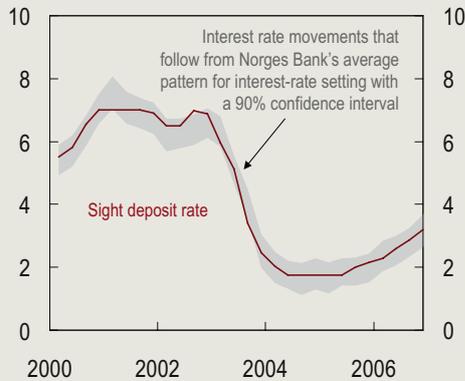
Through most of 2006, simple monetary policy rules prescribed higher interest rates than Norges Bank's key policy rate (see Chart 22). In *Inflation Report 3/06*, they approached the actual level.

The Taylor rule³ applies the output gap and inflation. The growth rule⁴ instead applies observed GDP growth and inflation. Simple monetary policy rules do not take account of the economic outlook ahead but focus sole-

³ The Taylor rule: Interest rate = Inflation target + equilibrium real interest rate + 1.5 x (inflation – inflation target) + 0.5 x output gap. See Taylor J.B. (1993): "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pp. 195-214. The CPI-ATE is used as a measure of inflation.

⁴ The output gap is replaced by the difference between actual growth and trend growth in the economy (growth gap).

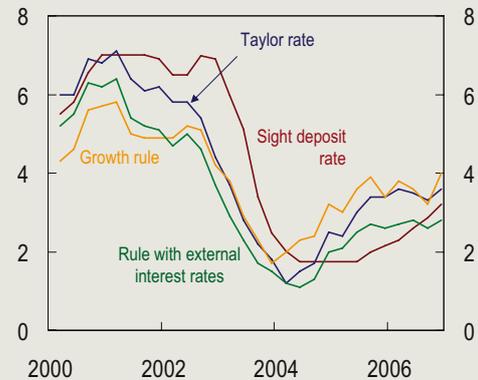
Chart 21 Sight deposit rate and interest rate movements that follow from Norges Bank average pattern for interest-rate setting¹⁾. Per cent. 2000 Q1–2006 Q4



¹⁾ Interest rate movements can be explained by developments in inflation, mainland GDP growth, wage growth and 3-month rates among trading partners. See IR 3/04 for further details.

Source: Norges Bank

Chart 22 Sight deposit rate, Taylor rate, growth rule and a rule with external interest rates.¹⁾ Per cent. 2000 Q1 – 2006 Q3



¹⁾ CPI-ATE adjusted for the estimated effect of reduced maximum day-care rates is used as a measure of inflation. Other measures of underlying inflation that have been higher than the CPI-ATE would have resulted in a higher interest rate path.

Source: Norges Bank

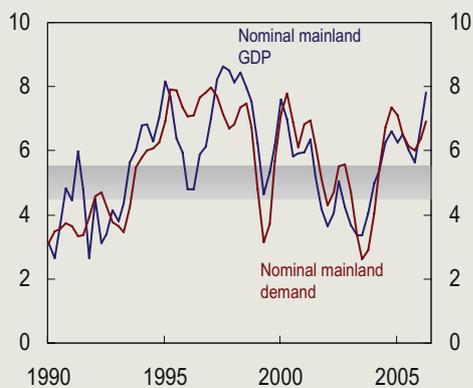
ly on the economic situation today. Because inflation has receded to a low level, the rules imply lower interest rates in the third quarter than in the fourth quarter of 2006, despite higher capacity utilisation in the Norwegian economy. The calculations apply the CPI-ATE adjusted for reduced maximum day-care rates. It is Norges Bank's assessment that underlying inflation is somewhat higher than measured by this indicator. The simple rules would then imply a somewhat higher interest rate than shown in Chart 20.

The rules have some limitations as a reference for a

small, open economy. They do not take into account that any changes in the interest rate level that would be consistent with the rules may result in changes in the exchange rate, thereby influencing the inflation outlook. In principle, the rule involving external interest rates⁵ is better suited for a small, open economy. This rule implies a somewhat lower interest rate than the other rules because external interest rates are low.

Nominal GDP growth for the mainland economy can serve as another cross-check that is less reliant on methodology than simple interest rate rules. Over time,

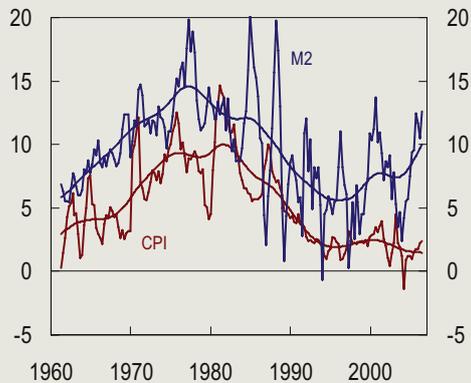
Chart 23 Nominal mainland GDP and aggregate mainland demand.¹⁾ 4-quarter growth. Per cent. 1990 Q1–2006 Q2



¹⁾ Adjusted for seasonal variations and irregular components

Sources: Statistics Norway and Norges Bank

Chart 24 Consumer prices (CPI) and money supply (M2). Calculated trend rise.¹⁾ 4-quarter rise. Per cent. 1961 Q1 – 2006 Q2



¹⁾ Trend calculated using HP filter. See Staff Memo 2005/2 (www.norges-bank.no) for further details.

Sources: Statistics Norway and Norges Bank

⁵ Rule involving external interest rates = 0.5 x Taylor rate + 0.5 x money market rate among Norway's trading partners.

nominal GDP will grow in pace with the sum of the rise in prices and growth in production capacity in the economy. Experience shows that production capacity increases by about 2 - 3% annually over time. An inflation target of 2.5% implies nominal GDP growth of approximately 4.5 - 5.5% annually over time. If GDP growth is higher than that, it may be an indication that monetary policy should be tightened. Nominal GDP growth is now higher than the level assumed to be consistent with the inflation target over time (see Chart 23). One of the reasons behind the high level of nominal GDP growth is that the rise in prices included in GDP – the GDP deflator – has been higher than underlying consumer price inflation in recent years. This is partly due to the sharp rise in prices for some other goods and services, particularly exports. This change in relative prices reflects an improvement in Norway's terms of trade, which should not necessarily have implications for interest rate setting. Nominal growth in aggregate domestic demand is somewhat lower, but is also higher than the normal level of 4.5 - 5.5%.

Historically, there has been a relationship between inflation and money growth (M2). Trend money growth can serve as a rough cross-check of inflation projections generated by other models. In recent years, consumer price inflation has exhibited a falling trend, while money growth has exhibited an upward trend (see Chart 24). Higher money growth must be seen in the light of strong growth in the Norwegian economy in an environment of low interest rates and high credit growth. The difference between trend money growth and the trend rise in prices has widened, but the conclusions to be drawn from this are not obvious. It may

be that the low level of inflation in recent years will gradually translate into slower money growth. On the other hand, the high rate of money growth may indicate that inflation will gradually rise. It is likely that the widening divergence between growth in the GDP deflator and consumer price inflation, as described above, is also reflected in the relationship between the money supply and consumer prices.

Evaluation – performance over time

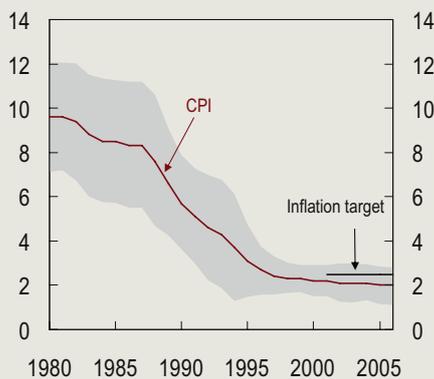
Evaluation of inflation and the output gap over time

In accordance with the mandate for monetary policy, Norges Bank will set interest rates with a view to achieving an inflation rate of 2½% over time. The level of consumer price inflation over a short period does not provide an adequate basis for assessing whether long-term monetary policy objectives have been achieved. Chart 25 shows a ten-year moving average for annual consumer price inflation. Inflation stabilised early in the 1990s after falling from a high level in the previous decade. In the ten-year period 1997-2006, average inflation was 2.1%, measured by the consumer price index. From 2001 to 2006, it was 1.9%.

Under a flexible inflation targeting regime, monetary policy also gives weight to the objective of stability in the real economy. Chart 26 shows developments in the output gap since 1980. In the 10-year period 1997-2006, the output gap was positive in all periods except 2003 and 2004.

The band around average inflation shows inflation variability (see Chart 25). Variability is calculated as

Chart 25 CPI. 10-year moving average¹⁾ and variation²⁾. Per cent. Annual figures. 1980–2006³⁾



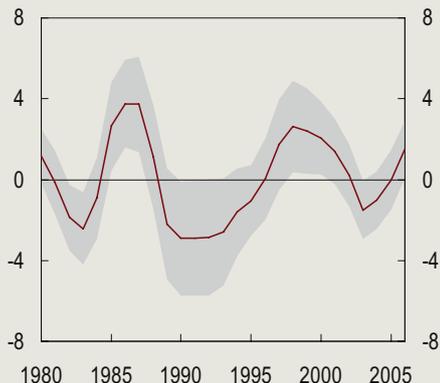
¹⁾ The moving average is calculated 7 years back and 2 years ahead.

²⁾ The band around the CPI indicates variation in the average period, measured by +/- one standard deviation.

³⁾ Projections for 2006-2008 in IR 1/06 form the basis for this estimate.

Sources: Statistics Norway and Norges Bank

Chart 26 Output gap estimate. Level¹⁾ and variation²⁾. Per cent. Annual figures. 1980–2006³⁾



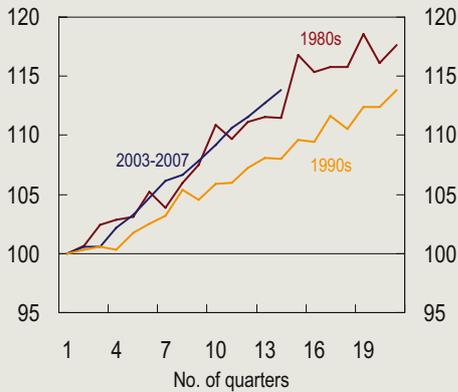
¹⁾ The output gap measures the difference between actual GDP and estimated potential mainland GDP

²⁾ The band shows variation in the output gap measured by +/- one standard deviation. The variation is calculated as the average standard deviation over a 10-year period, 7 years back and 2 years ahead.

³⁾ Projections in IR 3/06 form the basis for this estimate.

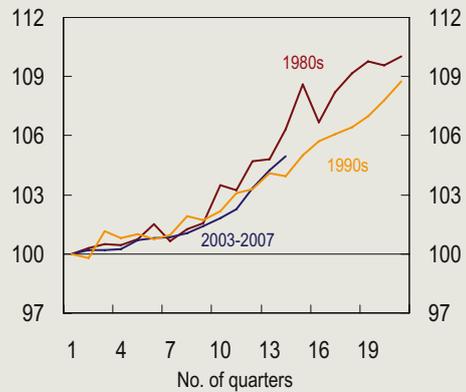
Source: Norges Bank

Chart 27 Mainland GDP. Developments after the start of a cyclical upturn. Seasonally adjusted. Index. Quarter 0=100



Sources: Statistics Norway and Norges Bank

Chart 28 Number employed.¹⁾ Developments after the start of a cyclical upturn. Index. Quarter 0=100



¹⁾ Quarterly national accounts figures

Sources: Statistics Norway and Norges Bank

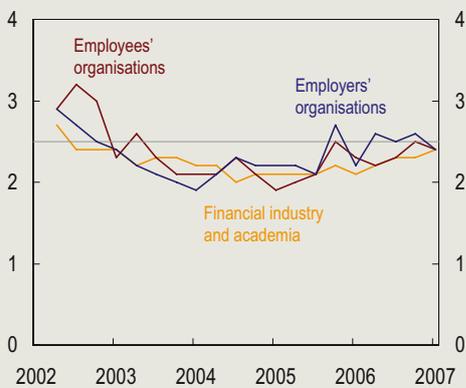
the standard deviation over a ten-year period, seven years back and two years ahead. Over a longer time horizon, inflation variability has been lower. Variability in the output gap seems to have been diminishing since the end of the 1990s (see Chart 26).

Over time, inflation has been low and stable and remained fairly close to 2½%. The deviation probably reflects the influence in recent years of a number of favourable shocks on the production side, including strong growth in productivity, ample supply of labour from other countries and a low rise in prices for imported goods. This is reflected in strong and

stronger-than-expected growth in the Norwegian economy coupled with low and lower-than-expected inflation. Therefore, it also takes somewhat longer than expected for inflation to pick up.

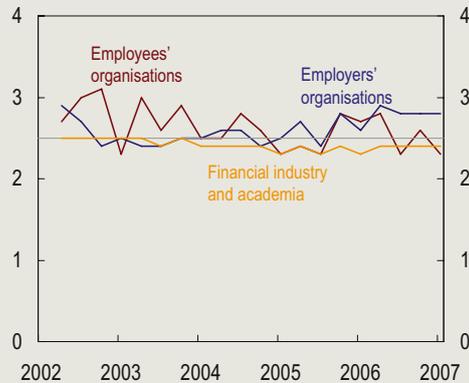
The favourable conditions on the supply side of the economy were reflected in output and employment. When the key policy rate was reduced in 2003, demand and output picked up quickly. Chart 27 shows that growth picked up at approximately the same pace as during the upturn in the 1980s and faster than during the upturn in the 1990s. Nevertheless, employment growth was more modest than in the 1980s and more

Chart 29 Expected consumer price inflation 2 years ahead. Per cent. 2002 Q2 – 2007 Q1



Source: TNS Gallup

Chart 30 Expected consumer price inflation 5 years ahead. Per cent. 2002 Q2 – 2007 Q1



Source: TNS Gallup

in line with developments in the 1990s (see Chart 28). It also took time for unemployment to fall after employment picked up. Although capacity utilisation in 2006 was higher than normal, wage growth was moderate and inflation considerably lower than the target of 2½%.

Inflation expectations

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

TNS Gallup has been commissioned by Norges Bank to carry out quarterly surveys on inflation expectations. The expectations survey in the first quarter of 2007 points to stable inflation expectations. Economists in the financial industry and academia, as well as employer and employee organisations, expect annual inflation of 2.4% two years ahead (see Chart 29). Five years ahead, economists expect inflation of 2.4%, while employer and employee organisations expect inflation of 2.6% (see Chart 30).

Figures from Consensus Forecast Inc., which compare different institutions' forecasts for consumer price inflation in Norway twice a year (April and October), show somewhat lower inflation expectations. At both

the 5-year and 10-year horizon, inflation is projected at 2.2%.

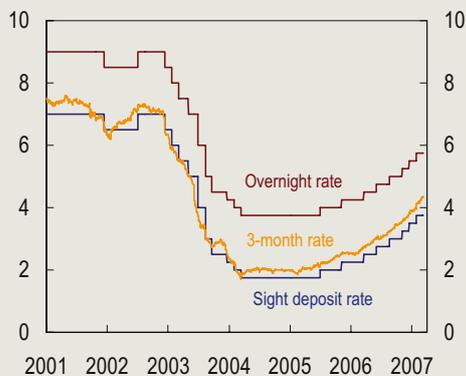
Overall, these indicators suggest that there is confidence in the inflation target. Short-term inflation expectations remain somewhat lower, probably due to the low consumer price inflation in recent years. Norges Bank also expects consumer price inflation to be somewhat below the target at the two-year horizon.

Liquidity management in the money market

The Executive Board sets the interest rate on banks' sight deposits and overnight loans in Norges Bank. The purpose of Norges Bank's liquidity policy is to ensure that the Executive Board's interest rate decisions have a broad impact on short-term money market rates. Through its liquidity policy, Norges Bank ensures that the banking system has surplus liquidity every day, deposited as sight deposits with Norges Bank. Short-term money market rates will therefore normally be slightly higher than the sight deposit rate, which is Norges Bank's key policy rate. Chart 31 shows developments in Norges Bank's key policy rates and money market rates.

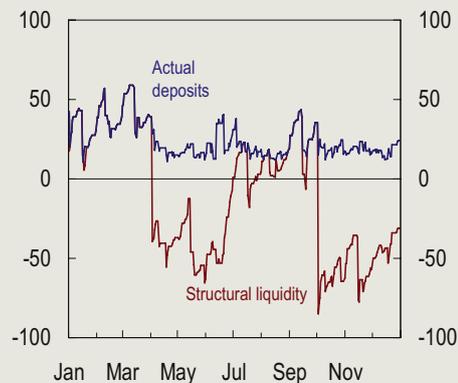
Liquidity policy instruments are fixed-rate loans (F-loans), fixed-rate deposits (F-deposits) and currency swaps.⁷ F-loans are Norges Bank's primary liquidity supplying instrument. Currency swaps have not been used in liquidity management since 2001. Norges Bank can withdraw liquidity in order to reduce the banking system's surplus liquidity via F-deposits. F-deposits have not been used since April 2003. In the current monetary policy regime, it makes little difference

Chart 31 Norges Bank's interest rates and 3-month money market rates. Nominal interest rates. Per cent. Daily figures. 2 January 2001 – 7 March 2007



Source: Norges Bank

Chart 32 Banks' liquidity in 2006. In billions of NOK. Daily figures



Source: Norges Bank

⁷ See Kran, Lars-Christian and Grete Øwre (2001): "Norges Bank's system for managing interest rates", Economic Bulletin 2/01.



whether the banking system's surplus liquidity is deposited as sight deposits or as F-deposits with Norges Bank.

Norges Bank draws up projections for banks' structural liquidity. The banking system's structural liquidity is banks' sight deposits in their sight deposit accounts at Norges Bank before the central bank supplies or withdraws liquidity using monetary policy instruments. The banking system's structural liquidity is influenced by incoming and outgoing payments over the government's account in Norges Bank, government loan transactions, Norges Bank's transactions in the foreign exchange and government securities markets and changes in notes and coins in circulation. Government transactions result in substantial fluctuations in structural liquidity in the course of a year. The general pattern is that liquidity falls markedly on days where direct and indirect tax payments fall due and then accumulate again as a result of government spending and Norges Bank's foreign exchange purchases.

If structural liquidity is not regarded as adequate to keep short-term money market rates slightly higher than the sight deposit rate, Norges Bank offers to supply liquidity to banks through F-loans. The maturity of an F-loan will depend on the variations in the banking system's estimated liquidity requirements. F-loans are auctioned to banks through an Internet-based system. The interest rate on F-loans is normally set using an American auction and is usually slightly higher than the sight deposit rate.

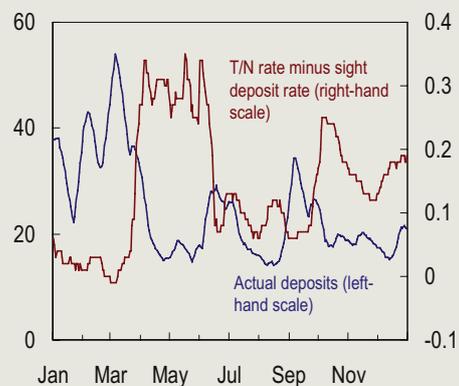
Fluctuations in banks' structural liquidity in 2006 were wider than in previous years, primarily reflecting record-high oil tax payments to the state as a result of high oil prices. In isolation, higher oil tax revenues result in higher transfers to the Government Pension Fund – Global, which are matched by liquidity-supplying foreign exchange purchases. The objective is to spread the foreign exchange purchases evenly over the year,⁸ while oil tax payments fall due twice a year, 1 April and 1 October. After these payments fall due,

structural liquidity is low for a period (see Chart 32).

As these payments increase in size, uncertainty increases in the short-term fixed income market. When oil tax payments fell due in October, Norges Bank tried to reduce uncertainty by satisfying the bulk of liquidity needs through fixed-rate loans with an extended maturity period of up to one month. This initiative may have reduced the effects on the shortest money market rates in periods before and after oil taxes fell due (see Chart 33) and was devised in consultation with the most important market participants. This was a means of ensuring that the Executive Board's interest rate decisions had a broad impact on short-term money market rates.

In 2006, 61 F-loan auctions were held. Norges Bank's daily liquidity supply through auctions varied between NOK 3.0bn and NOK 99.9bn. Loan maturities ranged from 1 to 31 days.

Chart 33 Banks' sight deposits (in billions of NOK) and T/N interest rates minus sight deposit rate (percentage point). 2006. 15-day moving average. Daily figures



Source: Norges Bank

⁸ Norges Bank's foreign exchange purchases are described in further detail in Chapter 5, "Foreign exchange transactions".

Chapter 2 Financial stability

Responsibility for the stability of the financial system

Norges Bank's remit and responsibility in the area of financial stability are defined in Sections 1 and 3 of the Norges Bank Act, which state that the Bank shall: "...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" and "...inform the Ministry when, in the opinion of the Bank, there is a need for measures to be taken by others than the Bank in the field of monetary, credit or foreign exchange policy. The Bank shall inform the public about the monetary, credit and foreign exchange situation." Under the Payment Systems Act, Norges Bank has responsibility for authorising banks' clearing and settlement systems, i.e. the interbank systems. Twice a year, in a submission to the Ministry of Finance, Norges Bank presents an overall assessment of financial stability in Norway.

The financial system consists of financial institutions, financial markets and payment systems. According to the Norges Bank Act, Norges Bank shall receive deposits from banks (Section 20) and may grant liquidity loans and extend credit in other forms to banks (Section 19). Banks' right to make deposits in Norges Bank affords them a special role in the distribution of banknotes and coins, and is important for banks' development of secure payment systems based on customer deposits in banks. Thus, within the financial system, Norges Bank has particular tasks and a particular responsibility for the banking system.

Financial stability implies that the financial system is robust to disturbances to the economy and is capable of channelling capital, executing payments and redistributing risk in a satisfactory manner. Responsibility for financial stability is divided between Norges Bank, Kredittilsynet (the Financial Supervisory Authority of Norway) and the Ministry of Finance. The Ministry of Finance has the overall responsibility for ensuring that Norway's financial industry functions smoothly. Norges Bank's responsibility is related in particular to the banking system and the clearing and settlement systems. Kredittilsynet is responsible in general for supervision of financial strength, management and control in financial institutions. Both Norges Bank and Kredittilsynet analyse financial institutions and financial markets and monitor the risk of problems in the financial sector.

Cooperation between the Ministry of Finance, Kredittilsynet and Norges Bank was further formalised in 2006 through the establishment of tripartite meetings of the three institutions. The meetings will be held

twice a year, and the themes will be the financial stability outlook and contingency measures to deal with crises in the financial sector.

Norges Bank's work in relation to financial stability consists of the following:

- *Surveillance of risks to financial stability.* Norges Bank's surveillance is aimed at identifying vulnerabilities that can lead to reduced earnings and financial strength in the financial sector and the build-up of financial imbalances that may threaten financial stability.
- *Preventing financial instability.* Norges Bank's preventive tasks are primarily aimed at limiting the risk associated with clearing and settlement systems in order to prevent liquidity and solvency problems from spreading among financial market participants. In addition, the Bank advises Kredittilsynet and the Ministry of Finance on issues associated with the regulation of financial markets and financial institutions, while keeping the general public informed of Norges Bank's assessments.
- *Maintaining confidence in the krone as a means of payment.* Norges Bank is responsible for ensuring that cash functions as a means of payment and that production, destruction and distribution are secure and efficient. Interbank payments shall be settled safely and efficiently in Norges Bank's settlement system so that banks can provide the same service to their customers in connection with everything from ordinary payments to the settlement of large financial transactions.
- *Contingency planning and crisis management.* Should a situation arise where financial stability is threatened, Norges Bank and other authorities will, if necessary, implement measures to limit adverse effects and strengthen the financial system. Norges Bank may supply extraordinary liquidity to individual banks or to the banking system as a whole.

Financial markets and financial institutions

Surveillance of financial stability

Norges Bank monitors developments in financial markets and financial institutions in order to detect vulnerabilities that may weaken stability in the financial system. Surveillance is focused in particular on:

- banks' earnings and financial strength, which indicate how well equipped banks are to deal with increased losses
- banks' exposure to various types of risk, including debt-servicing capacity of borrowers
- risks of problems in one part of the financial system intensifying and spreading to other parts of the system.

Banks' risk of loan losses, credit risk, is an important

part of the financial stability work. Assessments of the debt-servicing capacity of households and enterprises are therefore important. Experience indicates that banks incur larger losses on loans to enterprises than on loans to households. Nevertheless, it is important to monitor households' financial position because changes in household behaviour have consequences for enterprises' earnings and financial strength and for macroeconomic stability. Moreover, developments in enterprises' profitability will affect household income and job security.

Norges Bank regularly analyses the functioning of financial markets and adaptation among financial institutions. The *Financial Stability* report is published semi-annually. The report contains an overall assessment of the outlook for financial stability, with special emphasis on the situation in and the outlook for banks. The conclusions in the report are summarised in a submission to the Ministry of Finance. The report is also used in the dialogue with the financial industry and is intended to increase awareness of and fuel debate on issues that have a bearing on financial stability. In 2006, special emphasis was placed on analysing developments in household debt, the housing market and structural changes in the financial industry, including the effects of regulatory changes and competition. Some of the main features of the analyses have been presented in boxes in the report.

Norges Bank's macroeconomic model shows relationships that are central to the monitoring of financial stability. In 2006, relationships for housing wealth and housing investment were developed. The model now contains relationships for developments in household debt, house prices, housing wealth, housing investment, the number of bankruptcies among enterprises and banks' losses. The model is used to assess developments in financial stability based on the projections published in Norges Bank's *Monetary Policy Report*. Analyses that evaluate the vulnerability of the financial system to extreme macroeconomic events (stress testing) are also published in the *Financial Stability* report.

The credit risk model (SEBRA) is used to estimate bankruptcy probabilities for enterprises. Bankruptcy probability depends on the enterprise's earnings, liquidity, financial strength, industry, size and age. Norges Bank uses accounts data from all Norwegian limited companies in this work. Kredittilsynet also uses the SEBRA model in its supervision of institutions' loan portfolios. When analysing extreme macroeconomic events, SEBRA is used and accounting variables are projected with the aid of macrovariables. In 2006, Norges Bank began the further development of the SEBRA model and stress testing routines.

Data from Statistics Norway's Income Distribution Survey are used in household sector analyses. In 2006, household financial margins were analysed.⁹ Developments in the share of households that have

negative or narrow margins can provide an indication of developments in banks' risk of losses on loans to households. Analyses of these financial margins are therefore important in the surveillance of financial stability.

Norges Bank also monitors banks' liquidity and market risk. Banks provide long-term loans, while important sources of the financing, such as customer deposits, short-term paper and money market deposits, are often short-term. Liquidity risk designates the probability of banks' incurring extra costs as a result of unstable financing or of counterparties failing to meet their obligations as they fall due. Market risk is the risk of losses due to changes in market prices such as interest rates, exchange rates and equity prices. Market risk is relatively low in Norwegian banks because holdings of equities and fixed income instruments are relatively small. Life insurance companies have larger securities holdings and their risk exposure is thus higher than banks.

The discussion of the various types of risk culminates in a qualitative assessment of risk. The designations low, relatively low, moderate, relatively high and high risk are used. An assessment is also provided of changes in risk since the previous report. In the overall assessment of the financial stability outlook, the different types of risk are weighed against each other according to the Bank's best judgment. Due to the structure of banks' exposures, considerable emphasis is placed on credit risk. The risk may be different in the short and the long term.

In 2006, analyses in this field were published in Norges Bank's two quarterly periodicals *Penger og Kreditt* and *Economic Bulletin*, in *Staff Memos* and *Working Papers* and in the periodical *Økonomisk forum*. The regular analyses of financial stability are also enhanced by the ongoing development of expertise through Norges Bank's research activities (see section on research activities in Chapter 4).

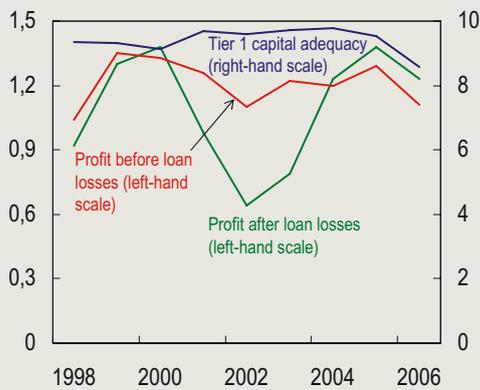
Financial stability in 2006

Satisfactory outlook for financial stability in the short term

In the light of the solid financial position of banks and most borrowers, the Norwegian financial system seems to be robust to disturbances to the economy. Banks' credit risk, liquidity risk and market risk are considered to be relatively low in the short term. The sustained rapid rise in debt accumulation and property prices may, however, be a source of future instability in the economy, higher losses and weaker results in the banking sector. Against this background, the uncertainty surrounding the longer-term financial stability outlook may have increased somewhat compared with that prevailing one year ago. On the whole, however, the financial stability outlook in Norway is considered satisfactory.

⁹ These margins are defined as household income after tax less normal cost of living, as estimated by the National Institute for Consumer Research, and interest and principal payments.

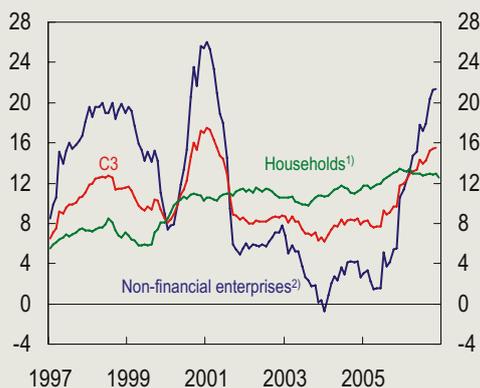
Chart 34 Banks' Tier 1 capital adequacy and pre-tax profit¹⁾. 1998–2006



¹⁾ As a percentage of average total assets
All banks except branches of foreign banks in Norway

Source: Norges Bank

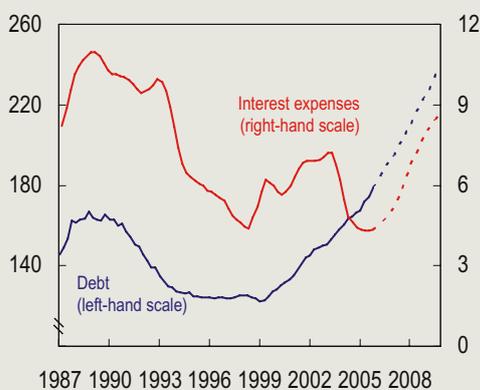
Chart 35 Credit to mainland Norway. Per cent. Twelve-month growth. 1997–2006



¹⁾ Household domestic credit
²⁾ It is assumed that all foreign credit is given to enterprise.

Source: Norges Bank

Chart 36 Household debt¹⁾ and interest expenses²⁾ in relation to income. Per cent. 1987–2009



¹⁾ Loan debt as a percentage of liquid disposable income less reinvested stock dividends
²⁾ Interest expenses after tax as a percentage of liquid disposable income less reinvested stock dividends plus interest expenses

Source: Norges Bank

Bank earnings remain solid

Banks' profits declined somewhat in relation to total assets in 2006 (see Chart 34), reflecting lower net interest income and other operating income. Nevertheless, results remain solid. This was largely due to very low loan losses and reduced costs. Banks' capital adequacy is satisfactory. The outlook for the Norwegian economy implies continued low loan losses and strong bank performance in the short term.

Nevertheless, banks are facing challenges. Many years of brisk lending growth have increased the potential for loan losses. Falling interest margins will in isolation lead to lower net interest income in the period ahead. New capital adequacy rules from 2007 will contribute to improving risk management and enhancing capital efficiency. The new rules will, however, entail a reduction in minimum capital requirements for banks. This will free up capital and may contribute to higher lending growth and lower interest margins.

Household debt continues to rise

The financial position of the household sector as a whole is healthy. Interest rates remain low, income is rising and unemployment has fallen. Housing wealth and financial assets have continued to increase. At the same time, households continue to increase their debt (see Chart 35). Debt growth is partly driven by low interest rates and rapidly rising house prices. Household gross debt in relation to disposable income has never been higher (see Chart 36). This is partly because banks, in their quest for market shares, are offering new products that are facilitating home equity withdrawal and partly because borrowers have more freedom to choose repayment profiles.

The number of households with high debt burdens has increased in recent years. Many of them are younger households in the start-up phase and have purchased their first dwelling during a period of sharply rising house prices. Some projections show that the share of debt in households with negative financial margins has increased somewhat in the past two years. The share is nevertheless considerably lower than at the time of the banking crisis.

The share of fixed-rate loans has declined in the household sector. Households are thus more exposed to unforeseen interest rate changes. Moreover, interest-only loans have become more common. The possibility of choosing interest-only loans may be seen as a buffer against increased expenses or reduced income. Vulnerability may thus be substantial for borrowers that have already opted for interest-only loans. Estimates indicate that the household saving ratio fell in 2006. A continued fall in household saving may lead to a tightening of household consumption further ahead.

House prices have risen sharply in the past decade, and the annual rise in 2006 was the sharpest since

2000. Historically, house prices are high in relation to consumer prices and house rents, but are more moderate in relation to household income. House price inflation has been somewhat higher than implied by a simple estimated relationship with effects from lending rates, income, unemployment and residential construction. However, there is substantial uncertainty associated with such calculations. More flexible loan products, foreign labour inflows, migration to more central regions and expectations of low interest rates in the long term may also have contributed to higher house prices. In addition, the high rise in house prices since the beginning of the 1990s may have generated expectations of a continued rise in house prices. House prices have long-lasting effects on credit growth. Growth in household gross debt may thus remain high for some time ahead. In the longer term, the high debt burden constitutes a source of uncertainty with respect to household consumption and saving.

The financial situation of households as a whole is sound. There are prospects of low unemployment and moderate growth in real income in the next few years. However, the long period of rapidly rising debt and house prices may be a source of future economic instability and weaker results in the banking sector.

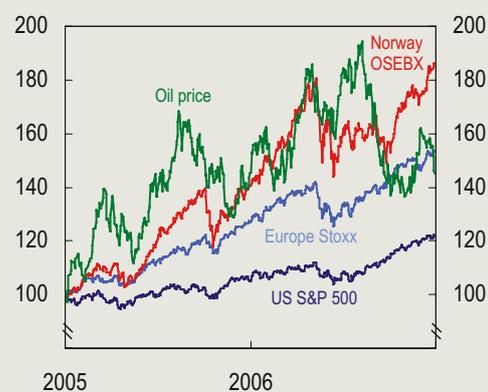
Enterprises' financial position is solid

Enterprises' profitability and financial position are solid. Analyses based on accounts figures for all limited companies in 2005 show that estimated bankruptcy probabilities are now historically low. Listed companies improved their results in the first three quarters of 2006. At the same time, the equity ratio has remained at a high level. Developments in listed companies normally provide a good indication of developments in other enterprises. These companies' solid profitability has been driven by high export prices, increased demand, moderate cost growth and low interest rates.

Enterprises have increased their debt considerably since autumn 2005 (see Chart 35) reflecting optimism in the business sector and higher fixed investment. If profitability gradually weakens and debt growth remains high, enterprises' debt burden will increase in the period ahead. This may lead to debt-servicing problems for some companies. On the whole, however, enterprises have considerable room before the debt burden reaches the level prevailing at the beginning of the 1990s. As measured here, credit institutions' expected losses on loans to non-financial enterprises are at a historically low level both on the whole and in most industries.

Loans to the commercial property sector account for the largest share of banks' loans to non-financial enterprises. Low long-term interest rates have made it more attractive to invest in commercial property. Growth in borrowing in the commercial property market is high,

Chart 37 Equity indices and prices for crude oil. 2005–2006



Source: Reuters EcoWin

and prices have risen markedly. Returns in the property market are vulnerable to interest rate changes and fluctuations in the level of economic activity.

Developments on the Oslo Stock Exchange indicate that market participants are still optimistic about corporate prospects. The Oslo Stock Exchange Benchmark Index (OSEBX) rose by more than 20% through 2006 (see Chart 37). Nevertheless, investors' uncertainty concerning future developments, as measured by option implied volatility, is fairly high historically and compared with other countries. Market analysts expect continued high corporate earnings.

Global growth remains buoyant, but vulnerabilities are on the rise

Growth in the world economy remains buoyant and has broadened geographically. Growth is expected to slacken somewhat in the next few years. Developments in the US housing market represent a source of uncertainty. In spite of higher policy rates, both short-term and long-term interest rates are still fairly low in many countries. This has contributed to a sustained rise in property and securities prices and continued growth in household and corporate debt. Risk premiums in securities markets are low in a historical context. At the same time, global trade imbalances are increasing. This increases vulnerability to negative economic shocks. On the other hand, the debt-servicing capacity of households and enterprises is solid, which has contributed to low loan losses and favourable bank results in many countries.

Financial market regulation

In 2006, Norges Bank advised Kredittilsynet and the Ministry of Finance on a number of issues related to the regulation of financial markets.

Capital adequacy rules

In 2006, Norges Bank participated in several consultative rounds on the introduction of new capital adequacy rules for banks (Basel II) and insurance companies. In general, Norges Bank supported the Ministry's proposals.

The capital adequacy rules came into force on 1 January 2007 in the form of changes to the Financial Institutions Act and a number of other acts. The detailed rules are set out in a regulation on capital requirements for commercial banks, savings banks, finance enterprises, holding companies in financial groups, investment firms and management companies for securities funds etc (the Regulation on Capital Adequacy Requirements).

In 2007, most banks will use a transitional arrangement that allows them to calculate capital requirements according to the old rules (Basel I). In autumn 2005, five banks applied to Kredittilsynet for permission to use internal methods to calculate capital requirements in 2007. The minimum capital requirement will be more closely related to banks' risk and is generally expected to be lower under Basel II. This will be the case in particular for banks that use the internal rating-based approach (IRB) to compute capital requirements. The capital requirement will be lower mainly because capital requirements for mortgage loans and loans to small and medium-sized companies have been reduced.

Liquidity requirements

New liquidity requirements for financial institutions were introduced on 1 July. The rules have been transferred from the banking acts to the Financial

Institutions Act. The quantitative liquidity requirement of 6% has been removed and replaced by a requirement of adequate liquidity management and control. The institutions shall at all times have adequate liquidity to meet payment obligations when they fall due. This is in accordance with Norges Bank's view and the Banking Law Commission's proposed regulation on bank liquidity from 2001. The Ministry of Finance has instructed Kredittilsynet to prepare a draft regulation concerning criteria for management and control of liquidity risk.

Financial markets

On 29 May, Norges Bank submitted a consultative statement to the Ministry of Finance concerning NOU 2006 nr:3 on Financial market regulation (Implementation of MiFID and transparency directive). Norges Bank pointed out that a new regulation is needed primarily because the EU is working to improve the functioning of the internal market for financial services. Norges Bank pointed out that improved information that can more easily be compared will enhance capital allocation and increase competition, which in turn will benefit both issuers and investors through lower transaction costs. Norges Bank stressed the importance of uniform supervisory practice throughout the EEA for achieving this objective.

Asset management in insurance companies and pension funds

On 30 October, Norges Bank submitted a consultative statement on the proposal for a new asset management



regulation for insurance companies and pension funds. The proposal implements the principle from the EU's Occupational Pensions Funds Directive on the transition to the "prudent person" approach. On the whole, Norges Bank supported the proposal, which sets out general rules that emphasise management and control of activities and that ensure a reasonable level of risk at all times in relation to the company's risk-bearing capacity. The proposal calls for removal of quantitative investment limitations.

Collateralised bonds

The purpose of collateralised bonds is to allow mortgage companies to raise capital on favourable terms and then to use this capital to provide, for example, mortgage loans. The terms are particularly favourable for bond funding because collateralised bonds give bond investors a right to the cash flow from the portfolio financed by the bond. The bonds can therefore achieve a very solid rating which in turn means low borrowing rates. The work to promote collateralised bonds began in 2001 with Report no. 6 from the Banking Law Commission. Norges Bank is positive to establishing rules that in practice allow for the issuing of such bonds and has expressed its views on several occasions, most recently on 8 May 2006.

Payment systems

Norges Bank's tasks and responsibilities

Payment systems play a pivotal role in the financial infrastructure and provide a channel for monetary policy instruments. Norges Bank pays particular attention to limiting the risk associated with clearing and settlement systems in order to prevent liquidity and solvency problems from spreading among financial market participants.

Section 1 of the Norges Bank Act states that the Bank shall: "...promote an efficient payment system domestically as well as vis-à-vis other countries..." The Payment Systems Act of 1999 gives Norges Bank a particular responsibility for authorisation and supervision of systems for clearing and settlement of interbank payment transactions. In addition to being the settlement bank at the highest level for interbank payments in NOK, Norges Bank is engaged in preventive activities both through oversight of the payment system as a whole and through its authorisation of interbank systems.

Norges Bank works to promote more efficient and robust payment systems by:

- contributing to safe and efficient settlement of interbank payments via their accounts in Norges Bank
- discharging its obligations as authorising authority and monitoring banks' risk in connection with partic-

ipation in clearing and settlement systems

- oversight of payment and settlement systems for financial instruments (securities etc.)
- facilitating the best possible link-up with international payment systems
- contributing to robust contingency arrangements
- informing the general public about the payment systems, for example, by means of the *Annual Report on Payment Systems*

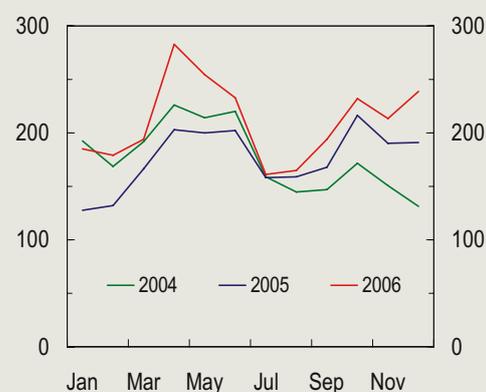
Norges Bank's settlement system

A smoothly functioning settlement system is important to promoting financial stability. Interbank claims and liabilities arise as a result of banks' financial transactions, payment services and customers' positions in cash settlement of transactions involving equities, bonds and derivatives. Final settlement of these transactions is made through entries in the banks' accounts in Norges Bank. Because the central bank is the issuer of money, settlement in central bank money does not involve credit or liquidity risk. Therefore, the interest rate on central bank money provides the basis for interest rates in the entire economy.

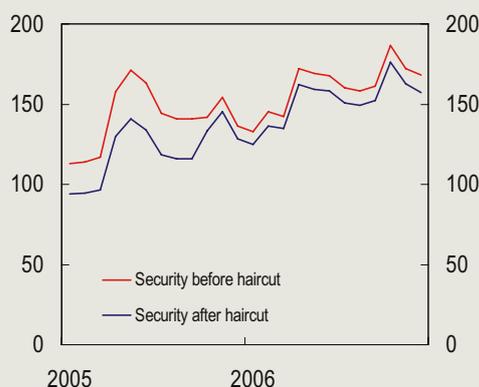
At the end of 2006, 145 banks had accounts in Norges Bank. Of these banks, approximately 25 participate in the daily payment settlements in Norges Bank's settlement system. The other banks handle their daily settlements through another bank and only occasionally settle transactions through their accounts in Norges Bank, for example, in connection with raising loans or with cash deposits in and withdrawals from the central bank. Chart 38 shows turnover in Norges Bank's settlement system in the past three years.

Norges Bank extends loans to banks against collateral in the form of securities. Such loans contribute to more efficient implementation of monetary policy and payment settlements. Access to the borrowing facilities is

Chart 38 Turnover in Norges Bank's settlement system. 2004–2006. Daily average per month



Source: Norges Bank

Chart 39 Collateral for loans in Norges Bank. 2005–2006

Source: Norges Bank

provided for in a separate regulation and in more detailed guidelines drawn up by Norges Bank. Securities issued by banks may also be approved as collateral for loans in Norges Bank. In 2006, the maximum share of this type of security in a bank's total collateral was reduced from 45% to 35% in accordance with a previously published approved plan. In addition, securities issued in some countries outside the EEA may now be approved as collateral. Chart 39 shows developments in banks' access to borrowing facilities in Norges Bank in the past two years. In October 2005, Norges Bank changed the rules for banks' collateralisation of loans. Market value rather than nominal value is now used to calculate the value of collateral. The haircut rate was also reduced, cf. discussion in Norges Bank's *Annual Report* for 2005 (pp. 64-65).

The central banks in Denmark, Sweden and Norway have an arrangement whereby one bank can make a deposit in one of the central banks as collateral for a loan in one of the other central banks. The scheme (Scandinavian Cash Pool) may only be used to supply liquidity through the day (intraday) and allows banks to manage total liquidity more efficiently.

Banks pay for account maintenance and settlement services in Norges Bank's settlement system. The price structure consists of an access fee for new participants, annual fees for participation in the various parts of the settlement system and a unit price for transactions. Prices are set each year and announced in a circular from Norges Bank. From 2006, Norges Bank has set prices for account maintenance and settlement services that fully reflect the relevant costs incurred.

Norges Bank has entered into an agreement with ErgoGroup AS concerning the operation and administration of IT solutions associated with Norges Bank's settlement system. The agreement is in force until 1 February 2008 with a two-year extension option. In

2006, IT operations have been satisfactory and of approximately the same quality as in preceding years.

In March 2006, Norges Bank signed an agreement with the Italian company SIA S.p.A. concerning delivery of software for a new interbank settlement system. The supplier was selected in accordance with the Public Procurement Act following a tendering round with potential suppliers from the EEA. SIA S.p.A. has supplied system solutions to central banks and other participants in the international financial sector. After the agreement was signed, Norges Bank and the supplier have cooperated on adjusting the system to Norges Bank's requirements and preparing the new system solutions for use. This work is continuing in 2007 and the new settlement system is expected to be operational in 2008.

The banking industry is the primary user of the settlement system, and Norges Bank has close contact with the industry regarding the upgrading of the settlement system. The Bank has also been in contact with other central banks that have undertaken similar processes in recent years. One of them, Sveriges Riksbank, has chosen the same supplier as Norges Bank.

Risk in payment systems

Participating in payment systems can expose banks to risk. The most important types of risk are credit risk, liquidity risk, legal risk and operational risk.

- Credit risk in the payment system arises if banks credit customers before banks receive settlement for a payment transaction. Since 2000, banks have normally credited customers after settlement. Credit risk associated with the payment system has thus been considerably reduced.
- Liquidity risk arises from situations where there is a possible shortage of liquidity if settlement is not executed as planned. Norges Bank's analyses show that banks generally have sufficient liquidity to address such situations. Banks' liquidity risk associated with payment settlements is currently regarded as limited.
- Legal risk arises in the event of uncertainties in connection with rights and obligations of participants in the system. Since the entry into force of the Payment Systems Act, which sets out requirements for the agreements in the payment system that are subject to authorisation, Norges Bank considers legal risk to be limited.
- Operational risk can arise as a result of deficient procedures, malfunctions in IT systems and telecommunications systems, breaches of rules, etc. It is the responsibility of the individual system operator to ensure that routines, back-up solutions, expertise and contingency arrangements are in place to manage operational risk. Several modernisation projects have been initiated in recent years, which will improve the

stability and efficiency of the Norwegian payment system. Norges Bank assesses the need for measures in close cooperation with Kredittilsynet.

Authorisation and supervision of interbank systems

Act no. 95 of 17 December 1999 relating to Payment Systems, etc., entered into force on 14 April 2000. The purpose of the Act is to ensure that interbank systems are designed with a view to promoting financial stability. Pursuant to the Act, Norges Bank is responsible for authorisation and supervision of interbank clearing and settlement systems. In 2001, the Norwegian Interbank Clearing System (NICS), Union Bank of Norway and DnB were granted authorisation to operate interbank systems. The authorisations granted to the latter two were replaced by an authorisation for DnB NOR Bank from April 2006. Therefore, there are now two authorised systems that are subject to supervision by Norges Bank.

In 2006, supervision has continued along the same lines as in earlier years. The authorised operators shall regularly report any significant changes in ownership, organisation or operations etc. System stability is followed up by means of operating reports from the authorised operators. In addition to regular contact, there are regular supervisory meetings. The system changes at DnB NOR Bank and NICS have been important topics of discussion in 2006.

From 2007, Sparebanken Midt-Norge will take over as settlement bank for a group of savings banks (Samspargruppen) and applied in 2006 for exemption from the authorisation requirement. The application was approved by Norges Bank as the system is of limited importance to financial stability. The system proprietor is required to submit an annual report on operations.

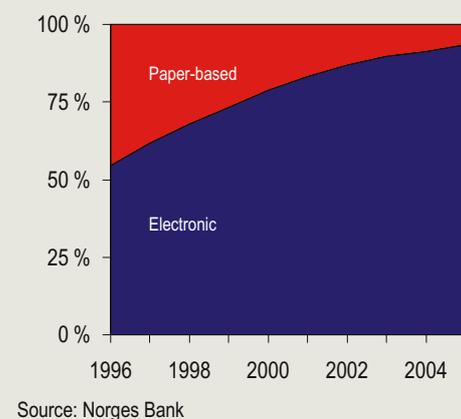
As from 2006, an operations report on Norges Bank's own settlement system has also been drawn up in line with the reports from the authorised settlement and clearing systems. These reports will be followed up according to prevailing practice.

In 2006, Norges Bank has provided information on its website about the Bank's tasks in the area of payment systems. The information includes requirements for interbank systems that are subject to authorisation, supervision of these systems and the agreements required of banks seeking to participate in settlements in Norges Bank.

Developments in the use of various payment instruments

Each year, Norges Bank publishes the *Annual Report on Payment Systems*¹⁰ which describes important developments in the payment system. A modern economy with a large number of payment transactions makes considerable demands on the efficiency of the payment system. In Norway, the use of electronic payment services has been rising and the use of paper-based

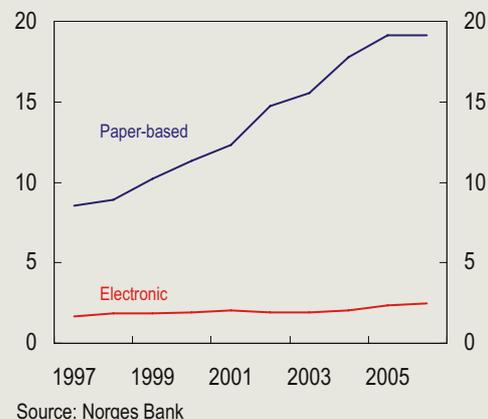
Chart 40 Use of payment services. 1996–2005



services has been falling for a number of years. Electronic services cost less to produce and allow payments to be completed more quickly than paper-based services, and this development has increased the efficiency of the Norwegian payment system.

The transition to electronic payment solutions continued in 2005. Electronic payment of giro now accounts for 86% of all transactions. A total of 385 million electronic giro transactions were made in 2005. The number of online payments of invoices increased by 18%, and at the end of 2005, customers had entered into more than 3 million online banking contracts. Electronic invoicing (eFaktura) is growing rapidly and the number of messages has nearly doubled since 2004. There was a 15% increase in the number of direct debit service agreements (Autogiro and

Chart 41 Price for payment services. 1997–2006. Weighted average. In nominal NOK



¹⁰ Since the statistics for 2006 are not yet available, the information below is from the *Report* for 2005.

Avtalegiro), while the number of transactions rose by 12%. 8 800 companies offered direct debit service agreements at the end of 2005. The use of telephone giros declined.

In value terms, the largest value-payments are made through the giro systems. Total turnover in these systems came to approximately NOK 7 800bn in 2005, whereas payment cards accounted for NOK 310bn and cheques for NOK 33bn.

There are now more than 105 000 terminals that accept BankAxept in Norway. BankAxept was used in connection with 87% of all payment card purchases in 2005. The number increased by 12% to 658m. The value of these transactions rose by 19%. International payment card use also increased in 2005.

The *Annual Report on Payment Systems* stresses the role of pricing in achieving an efficient payment system. In Norway, prices that reflect relative cost differences have contributed to a more rapid transition from paper-based to electronic payment services. In recent years, banks' average list prices for electronic payment services have remained low and relatively stable, whereas prices for paper-based payment services have increased sharply.

International payment systems

Cross-border payments require the use of more resources than domestic payments. Each country has its own payment system and cross-border payments thus involve several banks and payment systems. A considerable number of manual tasks are often involved and increasing efficiency can pose challenges.

Prices for cross-border payments are considerably higher than prices for domestic payments. The EU has introduced a regulation establishing that prices for cross-border payments in euro shall not be higher than prices for similar domestic payments in euro. The regulation was incorporated into Norwegian legislation on 1 January 2005.¹¹ Norges Bank has followed price developments in this area to determine whether this arrangement has reduced the cost of euro payments from Norway to other EU/EEA countries. The results are presented in the *Annual Report on Payment Systems for 2005* and show that prices for some services fell in 2005.

In Europe, the banking industry, public authorities and central banks are working to achieve a Single Euro Payment Area (SEPA). The objective is to enhance efficiency of the payment system and provide for efficient cross-border payment services in Europe. The European banking industry has therefore established the European Payments Council (EPC) which has defined a set of standards and rules on giro and card payments in euro. The plan is that from January 2008 until the end of 2010, national and SEPA payment instruments will both be in use and that SEPA payment instruments

gradually replace national instruments.

In December 2005, the EU Commission proposed a directive designed to provide a modern, harmonised legal framework for an integrated EU payments market. The proposal is still being discussed by the EU Parliament and Council and the directive is expected to be adopted in 2007. The purpose is to increase competition in national payments markets and contribute to transparency for both providers and users of payment services through a simplified and harmonised set of rules on disclosure. The directive will apply to all EU countries and their currencies and will create a legal platform for development towards a Single Euro Payment Area (SEPA). The Commission has indicated that the proposed directive is EEA-relevant and that it should be made applicable to Norway.

Banking services for the government

Norges Bank is responsible for managing government liquidity through a separate account system that is part of the government's financial management. A primary consideration is to gather government liquidity each day in the government's sight deposit account in Norges Bank. These tasks are regulated by separate agreements with the Ministry of Finance and are related to Norges Bank's obligations pursuant to the Norges Bank Act, cf. Section 17 "Banker to the government".

The government receives interest on its sight deposits in Norges Bank. The interest rate is set quarterly on the basis of a calculation involving interest rates for several currencies. In the four quarters of 2006, the interest rate on the government's sight deposits was 3.00%, 3.25%, 3.50%, and 3.75% respectively. The Ministry of Finance sets special internal interest rates for individual government funds and deposits. Norges Bank calculates and enters the interest for the government accounts in question.

The central government, represented by the Ministry of Finance, remunerates Norges Bank for its banking services. The remuneration is set each year and covers Norges Bank's costs.

Until November 2006, the government consolidated account in Norges Bank was an integral part of Norges Bank's settlement system. As part of the settlement system upgrade, a separate IT system solution for the central government consolidated account was established. This has made it possible to use a fairly standardised operating and system solution that is well adapted to the tasks performed.

In February 2006, Norges Bank signed an agreement with EDB Business Partner ASA on operating the central government consolidated account system. The agreement was entered into after tenders were received from several prospective suppliers in accordance with the Public Procurement Act. The new system and operating solution was implemented in November 2006.

¹¹ Regulation (EC) No 2560/2001 of the European Parliament and of the Council on cross-border payments in euro incorporated into Norwegian legislation by amendment to Section 9 of the Financial Contracts Act of 1 January 2005 (Proposition no. 52 (2003-2004) to the Odelsting).

The agreement applies for three years from 2007. Norges Bank has an option to extend the agreement for two years at a time for up to six years.

Norges Bank has been in close contact with the Ministry of Finance and the Norwegian Government Agency for Financial Management (SSØ) in its work to introduce the new system and operating solution for the new central government consolidated account system.

DnB NOR Bank ASA and Nordea Bank Norge ASA supplied the actual payment services for the central government in 2006. From 2007, the SpareBank 1 Alliance will also provide payment services for the central government. These three banks entered into a new framework agreement with SSØ in October 2006 on services related to the central government consolidated account arrangement.

Notes and coins

Norges Bank's responsibility

Pursuant to the Norges Bank Act, Norges Bank is responsible for issuing notes and coins and promoting an efficient payment system. This involves ensuring that a sufficient quantity of notes and coins is produced to meet the general public's needs for cash and to ensure that this cash is available.

Banks order cash from Norges Bank and deliver surplus cash to Norges Bank. Similarly, the general public withdraws cash from and deposits surplus cash in banks. Norges Bank thus supplies banks with cash, and the banks are responsible for supplying cash to the public. The central bank is also responsible for maintaining the quality of notes and coins in circulation by seeing to it that worn and damaged notes and coins are withdrawn from circulation and destroyed.

The central bank is responsible for ensuring that cash functions efficiently as a means of payment. This means that notes and coins are equipped with security features that are difficult to copy and that make it easy for the public to differentiate between genuine and counterfeit notes and coins. One of Norges Bank's important tasks is therefore to inform the public about the characteristics and special security features of notes and coins.

In accordance with the Norges Bank Act, Norges Bank has the sole right to issue banknotes and coins. Accordingly, Norges Bank must function as debtor for issued notes and coins and decide the terms and conditions surrounding this. Production, destruction and distribution may be performed by others, but Norges Bank must ensure that these tasks are carried out in accordance with the central bank's requirements. The new contracts for the future production of banknotes are discussed in a separate box.



Framework contracts concerning the purchase of banknotes

In 2003, Norges Bank decided to discontinue operations at Norges Bank's Printing Works in 2007 and to purchase banknotes from other printing works. In 2006, the Bank completed a project with a view to finding new producers of Norwegian banknotes. In December 2006, Norges Bank entered into agreements for the delivery of banknotes with De La Rue International Limited in the UK and Francois-Charles Oberthur Fiduciaire in France.

The security features of banknotes and banknote production are confidential and therefore the requirements in the regulation on public procurement do not apply. Thus, the tendering process was not open. Nevertheless, the contract partners were selected on the basis of an extensive tendering process that complied with legislative requirements concerning competition. The choice was based on defined technical and functional requirements and on price.

The contract partners are large, well-reputed printing works that print banknotes for many other countries. The contracts apply for the period 2007-2012 and the first deliveries will probably be made in 2008.

To ensure delivery in the event of a problem arising with one of the suppliers, Norges Bank chose to enter into contracts with two suppliers in two countries.

Norges Bank will continue to be responsible for determining the quality, security features and design of Norwegian banknotes. Norges Bank will retain important design and production expertise in-house even after Norges Bank's Printing Works has been wound up. Unless Norges Bank approves changes, the banknotes to be produced abroad will continue to have the same design and features as the banknotes currently in circulation.

Banknotes and coins in circulation

After a slight fall in the value of cash in circulation from 2000 to 2003, the average value of notes and coins in circulation has risen in the past three years. In 2006, the value of cash in circulation rose by a little more than 7% to an annual average of about NOK 49.2bn. In relation to the means of payment used by the public (M1), banknotes and coins in circulation continue to fall.

The average value of notes in circulation was NOK 44.5bn in 2006, more than 7% higher than in 2005. The 500-krone note has increased its share of the notes in circulation while the share of 1000-krone notes has declined.

The average value of coins in circulation was NOK 4.7bn in 2006, an increase of more than 4% compared with 2005. The denominations of coins in circulation have remained virtually the same during the past year.

Commemorative coins

To commemorate the Ibsen year, Norges Bank issued a 20-krone special edition circulation coin. The Bank did not issue any gold or silver commemorative coins in 2006.

The authority to issue jubilee and commemorative coins in accordance with Section 16 of the Central Bank Act was delegated to Norges Bank in 1994. At the same time, the guidelines for these kinds of issues were established and the Storting (Norwegian parliament) was informed. In November 2006, Norges Bank decided to establish an advisory committee for the

issue of commemorative coins. This committee shall advise Norges Bank on which events meet the requirements in the guidelines and the established practice.

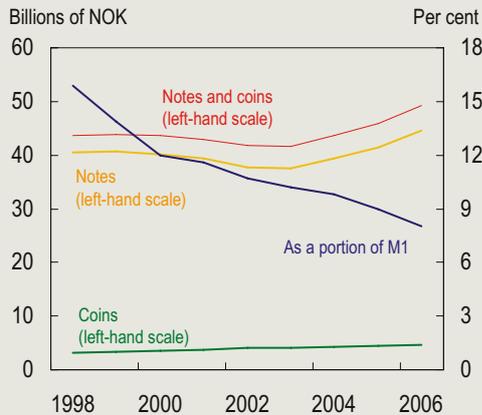
Counterfeit money

The number of counterfeit notes seized increased in the second half of the 1990s and peaked in 2000 with 3 064 counterfeit notes. The increase is attributable to an increase in the number of colour copying machines, scanners and printers. In the period 2002 to 2004, Norges Bank upgraded the 100-krone and 200-krone notes with features that are easy for the public to identify and difficult to copy. The security features on the 50-krone note were also upgraded in 2004. The number of counterfeit notes has declined after this and has remained at a very low level (see Chart 43).

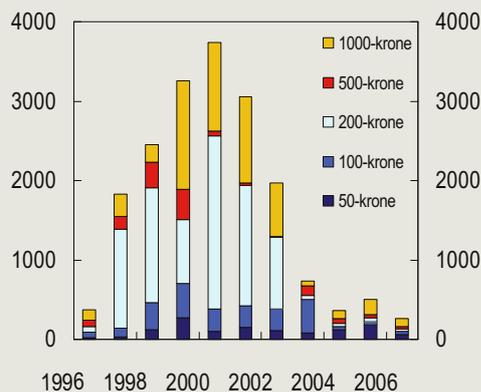
Organisation of cash handling

Norges Bank buys cash handling services related to central bank responsibilities (destruction) and services associated with the management of central bank depots from Norsk Kontantservice AS (NOKAS). This company was established in 2001 and was jointly owned by Norges Bank and private banks. NOKAS performs cash handling services and competes with other similar companies. Norges Bank sold its ownership interest in NOKAS in January 2006.

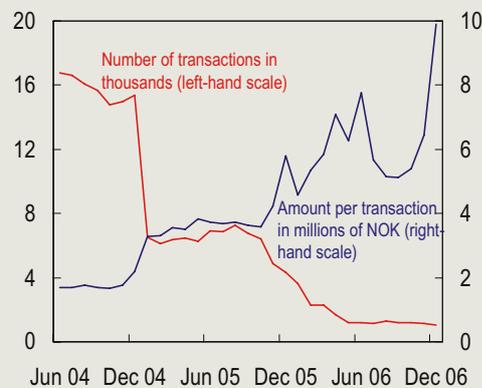
In recent years, Norges Bank has assessed its role in cash distribution with a view to optimising the division of responsibility among the various participants and achieving a clearer distinction between different types

Chart 42 Cash in circulation. 1998–2006

Source: Norges Bank

Chart 43 Counterfeit Norwegian banknotes. 1996–2006

Source: The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime (ØKOKRIM)

Chart 44 Banks' cash transactions in Norges Bank. 2004–2006

Source: Norges Bank

of services. Norges Bank wishes to have a wholesaler role in cash distribution so that banks handle the further distribution of cash on the basis of their needs.

To achieve this, Norges Bank changed the terms for banks' cash deposits in and withdrawals from the Bank from 1 May 2005. The number of central bank depots was reduced and Norges Bank introduced an arrangement whereby banks could establish private cash depots on the basis of their own needs. On given conditions, Norges Bank pays compensation in the form of interest for cash held in banks' own depots. At the end of 2006, there were central bank depots in Bergen, Oslo, Stavanger, Tromsø and Trondheim and 16 private cash depots throughout the country. As a result of these changes, there has been a considerable reduction in banks deposits in and withdrawals from Norges Bank. However, the average amount per transaction has increased somewhat (see Chart 44).

Costs

The costs associated with Norges Bank's role as issuer consists of production costs for new notes and coins, costs of maintaining the quality of notes and coins in circulation and the costs of distribution to banks. The costs of maintaining the necessary quality are related to the replacement of worn notes as well as the destruction of damaged, worn and invalid notes and coins. Distribution involves transport to the central bank's depots, storage and the provision of services in connection with delivery to and receipt from banks.

Table 2 shows developments in Norges Bank's cash handling costs from 2003 to 2006. Production costs will vary from year to year, due in part to fluctuations in production volume and to variations in the denominations produced. Replacements in note and coin series may lead to considerable variations in volumes. The more sophisticated security features in the newest note series have also increased the unit costs of these notes compared with earlier series.

The table shows an increase in total costs of NOK 30.4m from 2005 to 2006. The increase is primarily due to an increase in the volume of purchased coins and considerably higher metal prices in 2006 compared with 2005. The decline in Norges Bank's costs related to the purchase of external depot and processing services and the reduction in handling fees is due in part to the establishment of private cash depots.

Compensation in the form of interest paid for cash holdings in private depots has not been included in the table. NOK 33.3m in compensation was paid in 2006. Without the new arrangement, it is likely that this cash would have been deposited in Norges Bank. Thus, there has been little effect on total costs related to interest compensation and ordinary interest.

Table 2. Norges Bank's cash handling costs. In millions of NOK

	2003	2004	2005	2006
Total costs for production of notes NB Printing Works*	45.0	48.7	48.1	50.7
Costs for purchase of coins	38.1	26.4	26.2	53.1
Total production costs	83.1	75.1	74.3	103.8
Costs for central administration and transport*	15.3	17.6	16.6	20.3
Purchase of external depot and processing services	51.5	49.1	49.2	30.6
Handling fees related to banks' deposits and withdrawal of cash**			-23.7	-7.9
Total distribution costs	66.8	66.7	42.1	43.0
Total costs	149.9	141.8	116.4	146.8

* The figures in the table do not include house rents and share of joint overheads
** Changes in practice for billing of handling fees from 2005

Contingency arrangements in the financial sector

Norges Bank's work on contingency arrangements in the financial sector is related to its general work in relation to this sector. In addition, Norges Bank has a responsibility for monitoring the Civil Defence and Emergency Planning System in the financial sector. Internally, this applies to the supply of notes and coins and the operation of the Bank's settlement system. Externally, this applies in general to the financial infrastructure and in particular to the central bank's role in financial sector liquidity crises and its responsibilities under the Bank Guarantee Act. Regular drills are held to test the contingency arrangements.

Financial markets and financial institutions

In 2006, different EU bodies have worked extensively to strengthen the capacity to manage a financial crisis affecting several countries. Both the Committee of European Banking Supervisors (CEBS) and the Banking Supervision Committee (BSC) have been working on this.¹² Due to the EEA agreement and the close integration of the banking systems in the EU and the EEA EFTA countries, the authorities in Norway, Iceland and Liechtenstein are participating in this work. Norges Bank and Kredittilsynet have been observers in the CEBS since 2004, and from 2006 the two institutions have been invited to meetings in the BSC which discusses matters of mutual interest, including work on contingency arrangements and crisis management.

The two committees established the Joint Task Force on Crisis Management in 2004 in order to establish guidelines for cooperation on managing crises that could affect the financial stability of several countries. Norges Bank has been represented in this working group.

In Norway, the financial stability outlook and contingency arrangements to cope with crises in the financial sector will be assessed in tripartite meetings of the Ministry of Finance, Kredittilsynet and Norges Bank, a forum that was further formalised in 2006.

In September 2006, a working group appointed by the Norwegian Banks' Guarantee Fund presented a report on the administration of banks in crisis. This group discusses the roles of various authorities before and when a bank is placed under public administration and the consequences this will have for the Norwegian Banks' Guarantee Fund, the bank and the customers. Norges Bank participated in the working group. In a consultative statement on the report, Norges Bank pointed out that the authorities should require banks to have more automatic routines for the payment of deposit guarantees than is currently the case. Swift payment of guarantees is important to maintain confidence in bank deposits and to prevent the spreading of problems. Such routines should be established hand in hand with a general review of the deposit guarantee schemes and the crisis management system.

Financial infrastructure

The execution of financial transactions requires that both market participants and systems in the financial infrastructure are functioning. Payments between individuals, companies and public authorities are made through retail payment systems whereas transfers between banks are made through interbank systems. These systems must be robust and efficient. This assumes that they have stable operating systems and sound back-up and contingency arrangements.

The Contingency Committee for Financial Infrastructure was established in October 2000 to help optimise the coordination of contingency work among participants in the financial infrastructure. Norges Bank chairs the Committee and provides a secretariat. The following institutions and operators are represented on the Committee: Kredittilsynet, the Norwegian Financial Services Association, the Norwegian Savings Banks Association, BBS (Banking and Business Solutions), EDB Business Partner ASA and the Norwegian Central Securities Depository (VPS ASA). The Ministry of Finance participates in the Committee as an observer and the Committee has contact with a number of other operators, including DnB NOR Bank

¹² The CEBS is an advisory committee under the EU Commission, whereas the BSC is a committee of the European Central Bank.



ASA, Nordea Bank Norge ASA, the Norwegian Water Resources and Energy Directorate, the Norwegian Post and Telecommunication Authority and Telenor ASA.

The Committee's primary tasks are:

- to establish and coordinate measures to prevent and resolve crisis situations that may result in major disruptions in the financial infrastructure
- to coordinate contingency work in the financial sector, including the Civil Defence and Emergency Planning System.

In 2006, the Contingency Committee for Financial Infrastructure had three ordinary meetings and discussed matters relating to operating stability, risk and vulnerability in the financial infrastructure. The Committee has also reviewed contingency incidents, the testing of back-up solutions and contingency exercises.

In May 2006, the Committee held an exercise to discuss the development of a labour conflict in the banking industry that could lead to a complete shut-down. Prior to an expected announced escalation of a labour conflict in June, the Committee discussed the possible consequences. After the government

announced that it would propose compulsory arbitration, the parties decided to end the ongoing labour conflict in the financial industry so that it did not escalate to include the banking industry.¹³

In 2006, the Contingency Committee discussed a report containing suggestions about which operators and functions in the financial infrastructure should have priority access to electricity supply and telecommunications in an emergency situation. The Committee also established a working group to evaluate alternative solutions when ordinary payment methods cannot be used and to recommend appropriate measures in such a situation. The Committee also sent a consultative statement to the Ministry of Justice and the Police concerning the report on protection of the country's critical infrastructure and critical social functions, including the banking and financial sector, cf. 2006 nr. 6: "Når sikkerheten er viktigst" (When safety is most important).

In the light of changes in the financial infrastructure, the Contingency Committee has proposed an expansion of the Committee to include members representing the two largest banks from 2007.

¹³ Before the government announced the use of compulsory arbitration, Norges Bank submitted upon request a statement to the Ministry of Finance concerning the consequences of a possible labour conflict.

Chapter 3 Investment management

At the end of 2006, Norges Bank managed assets amounting to NOK 2 053bn in international capital markets. The bulk of this was the Government Pension Fund - Global, which is managed on behalf of the Ministry of Finance, and the Bank's international reserves. The Bank also manages the Government Petroleum Insurance Fund on behalf of the Ministry of Petroleum and Energy. Norges Bank Investment Management is also presented in a separate annual report.

Foreign exchange reserves and claims on the IMF

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

The market value of the foreign exchange reserves, less borrowing in foreign currency, stood at NOK 254.6bn at the end of 2006. The foreign exchange reserves are to be available for interventions in the foreign exchange market in connection with the implementation of monetary policy or to promote financial stability. Norges Bank's Executive Board lays down guidelines for the management of the foreign exchange reserves and has delegated responsibility to the Governor for issuing supplementary rules. The reserves are divided into a money market portfolio and an investment portfolio. In addition, a *buffer portfolio* is used for the regular foreign exchange purchases for the Government Pension Fund - Global.

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

The investment portfolio accounts for the largest portion of foreign exchange reserves, and at end-2006 amounted to NOK 225bn. In 2006, NOK 2.0bn in new capital was transferred to the portfolio from the money market portfolio.

The objective of management of the investment portfolio is a high return in the long term, but it should also be possible to use the portfolio for monetary policy purposes or to promote financial stability if this is

considered necessary. The management strategy for the investment portfolio has two main components. It consists partly of the long-term strategy, which is reflected in the benchmark portfolio defined by the Executive Board, and partly of active management designed to outperform the benchmark.

In November 2005, the Executive Board decided to increase the equity portion of the investment portfolio from 30 to 40%. The phasing-in to increase the equity portion was completed on 30 April 2006. The Executive Board has decided that the maximum ownership interest in a single company shall be 5% of the voting shares. Ownership interest refers to investments in equity instruments that allow the owner or a proxy to exercise voting rights in companies. It also refers to contracts that allow the holder to achieve such an ownership position. Norges Bank's investments are not strategic but are purely financial. If combined holdings in the foreign exchange reserves and the Government Pension Fund - Global exceed 5%, a separate report must be submitted to the Executive Board. The Executive Board has laid down common guidelines for the exercise of ownership rights in the two funds.

The entire equity portion and approximately 85% of the fixed income portion of the investment portfolio are managed internally in Norges Bank. The remainder of the fixed income portfolio is managed externally.

An upper limit has been set for the actual portfolio's deviation from the benchmark. A measure of overall risk (expected tracking error) is the limit set for the investment portfolio. In practice, this means that the difference between the return on the actual portfolio and the return on the benchmark portfolio will normally be small. The upper limit for expected tracking error is 1.5 percentage points. In 2006, an average 0.1 percentage point of this risk limit was used. If the risk remained constant at this level, the actual difference between the returns on the benchmark and the actual portfolio could be expected to average between -0.1 and +0.1 percentage point in two out of three years. It is then assumed that the management organisation is not more competent than the average of other managers.

The return on the investment portfolio for 2006 was 7.30% measured in terms of the currency basket that corresponds to the composition of the benchmark portfolio. Measured in NOK, the return was 5.18%. The difference is due to the appreciation of the Norwegian krone in relation to the benchmark's currency basket. The portfolio outperformed the benchmark by 0.13 percentage point.

The money market portfolio is invested in short-term money market instruments, primarily secured lending to approved international banks. In accordance with the

Executive Board's guidelines of 8 February 2006, the value of the money market portfolio shall normally be between NOK 3bn and NOK 10bn. It shall be invested in such a way that it can be used at short notice as a monetary policy instrument or to promote financial stability. The money market portfolio is also used to execute transactions on behalf of the IMF and to carry out foreign exchange transactions on behalf of the Government Petroleum Insurance Fund. At the end of 2006, the money market portfolio amounted to NOK 6.4bn.

In 2006, the return on the money market portfolio was 3.95% measured in terms of the benchmark's currency basket. Measured in NOK, the return was 1.18%. The difference is due to the depreciation of the Norwegian krone against the benchmark currency basket in 2006. The portfolio outperformed the benchmark by 0.10%.

The buffer portfolio receives capital when the State's Direct Financial Interest in petroleum activities (SDFI) transfers gross income in foreign currency to Norges Bank. At times, Norges Bank also purchases foreign currency directly in the market in order to cover the amount that is to be allocated to the Government Pension Fund - Global. The routines for these transactions are described in Chapter 5. Since only cash is transferred to the Government Pension Fund - Global, the buffer portfolio is invested exclusively in money market instruments. At the end of 2006, the size of the portfolio was NOK 24.bn. Capital is normally transferred from the buffer portfolio to the Government Pension Fund - Global at the end of each month, except in December when no transfer is made. This means that at year-end the portfolio will normally be larger than the average value at other month-ends (after transfers). The return on the buffer portfolio, measured in NOK, was 1.91% in 2006.

Claims on the IMF now consist of two components: SDR (Special Drawing Rights) and reserve positions. Norges Bank's aim is to keep the SDR reserves at between SDR 200m and SDR 300m¹⁴. At end-2006, holdings amounted to SDR 301m, equivalent to NOK 2 827m. Reserves in the IMF amounted to NOK 1 293m. Norges Bank's share of the borrowing arrangement under IMF Poverty Reduction and Growth Facility (PRGF) was redeemed in its entirety in December 2006.

Government Pension Fund – Global

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

At the end of 2006, the market value of the Government Pension Fund – Global was NOK 1 784bn,

before deduction of Norges Bank's management fees. In 2006, the Ministry of Finance transferred a total of NOK 288bn to the Pension 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 27 countries and fixed income indices in the currencies of 21 countries. The benchmark embodies the principal's investment strategy for the Government Pension Fund - Global. The strategy is an important basis for managing the risk associated with the operational management and for evaluating Norges Bank's management performance. The Ministry of Finance has set an upper limit for the actual portfolio's deviation from the benchmark.

In 2006, the return on the Fund was 7.92% measured in terms of the benchmark portfolio's basket of currencies. It is this measure of return that best describes developments in the Fund's international purchasing power. Measured in NOK, the return was 5.89%. Measured in terms of the Fund's currency basket, the return on the equity portfolio was 17.04%, while the return on the fixed income portfolio was 1.93%.

Measured over the ten calendar years since capital was first transferred to the Fund's international portfolio, the annual nominal return has been 6.49% measured in terms of the Fund's currency basket. The net real return after management costs has been 4.58% annually.

The actual return in 2006 was 0.15 percentage point higher than the return on the benchmark portfolio. The excess return on the fixed income portfolio was 0.24 percentage point, while the equity portfolio underperformed the benchmark portfolio by 0.05 percentage point.

The value added achieved in Norges Bank's management can be calculated by comparing the actual return with the return that could have been achieved by replicating the benchmark portfolio. Both costs and returns have been higher than would have been the case in passive management. In 2006, net value added as calculated above was 0.12 percentage point, or NOK 2.0bn. For the past eight years, total value added comes to NOK 27bn.

Government Petroleum Insurance Fund

The market value of the Government Petroleum Insurance Fund was NOK 15.2bn at end-2006. The Fund is owned by the Ministry of Petroleum and Energy, and its purpose is to support the government's role as self-insurer of ownership interests in petroleum activities. The Fund is managed by Norges Bank. In 2006, the return was 2.17% measured in terms of the currency basket corresponding to the composition of the Fund's benchmark portfolio. Measured in NOK, the return was 1.34%. This was 0.03 percentage point higher than the return on the benchmark portfolio.

¹⁴ The Governor of Norges Bank has granted exemption for SDR holdings to exceed SDR 300m on a temporary basis.

Chapter 4 Research and international cooperation

Research in 2006

Research at Norges Bank provides part of the basis for the Bank's decisions. Research is focused on monetary policy, financial stability and investment management. Monetary policy research focuses in particular on the functioning of the Norwegian economy and on the formulation of monetary policy strategy and properties of the monetary policy regime. Research on financial stability and investment management focuses on credit markets, the behaviour of financial institutions, portfolio management and the functioning of equity markets. As of 1 January 2007, the strategic planning process for management of the Government Pension Fund – Global was transferred to Norges Bank Investment Management and has thereby been moved closer to operational management. Norges Bank no longer employs a separate staff to perform this strategy work. In future, emphasis will not be placed on research associated with portfolio management. Research activities at

Norges Bank are presented on the Bank's website.¹⁵

The Bank's research should be anchored in the reality of the Norwegian economy as well as 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 2006, 15 articles were published in peer-refereed journals.

Publication of articles is often a lengthy process, and thus the list of publications includes articles on research carried out several years ago. Ongoing research activity is documented in the Bank's *Working Papers* series. In 2006, 13 papers were published in this series and these are available on Norges Bank's website. *Norges Bank Working Papers* is also distributed through the internet portals Research Papers in Economics (RepEc) and BIS Central Bank Research Hub.



¹⁵ <http://www.norges-bank.no/english/research>

Research papers published in external publications in 2006

- Akram, Q. Farooq: "PPP in the medium run: The case of Norway"; *Journal of Macroeconomics*, 2006, vol. 28 (4). pp. 700—719.
- Akram, Q. Farooq, Gunnar Bårdsen and Øyvind Eitrheim (2006): "Monetary policy and asset prices: To respond or not?" *International Journal of Finance and Economics* 11, pp. 279-292.
- Akram, Q. Farooq and Ragnar Nymoen (2006): "Econometric modelling of slack and tight labour markets", *Economic Modelling*, 23, pp. 579-596.
- Akram, Q. Farooq, Øyvind Eitrheim and Lucio Sarno (2006): "Non-linear dynamics in output, real exchange rates and real money balances: Norway, 1830-2003". In C. Milas, P. Rothman and D. van Dick (eds) (2006), *Non-linear Time Series Analysis of Business Cycles*. (Contributions to Economic Analysis Series), Elsevier.
- Alstadheim, R. and D.W. Henderson (2006): "Price-level determinacy, lower bounds on the nominal interest rate, and liquidity traps". In *Contributions to Macroeconomics*: Vol. 6: No. 1, Article 12.
- Asheim, G.B, C.A. Claussen and T. Nilssen (2006): "Majority Voting Leads to Unanimity," *International Journal of Game Theory*, Vol. 351, pp 91-110
- Halvorsen, Jørn Inge (2006): "Produktivit og velstandsutvikling i Norge for perioden 1981–2003" ("Productivity and Prosperity Development in Norway 1981-2003"). *Norsk Økonomisk tidsskrift* 120, pp. 25-43
- Kristiansen, Eirik Gaard (2006). "R&D and buyers' waiting option". *Journal of Industrial Economics* 54, pp. 31-42.
- Leitemo, Kai and Ingunn Lønning (2006): "Simple Monetary Policymaking without the Output Gap", *Journal of Money, Credit, and Banking* 38, pp. 1619-1640.
- Leitemo, Kai, Øistein Røisland and Ragnar Torvik. "Should inflation-targeting central banks care about traded and non-traded sectors?" *The ICFAI Journal of Bank Management* 5(1) February 2006.
- Næs, Randi and Johannes Skjeltorp. "Order Book Characteristics, Trading Volume and Price Volatility: Empirical Evidence from a Limit Order Market". *Journal of Financial Markets*.
- Næs, Randi and Bernt Arne Ødegaard. "Equity trading by institutional investors. To cross or not to cross?" *Journal of Financial Markets*.
- Sveen, T. and L. Weinke. "Firm-specific capital, nominal rigidities, and the Taylor principle", *Journal of Economic Theory*, online-publication August 2006. doi:10.1016/j.jet.2006.06.003
- Ødegaard, Bernt Arne and Øyvind Bøhren. "Governance and performance revisited" in *International Corporate Governance after Sarbanes-Oxley*, edited by Greg Gregouriu and Paul Ali, Wiley.
- Røisland, Øistein and Tommy Sveen (2005): "Pengepolitikk under et inflasjonsmål: en dynamisk analyse" (Monetary policy under an inflation target: a dynamic analysis), *Norsk Økonomisk Tidsskrift* 120 (2006), pp. 90-103

Participation in the research community

A number of research projects have been presented at Norwegian and international conferences and seminars, at which Norges Bank's researchers have also contributed comments on the work of other researchers. In 2006, Norges Bank's researchers were also involved in organising research conferences, including a conference in cooperation with the Bank of Canada. The Bank's researchers also contributed to student guidance, teaching, assessment of PhD candidates and researchers, and acted as referees for national and international journals.

In 2006, a total of 12 researchers and 4 PhD students from various schools of economics in Norway (14) and abroad (2) worked at Norges Bank on part-time contracts. These researchers contribute to the research

community provided by the permanent staff of Norges Bank.

As part of an international research environment, Norges Bank has extensive contact with researchers at universities and other central banks. This is important for maintaining a high professional standard of research and ensuring the best possible basis for the Bank's decisions. Contact of this nature provides opportunities for guest researchers at Norges Bank to present their work and to take part in seminars arranged by the Bank.

Historical monetary statistics

The project on Historical Monetary Statistics for Norway was continued in 2006. The aim of the project is to encourage the use of a long-term historical hori-

zon in the analysis of economic policy. The underlying data can be downloaded from Norges Bank's website. The data are updated regularly and supplementary documentation of revisions and new series will be published as the series become available. In connection with the publication of the book *"Tilbakeblikk på norsk pengehistorie. Konferanse 7. juni 2005 på Bogstad gård"* ("Retrospective on the history of Norwegian money. Conference 7 June 2005 at Bogstad Gård") in Norges Bank's *Occasional Papers* no. 37, three classes from upper secondary schools in Oslo were invited to an arrangement at the Bank on 7 March 2006.

Support for economic research

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

Researchers on secondment to Norges Bank in 2006

- Andrew Ang, Columbia University
- Katrin Assenmacher-Wesche, Swiss National Bank
- Ole Christian Bech-Moen, University of Oslo
- Yakov Ben Haim, Israel Institute of Technology
- Jaap Bos, Utrecht School of Economics
- Willem Buiter, London School of Economics
- Alexander Cappelen, Norwegian School of Economics and Business Administration (NHH)
- Jagjit Chadha, Brunel University
- Loran Chollete, Norwegian School of Economics and Business Administration (NHH)
- Stefan Gerlach, Bank for International Settlements
- Dominico Giannone, Université Libre de Bruxelles
- Paul De Grauwe, Katholieke Universiteit Leuven
- Karl-Olof Hammarkvist, Stockholm School of Economics
- Philipp Hartmann, European Central Bank
- Robert Hauswald, American University
- Karlo Kauko, Bank of Finland
- Robert Marquez, University of Maryland
- Kristian Miltersen, Norwegian School of Economics and Business Administration (NHH)
- James Mitchell, National Institute of Economics and Social Research, London
- Espen Moen, Norwegian School of Management
- Krisztina Molnar, Norwegian School of Economics and Business Administration (NHH)
- Steven Ongena, University of Tilburg
- Carol Osler, University of Warwick
- Simon Potter, Federal Reserve Bank of New York
- Morten Ravn, European University Institute
- Ricardo Reis, Princeton
- Roberto Rigobon, Massachusetts Institute of Technology
- Glenn Rudebusch, Federal Reserve Bank of San Francisco
- Roberto Sabbatini, Banca d'Italia
- Ulf Söderström, Bocconi University
- Timo Teräsvirta, University of Aarhus
- Harald Uhlig, Humboldt University
- Karl Walentin, Sveriges Riksbank
- Andreas Westermark, Uppsala University
- Noah Williams, Princeton University
- Oleg Zamulin, Stockholm School of Economics
- Josef Zechner, University of Vienna
- Pär Österholm, Sveriges Riksbank and Uppsala University

International cooperation

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

Other central banks

Norges Bank collaborates extensively with the other Nordic central banks. The annual meeting of Nordic central banks was held on the island of Bornholm, hosted by Danmarks Nationalbank (Central Bank of Denmark). The central bank governors discussed financial stability and monetary policy regimes, among other issues. Staff of various departments of the central banks meet at regular intervals to discuss issues relating to economic analysis, monetary policy, financial stability, payment systems, legal matters concerning central banks, human resource policy, etc.

Norges Bank has regular contact with the European Central Bank (ECB) and other central banks in EU countries. Norges Bank has established an arrangement with the ECB and the Bank of England which allows staff to work at these institutions for periods of up to 12 months. In 2006, members of Norges Bank's staff were seconded to the ECB in Frankfurt.

Technical assistance to the Reserve Bank of Malawi

For many years, Norges Bank has provided technical assistance to central banks in developing countries. In most cases, economists from Norges Bank are granted leave of absence to carry out missions of varying duration sponsored by international organisations or national aid organisations. On occasion, technical assistance has also been provided under an agreement made directly with another central bank, usually in the form of training at Norges Bank.

In order to contribute to a more efficient and performance-oriented programme of assistance to central banks in developing countries, Norges Bank has agreed to assume responsibility for assisting a central bank in a developing country for a three-five year period. In the light of the IMF's extensive activity and wide knowledge in this area, it was deemed important for Norges Bank's assistance to be closely coordinated with IMF assistance. In September 2006, the Ministry of Foreign Affairs (represented by the Norwegian Embassy in Malawi) and the IMF entered into an agreement under which Norges Bank assumed responsibility for managing the bulk of the assistance agreed upon between the Reserve Bank of Malawi and the IMF. The agreement applies for the period September 2006 to January 2008. Norges Bank's assistance to the Reserve Bank of Malawi will be formally administered by the IMF, but financed by the Norwegian Ministry of Foreign Affairs.

Norges Bank will provide up to 2 person-years annu-

ally to the Reserve Bank of Malawi, consisting of 1 person-year in the form of a long-term assignment as adviser to the Reserve Bank and up to 1 person-year in the form of short-term assignments. The short-term assignments will cover a broad range of central bank tasks, and in 2006 three projects were launched in the fields of market operations, payments and administration. In January 2007, the IMF appointed Executive Director Jon A. Solheim to a one-year post as "Monetary and Central Bank Operations Adviser" to the Reserve Bank of Malawi.

International organisations

Norway's small, open economy is heavily influenced by international conditions. Norges Bank therefore places considerable emphasis on its participation in and contact with international economic organisations.

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

Pursuant to Section 25 of the Norges Bank Act, Norges Bank shall administer Norway's financial rights and fulfil the obligations ensuing from participation in the International Monetary Fund (IMF). Norges Bank has been commissioned by the Ministry of Finance to be responsible for day-to-day IMF work in Norway. In consultation with the Ministry, the Bank formulates proposals for Norwegian viewpoints on issues to be brought before the IMF Executive Board. The Ministry of Finance has the ultimate responsibility. The division of responsibilities between the Ministry and Norges Bank is set out in a written agreement.

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

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

The countries in the Nordic-Baltic constituency primarily co-ordinate their views on important IMF matters through the Nordic-Baltic Monetary and Financial Committee (NBMFC). The Norwegian members are the Minister of Finance and the Deputy Governor of Norges Bank, Jarle Berge. The other

countries are represented at a comparable level. The NBMFC normally meets twice a year.

The aim is for the countries in the constituency to arrive at a common stance, which the board member representing the group then presents to the IMF Executive Board. The position of board member is rotated among the Nordic countries. The representative is replaced every other year. The board member in 2006 and 2007 is from Finland.

The International Monetary and Financial Committee (IMFC) has an important function as an advisory body for the Executive Board. The committee provides political guidelines for the IMF's activities. The IMFC's members are Ministers or Central Bank Governors who either represent a country or a constituency of countries. In 2006-2007, the Finnish Minister of Finance is our constituency's member in the IMFC.

An important part of IMF activity involves monitoring economic developments in member countries, with particular emphasis on macroeconomic conditions and financial stability. The primary emphasis is on bilateral surveillance under the Article IV consultations, which take place annually in most countries. Norway has a two-year interval between these consultations, provided that there are no special circumstances that call for annual consultations.

In the intervening years, the IMF conducts a shorter visit. Such a visit took place in the period 7 – 12 June 2006. The IMF delegation's evaluations were published on 12 June.

The IMF has a special lending facility for low-income countries– the Poverty Reduction and Growth Facility (PRGF). The PRGF is not financed by the IMF's ordinary resources, but by funding from member countries. This funding is either capital that is used for loans, or subsidies that allow the IMF to provide these loans at a very low rate of interest.

Norges Bank has made capital available to the PRGF through two loan agreements (1988 and 1994). This capital totalled SDR 150m (equivalent to about NOK 1.4bn according to the exchange rate on 31 December 2006). In addition, the Ministry of Foreign Affairs has provided about NOK 390m over the aid budget since 1988 to subsidise interest payments. Loan agreements between the IMF and Norges Bank are formulated in such a way that repayments to Norges Bank are made in pace with borrowers' repayment of their loans to the IMF. Norges Bank receives interest based on short-term market rates on these loans. At the end of December 2006, the IMF had redeemed the loan in full to Norges Bank.



Chapter 5 Other responsibilities

Production of statistics

In 2006, Norges Bank produced statistics on money, credit and foreign exchange markets largely in line with the previous year. Activities in the final half of the year were marked by preparations for the transfer of responsibility for production of statistics to Statistics Norway with effect from 2007.

Transfer of statistics production to Statistics Norway

In spring 2006, Statistics Norway and Norges Bank discussed plans to transfer to Statistics Norway the production of financial markets statistics for which Norges Bank has been responsible. The governing bodies of the two institutions approved this transfer in August 2006. The transfer, which involves some 30 statistical products and 27 employees, took place on 1 January 2007. Most of these statistics are official statistics and will be published on Statistics Norway's website from 2007. Some statistics relate specifically to Norges Bank's activities. Statistics Norway will collect data for these statistics on behalf of Norges Bank, which will publish them.

Financial and securities statistics

In 2006, Norges Bank produced and published accounting statistics for banks and other financial undertakings. These primary statistics form the main basis for the monthly debt indicators for municipalities, non-financial institutions and households, and money supply developments. In 2006, Norges Bank established new statistics on banks' foreign exchange trading. Norges Bank has also produced statistics for VPS-registered securities, for issues of bonds and short-term paper and for securities funds. Payment statistics are published in the annual report on payment systems, and with effect from 2006 changes have been made in the collection of data for these statistics. At the beginning of 2007, financial and securities statistics were transferred to Statistics Norway.

Financial sector accounts (FINSE)

The statistics on quarterly financial sector accounts (FINSE) are based on accounting statistics for banks and other financial undertakings, statistics for securities markets and other sources. FINSE contains data from the end of 1995 and is used in the Bank's work on macroeconomic models, in monetary policy analyses and in the work on financial stability. Annual FINSE data are reported to Eurostat under the EEA agreement. The statistics product *financial accounts for households*, which is based on FINSE, shows quarterly

developments in household assets, liabilities and net lending. At the beginning of 2007, these statistics activities were transferred to Statistics Norway.

International reporting and cooperation

Norges Bank's reporting of statistics to international organisations has been extensive. The Bank has reported to the BIS, Eurostat, the IMF and the OECD.

Norges Bank has participated in fora that discuss the development of international statistics standards and international reporting. These fora include the *Committee on Monetary, Financial and Balance of Payments Statistics* and working groups under this committee.

At the beginning of 2007, Norges Bank's international reporting and cooperation on statistics was transferred to Statistics Norway.

Foreign exchange transactions

In 2006, Norges Bank's commercial foreign exchange transactions mainly comprised foreign exchange purchases for building up the Government Pension Fund – Global (hereafter referred to as the Pension Fund). In addition, Norges Bank executed some transactions on behalf of the Government Petroleum Insurance Fund.

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

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

Capital is not normally transferred to the Pension Fund in December. It is therefore improbable that foreign exchange will be purchased by Norges Bank in

December. Foreign exchange income from SDFI may nevertheless be transferred in order to minimise the government's exchange costs. The December transfers from SDFI cause the foreign exchange reserves to increase. The reserves are reduced again through the monthly transfers to the Fund in the first quarter of the following year.

In 2006, Norges Bank purchased foreign exchange for NOK 121.9bn in the market (see Table 3). Transfers from SDFI were equivalent to NOK 166.7bn.

Table 3. Norges Bank's daily foreign exchange purchases for the Pension Fund in 2006.

Month	Daily amount (in millions of NOK)	Total per month (in millions of NOK)
January	270	5 940
February	190	3 800
March	280	6 440
April	310	4 960
May	570	11 400
June	570	11 970
July	500	10 500
August	410	9 430
September	850	17 850
October	890	19 580
November	910	20 020
December	0	0
2006		121 890

Services relating to government debt

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

The government's schedule for the issue of short- and long-term securities in 2006 was published in an auction calendar in December 2005. In accordance with the 2006 auction calendar, seven auctions of government bonds and 14 auctions of Treasury bills were held. No ad hoc auctions were held. The total volume issued, excluding the government's own purchases in the primary market, amounted to NOK 25bn in government bonds and NOK 48bn in Treasury bills.

The long-term strategy for long-term government borrowing is based on maintaining a yield curve for government bonds with particular weight on liquidity in the 5- and 10-year segments. The pattern for government bond issues has been aimed at issuing a new 11-year bond every second year. A new 11-year bond was issued

in May 2006. No government bonds matured in 2006.

According to the issue programme for short government paper, new Treasury bills are issued on IMM days¹⁶, and mature on the IMM day one year later. The loans are increased through subsequent auctions.

The government paper auctions have been held via the Oslo Stock Exchange trading system. The bid-to-cover ratio, which is the volume of bids in relation to the volume allocated in the auction, was 3.0 for government bonds and 2.4 for Treasury bills.

Norges Bank has entered into agreements with a group of primary dealers who are obligated at all times to furnish binding bid and offer prices for agreed minimum amounts of both government bonds and Treasury bills on the Oslo Stock Exchange. In return for furnishing these binding bid and offer prices, the primary dealers may borrow government paper for a limited period. The total borrowing limit for each Treasury bill is NOK 3bn. The total borrowing limit for each government bond is NOK 2.5bn.

Since June 2005, the government has used interest rate swaps in its domestic debt management. An interest rate swap is an agreement between two parties to exchange future interest payments associated with a given principal. The use of interest rate swaps gives the government the flexibility to change the average period during which the interest rate on the debt portfolio is fixed without changing its borrowing strategy. The Ministry of Finance has entered into framework agreements with several counterparties. Norges Bank carries out the operational functions in connection with entry into interest rate swap agreements on behalf of the Ministry of Finance. The commercial decisions are taken by the Ministry. At end-2006, the average fixed-rate period for government debt was 4.06 years. If existing interest rate swap agreements are taken into account, the fixed-rate period was 2.94 years.

Total government domestic securities debt registered in the VPS at end-2006 amounted to NOK 239bn, calculated at face value. Foreign investors own about 46% of Norwegian government domestic securities debt, while life insurance companies and private pension funds own about 31%. Government domestic securities debt was equivalent to about 12% of GDP in 2006.

Communications activities

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

¹⁶ International standard for settlement days: third Wednesday in March, June, September and December.

The Bank places considerable emphasis on responding to growing interest with transparency and predictability. Press conferences are therefore regularly webcast following the Executive Board's monetary policy meetings and in connection with the publication of the *Monetary Policy Report*, the *Financial Stability* report and the annual and quarterly reports of the Government Pension Fund - Global. In 2006, podcasting and direct mobile video transmission of Norges Bank's press conferences were introduced as a trial arrangement. Sixteen press conferences were held in 2006. Speeches given by the Governor and Deputy Governor of Norges Bank are also published on Norges Bank's website at the time that they are given. In 2006, a total of 23 speeches were published.

On-line information is an important part of the Bank's information strategy. The Bank's website is under constant development. In addition to news and the publications mentioned above, the website contains

extensive information about the Bank's responsibilities and a large volume of financial statistics. Electronic versions of the Bank's publications are also available on the website. User statistics show that Norges Bank's website has an average of 518 000 hits per month.

In addition to the *Annual Report*, on-line information and the other reports mentioned above, Norges Bank issues the following publications: The journals *Penger og Kreditt* and its English equivalent, *Economic Bulletin*, are published quarterly. A report on payment systems is published annually. Research projects are documented in the *Working Papers* series. Thirteen were published in 2006 and some of them are subsequently published as articles in external books and periodicals. *Staff Memos* contain other documentation or reports on the Bank's work on key issues, and seven were only published on the Bank's website. There were no publications of *Norges Bank's Occasional Papers* or the series *Doctoral Dissertations* in 2006.



Chapter 6 Organisation, management and use of resources

Core responsibilities

Norges Bank has clearly defined core responsibilities.

Norges Bank shall promote price stability by means of monetary policy. Norges Bank shall promote financial stability and contribute to robust and efficient financial infrastructures and payment systems. Norges Bank shall manage the portfolios of the Government Pension Fund – Global, the Bank's own foreign exchange reserves and the Government Petroleum Insurance Fund efficiently and satisfactorily.

Developments in the use of resources

Concentration on these three core responsibilities has directed the development of the Bank. As a result of the establishment of limited companies, outsourcing, discontinuation of tasks and generally increased efficiency, the number of permanent employees has been reduced from 1 150 in 1998 to 542 at end-2006. At the same time, the net real resources employed, measured in relation to the price index for public expenditure,

have been reduced by 30%. Restructuring costs are not included. The costs of managing the Government Pension Fund - Global are covered by means of income from the Ministry of Finance. By 2010 Norges Bank is to be a lean and efficient specialist enterprise with a strong focus on its core responsibilities.

The box below provides an overview of changes since 1998, and Chart 45 shows developments in costs and staffing.

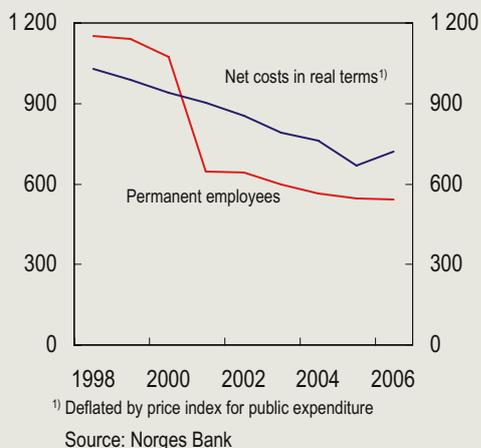
Restructuring has had consequences for many employees. Norges Bank uses human resource policy programmes to facilitate restructuring. These include severance pay, study grants with termination agreements, redundancy pay and early retirement. In 2006, applications for termination from 7 employees in various parts of the Bank were approved using human resource policy programmes. Between 1999 and the end of 2006 a total of 312 termination agreements were concluded¹⁷. Of these agreements, 158 expired at the end of 2006, and 26 will apply in the period 2007-2008.

Restructuring

- Norges Bank Investment Management (NBIM) has been expanded from 41 employees in 1998 to almost 130 in 2006.
- The Royal Norwegian Mint was established as a separate company in 2001 and sold in 2003.
- Cash handling was established as a separate company (NOKAS) in 2001. Norges Bank owned 33.5% of the shares until 2006, when they were sold.
- Norges Bank's Printing Works phased out stamp production in 2000 and passport production in 2003. Banknote production will be terminated in 2007. Contracts with foreign companies for the purchase of banknotes were entered into in 2006.
- Concentration on core activities in the Banking Department in 2004.
- Responsibility for producing statistics on non-financial sectors for the balance of payments was transferred to Statistics Norway in 2005. Responsibility for financial market statistics was transferred to Statistics Norway on 1 January 2007.
- A profit centre for the management of the head office building was established in 2003.
- Dimensioning of staff and support functions to the "new" Norges Bank.
- Operation of Norges Bank's settlement system was outsourced in 2003.

¹⁷ These include five early retirement agreements approved before 1999.

Chart 45 Development in net costs (real, in 2006-NOK) and permanent employees 1998-2006



Operational areas as core units

The Bank's activities are concentrated on the three operational areas Norges Bank Monetary Policy

(NBMP), Norges Bank Financial Stability (NBFS) and Norges Bank Investment Management (NBIM). An additional area provides staff and support services (see Chart 46).

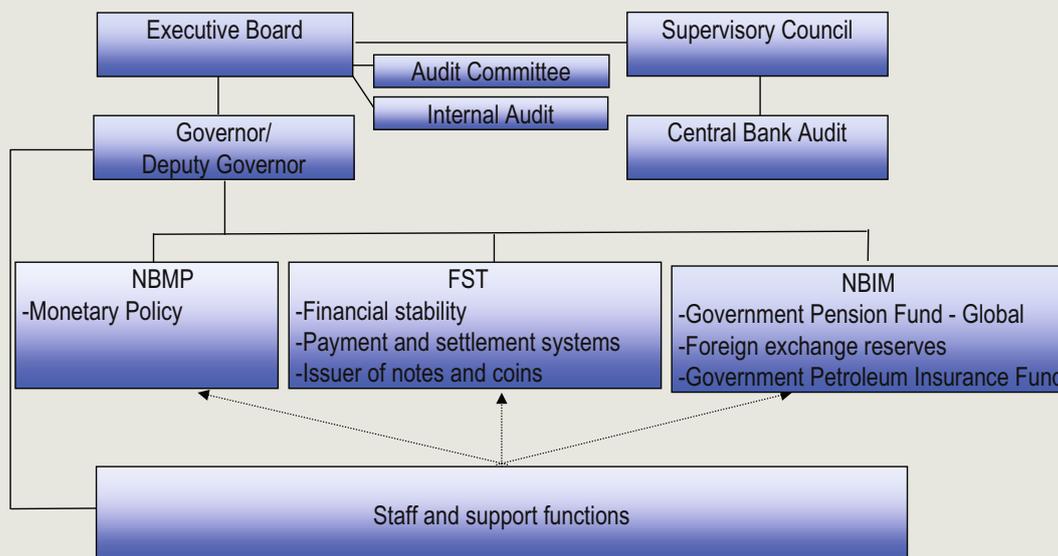
The structure of few, but relatively large units provides a suitable span of control for the Governor and Deputy Governor. The areas have clearly defined interfaces with the other units, and currently employ between a good 80 and close to 170 persons.

High degree of delegation

The Supervisory Council is composed of fifteen members elected by the Storting (the Norwegian parliament). It adopts the budget, approves the accounts and ensures that the rules governing the Bank's activities are observed. The Bank's audit department, Central Bank Audit, reports to the Supervisory Council, which usually meets five times a year.

The Executive Board is composed of seven members appointed by the King in Council, and is responsible for the Bank's executive and advisory activities. The Governor and Deputy Governor of Norges Bank are chairman and deputy chairman, respectively, of the Executive Board. The employees are represented by

Chart 46 Norges Bank's organisation



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

two members who supplement the Executive Board when administrative matters are discussed. The Executive Board normally meets every three weeks.

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

Subject to annual person-year and budgetary limits, each area has a large degree of freedom with respect to human resource administration and budget allocations. Guidelines for the number of person-years are set for three-year periods for most activities.

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

Norges Bank Investment Management makes extensive use of performance-based pay.

Management and follow-up

The main management principle in Norges Bank is line management. The result is a straightforward organisation with clear lines of responsibility. The organisational areas prepare annual action plans for activities with attendant performance goals, which are approved by the Executive Management. In the course of the year, the Executive Management follows up the performance of the individual executive directors by means of an appraisal dialogue in spring and a follow-up dialogue in autumn. During the year, there are shorter follow-up talks about every three weeks.

All managers have a clearly defined responsibility in accordance with the organisation of the activity and the line management principle. Each year managers are assessed by their immediate superior and subordinate in the line. The assessment criteria are direction, drive, attitude and professional quality.

Fundamental values

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

In order to attain this objective, all employees shall:

- Achieve results
- Be committed
- Conduct themselves with a high degree of ethical awareness
- Seek to attain a high professional standard and integrity

Distribution of costs by main function

The purpose of the distribution is to illustrate total costs for the various functions. The overview has also increased awareness with respect to achieving cost effectiveness in the joint support functions. Costs were distributed by the following functions in 2006:

- Monetary policy
- Management of the Government Pension Fund - Global
- Management of the long-term foreign exchange reserves
- Financial stability
- Settlement services
- Purchase, production and distribution of notes and coins
- Other functions¹⁸

The basis of calculation consists of operating expenses and operating income in the Bank's internal accounts, in addition to depreciation and imputed pension costs. Emphasis has been placed on including costs and income that provide a picture of the Bank's ordinary operating expenses. Restructuring costs and extraordinary income are therefore excluded. At the same time, internal rent has been used instead of depreciation of the building in Oslo. As a result, operating expenses deviate from operating income in the annual accounts.

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

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

Gross expenses in 2006 amounted to NOK 2 323m and net expenses to NOK 720m. The corresponding figures for 2005 were NOK 1 965m and NOK 645m, respectively. Net use of resources has increased to about NOK 75m. The increase is related in particular to the purchase of coins and the costs of managing long-term foreign exchange reserves. There is also a certain increase in expenses associated with monetary policy and other responsibilities.

Management of the Government Pension Fund – Global is by far the most resource-intensive task. Gross expenses came to NOK 1 526m in 2006 and NOK 1 240m in 2005. Norges Bank's costs are covered by the Ministry of Finance according to the principle of full cost coverage.

Chart 47 shows the distribution of costs. The Government Pension Fund – Global is not included in the graphic presentation, as the magnitude of the costs differs widely from those associated with other responsibilities.

¹⁸ These include advisory services for investment management, the organisation of historical archives, management of buildings, the Banking Law Commission, production of statistics for other bodies, services for the government and the management of the Government Petroleum Insurance Fund.



Next to the management of the Government Pension Fund – Global, the responsibilities ‘Notes and coins’ and ‘Monetary policy’ are the most costly.

The costs for the purchase, production and distribution of notes and coins amounted to just under NOK 230m. This is more than the amount shown in Table 2 in Chapter 2. The figure in Chart 47 is based on a distribution of the Bank’s total costs, and not a selection of costs, as in the table.

The external costs of custodian, settlement and management costs for the long-term foreign exchange reserves have been marked in orange in the chart.

Working conditions

Norges Bank has consistently placed emphasis on the importance of providing good working conditions.

The Bank has a loan scheme for employees where the interest rate is equal to the norm interest rate.¹⁹ The upper limit on housing loans is NOK 1 890 000 per employee.

The employee insurance programme covers personal guarantees (including compulsory occupational injury and occupational health insurance), group life insurance, group accident and illness insurance, business travel insurance and accident insurance for especially exposed occupations. These costs account for 1.2% of total personnel expenses.

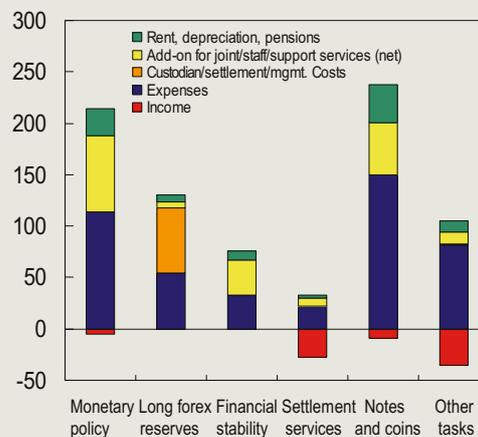
Norges Bank has its own pension fund for employees. Pension benefits are equal to 2/3 of the employee’s salary at the time of retirement. Benefits from the pension fund are coordinated with the National Insurance Scheme. Employees contribute 2% of their gross annual salary to the pension fund.

The Bank owns two course and holiday facilities: Venastul, which is located in Ringeby Municipality, is open all year round, and in 2006 recorded a total of

7 806 guest-nights. Vindåsen, which is located in Tjøme, is only open during the summer. In 2006, it recorded 2 929 guest-nights. Net operating grants to the holiday facilities in 2006 amounted to NOK 3.6m. Capital costs are not taken into account. The Bank also has agreements with central banks in Denmark, the Netherlands, the Czech Republic and Germany for reciprocal use of holiday facilities.

Norges Bank has previously provided interest- and instalment-free loans for the purchase of nine cabins for use by the employees. One of these will continue to be available to the Bank’s employees. The Bank has decided to sell the other cabins. Three of these were sold in 2003, one in 2005, and one in 2006. The loans associated with the four cabins amounted to NOK 1.4m at the end of 2006.

Chart 47 Use of resources 2006 by task. In millions of NOK



¹⁹ The norm interest rate laid down by the Ministry of Finance for taxation of loans on favourable terms for employees.

APPENDICES



Appendix A. Tables

Table 1. Norges Bank's balance sheet at 31 December 2005 and each month of 2006, by sector, In millions of NOK

	2005-12	2006-01	2006-02	2006-03
ASSETS				
FOREIGN ASSETS	318 276	308 194	291 417	297 216
International reserves	318 163	308 081	291 303	297 095
Other assets	113	113	114	121
INVESTMENTS FOR GOVERNMENT PENSION FUND – GLOBAL	1 397 896	1 450 820	1 493 723	1 483 619
DOMESTIC CLAIMS AND FIXED ASSETS	28 403	3 539	3 448	2 611
Lending	25 404	483	483	489
Other claims	1 322	1 389	1 305	465
Fixed assets	1 386	1 376	1 369	1 366
Gold	291	291	291	291
TOTAL ASSETS	1 744 575	1 762 553	1 788 588	1 783 446
LIABILITIES AND CAPITAL				
FOREIGN LIABILITIES	63 333	64 565	61 569	69 182
Deposits	377	176	161	77
Borrowing	61 002	62 474	59 475	67 157
Other liabilities	334	297	304	361
Equivalent of allocated Special Drawings Rights, IMF	1 620	1 618	1 629	1 587
DEPOSITS IN KRONE ACCOUNT GOVERNMENT PENSION FUND – GLOBAL	1 397 896	1 450 820	1 493 723	1 483 619
DOMESTIC LIABILITIES	214 724	176 560	161 063	164 318
Notes and coins in circulation	51 910	48 320	47 697	47 410
Treasury deposits	109 627	92 169	73 781	73 641
Other deposits	42 699	30 517	38 897	39 198
Borrowing	0	0	0	0
Other liabilities	10 488	5 554	688	4 069
CAPITAL	68 622	68 622	68 622	68 622
NET INCOME	0	1 986	3 611	-2 295
TOTAL LIABILITIES AND CAPITAL	1 744 575	1 762 553	1 788 588	1 783 446
Liabilities				
Derivatives and forward contracts sold, international reserves	137 051	128 854	156 024	181 182
Derivatives and forward contracts purchased, international reserves	136 670	143 220	173 785	160 139
Derivatives and forward contracts sold, Government Pension Fund – Global	798 223	766 737	680 918	933 480
Derivatives and forward contracts purchased, Government Pension Fund – Global	785 681	790 932	716 850	892 746
Allotted, unpaid shares in the BIS	287	287	287	287
Rights				
Options sold, international reserves	759	526	15	4 973
Options purchased, international reserves	1 448	1 708	6	7 901
Options sold, Government Pension Fund – Global	5 273	3 603	317	7 657
Options purchased, Government Pension Fund – Global	8 578	16 861	306	36 675

2006-04	2006-05	2006-06	2006-07	2006-08	2006-09	2006-10	2006-11	2006-12
302 542	299 263	308 125	319 456	313 295	328 070	352 182	326 303	354 082
302 410	299 119	307 986	319 337	313 171	327 922	352 036	326 153	353 936
132	144	139	119	124	148	146	150	146
1 457 949	1 449 959	1 504 419	1 528 358	1 618 758	1 711 271	1 785 248	1 760 276	1 782 139
54 618	83 119	33 798	16 981	9 583	7 052	83 437	79 681	60 254
52 492	78 062	30 496	14 500	490	487	80 635	73 564	55 647
474	3 414	1 663	842	7 462	4 941	1 182	4 504	2 937
1 361	1 352	1 348	1 348	1 340	1 333	1 329	1 322	1 379
291	291	291	291	291	291	291	291	291
1 815 109	1 832 341	1 846 342	1 864 795	1 941 636	2 046 393	2 220 867	2 166 260	2 196 475
86 420	91 576	92 630	95 951	95 959	101 118	105 499	93 584	101 412
74	77	92	81	123	115	162	100	87
84 485	89 615	90 622	93 966	93 894	98 977	103 288	91 550	99 348
331	361	363	364	367	409	416	367	402
1 530	1 523	1 553	1 540	1 575	1 617	1 633	1 567	1 575
1 457 949	1 449 959	1 504 419	1 528 358	1 618 758	1 711 271	1 785 248	1 760 276	1 782 139
213 166	237 491	191 078	182 672	160 294	158 731	249 790	241 190	238 801
47 925	49 067	50 299	49 267	48 763	48 332	48 671	49 903	54 838
146 769	173 543	109 651	106 680	92 300	74 460	174 868	175 197	159 679
15 069	14 739	31 022	18 382	19 117	35 805	17 388	15 949	24 030
3	2	0	0	0	1	0	0	2
3 400	140	106	8 343	114	133	8 863	141	252
68 622	74 123							
-11 048	-15 307	-10 407	-10 808	-1 997	6 651	11 708	2 588	0
1 815 109	1 832 341	1 846 342	1 864 795	1 941 636	2 046 393	2 220 867	2 166 260	2 196 475
184 180	209 018	199 010	207 809	225 531	204 995	200 788	211 925	200 697
182 975	211 147	194 124	205 133	212 030	213 252	201 611	203 780	203 003
967 899	1 149 604	1 134 791	1 095 804	1 106 916	1 144 587	1 137 492	1 205 496	1 228 557
971 183	1 164 869	1 133 381	1 095 460	1 067 747	1 160 268	1 128 789	1 181 401	1 241 246
287	287	287	287	287	287	287	287	279
12 672	10 239	10 835	9 765	9 551	11 664	18 273	20 044	8 851
12 944	6 709	6 568	7 895	8 725	16 452	25 370	13 337	21 656
58 427	68 145	84 172	93 379	60 228	26 480	51 358	77 089	24 154
68 562	47 821	50 687	71 002	68 911	118 184	152 988	113 508	131 203

Table 2. Norges Bank's profit and loss account at 31 December 2004–2006. In millions of NOK.

	2006	2005	2004
Interest income and dividends	13 025	9 190	8 479
Change in value financial instruments	6 604	10 985	5 711
Valuation adjustment of foreign exchange	-4 985	8 051	-10 053
Return on international reserves	14 644	28 226	4 137
Share dividend, BIS	19	18	18
Net other foreign financial instruments	-4 187	-3 214	-1 071
Net domestic financial instruments	-286	-147	952
Interest expenses to Treasury etc.	-4 083	-2 872	-2 283
Net other financial activities	-8 537	-6 215	-2 384
Total return financial activities	6 107	22 011	1 753
Return on investments for Government Pension Fund – Global	96 236	162 388	32 937
Transferred to krone account Government Pension Fund – Global	-96 236	-162 388	-32 937
Management remuneration Government Pension Fund – Global	1 526	1 239	984
Other operating income	224	145	108
Total operating income	1 750	1 384	1 092
Personnel expenses	-580	-563	-448
Depreciation	-87	-116	-108
Other operating expenses	-1 688	-1 396	-1 200
Total operating expenses	-2 355	-2 075	-1 756
Net operating expenses	-605	-691	-664
Profit for the year	5 502	21 320	1 089
Transferred from Adjustment Fund	0	0	0
Transferred from 'Other capital'	37	72	3 084
Reserves	5 539	21 392	4 173
Allocated to Adjustment Fund	-5 539	-21 392	-4 173
Allocated to Transfer Fund	0	0	0
Allocated to 'Other capital'	0	0	0
Total allocations	-5 539	-21 392	-4 173

Table 3. Norges Bank's loans to and deposits from banks in 2006

Period	D-loans	Fixed-rate loans		Fixed-rate deposits		Sight deposits
	NOK bn ¹⁾	NOK bn ¹⁾	Nominal rate ²⁾	NOK bn ¹⁾	Nominal rate ²⁾	NOK bn ¹⁾
January	-	1.6	2.29	-	-	30.1
February	-	-	-	-	-	38.3
March	-	-	-	-	-	44.3
April	0.1	53.6	2.54	-	-	20.0
May	-	59.3	2.55	-	-	16.6
June	0.25	63.4	2.79	-	-	24.9
July	-	14.4	2.80	-	-	20.7
August	-	5.2	2.93	-	-	15.0
September	-	2.5	3.04	-	-	29.4
October	-	79.4	3.07	-	-	19.7
November	-	72.1	3.30	-	-	18.6
December	-	59.5	3.45	-	-	18.0

1) Average of daily observations, in billions of NOK.

2) Average interest rate allotted. Weighted average for all F-loans/F-deposits in the period.

Table 4. Norges Bank's D-loan and sight deposit-rates

Period	Overnight lending (D-loan) rate		Sight deposit rate	
	Nominal	Effective	Nominal	Effective
28.01.99-02.03.99	9.50%	9.95%	7.50%	7.78%
03.03.99-25.04.99	9.00%	9.40%	7.00%	7.24%
26.04.99-16.06.99	8.50%	8.86%	6.50%	6.71%
17.06.99-22.09.99	8.00%	8.31%	6.00%	6.18%
23.09.99-12.04.00	7.50%	7.78%	5.50%	5.65%
13.04.00-14.06.00	7.75%	8.04%	5.75%	5.91%
15.06.00-09.08.00	8.25%	8.58%	6.25%	6.44%
10.08.00-20.09.00	8.75%	9.13%	6.75%	6.97%
21.09.00-12.12.01	9.00%	9.40%	7.00%	7.24%
13.12.01-03.07.02	8.50%	8.86%	6.50%	6.71%
04.07.02-11.12.02	9.00%	9.40%	7.00%	7.24%
12.12.02-22.01.03	8.50%	8.86%	6.50%	6.71%
23.01.03-05.03.03	8.00%	8.31%	6.00%	6.18%
06.03.03-30.04.03	7.50%	7.78%	5.50%	5.65%
01.05.03-25.06.03	7.00%	7.24%	5.00%	5.12%
26.06.03-13.08.03	6.00%	6.18%	4.00%	4.08%
14.08.03-17.09.03	5.00%	5.12%	3.00%	3.04%
18.09.03-17.12.03	4.50%	4.60%	2.50%	2.53%
18.12.03-28.01.04	4.25%	4.34%	2.25%	2.27%
29.01.04-11.03.04	4.00%	4.08%	2.00%	2.02%
12.03.04-30.06.05	3.75%	3.82%	1.75%	1.76%
01.07.05-02.11.05	4.00%	4.08%	2.00%	2.02%
03.11.05-16.03.06	4.25%	4.34%	2.25%	2.27%
17.03.06-31.05.06	4.50%	4.60%	2.50%	2.53%
01.06.06-16.08.06	4.75%	4.86%	2.75%	2.79%
17.08.06-01.11.06	5.00%	5.12%	3.00%	3.04%
02.11.06-13.12.06	5.25%	5.38%	3.25%	3.30%
14.12.06-24.01.07	5.50%	5.65%	3.50%	3.56%
25.01-07-	5.75%	5.91%	3.75%	3.82%

Table 5. Denominations of coins in circulation 2002–2006. Annual average and at end-month in 2006. In millions of NOK.

	20-krone	10-krone	5-krone	1-krone	50-øre	10-øre ¹⁾	Total
2002	1 387.0	1 085.0	505.3	666.1	182.4	129.5	3 955.3
2003	1 560.9	1 051.3	514.6	686.3	190.5	128.6	4 132.3
2004	1 666.6	1 049.3	537.8	717.9	198.5	128.4	4 298.7
2005	1 778.2	1 076.2	562.9	752.6	207.6	128.4	4 505.8
2006	1 848.8	1 144.7	598.4	799.2	218.4	85.6	4 695.1
2006							
January	1 864.8	1 094.7	577.4	774.4	212.9	128.3	4 652.5
February	1 868.8	1 094.9	577.7	776.1	213.8	128.3	4 659.6
March	1 879.2	1 104.0	580.3	780.4	214.8	128.3	4 687.1
April	1 914.0	1 123.9	587.3	786.3	215.9	128.3	4 755.8
May	1 945.3	1 140.0	595.4	794.2	217.1	128.3	4 820.3
June	1 942.3	1 142.1	599.6	799.8	218.1	128.3	4 830.3
July	1 849.5	1 158.9	603.7	805.0	219.0	128.3	4 764.4
August	1 795.5	1 174.6	611.2	810.2	220.4	128.3	4 740.3
September	1 767.5	1 160.5	607.7	810.1	220.7	-	4 566.5
October	1 778.0	1 166.4	610.1	812.8	221.6	-	4 589.0
November	1 781.7	1 178.5	612.6	816.5	222.5	-	4 611.9
December	1 799.4	1 198.0	617.2	824.5	223.9	-	4 663.1

¹⁾ As of March 1993, the 10-øre coin was no longer legal tender, but was redeemed by Norges Bank until March 2003. The outstanding amount was recorded as income in Norges Bank's accounts in August 2006.

Table 6 Denominations of notes in circulation 2002–2006. Annual average and at end-month in 2006. In millions of NOK.

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2002	22 598.8	7 626.1	4 572.7	2 270.2	743.5	37 811.3
2003	22 166.6	7 732.3	4 674.5	2 091.5	764.6	37 429.4
2004	23 555.0	8 277.5	4 792.3	2 012.0	792.5	39 429.4
2005	24 648.7	9 059.5	4 819.0	2 020.9	833.4	41 381.6
2006	25 817.5	10 373.5	5 296.3	2 119.3	916.2	44 522.8
2006						
January	26 245.1	9 674.6	4 893.5	2 000.3	848.7	43 662.2
February	25 694.1	9 568.7	4 922.6	1 991.6	860.2	43 037.1
March	25 303.5	9 584.2	4 996.8	1 985.5	853.2	42 723.2
April	25 106.1	9 899.3	5 214.7	2 057.4	891.5	43 168.9
May	25 259.0	10 318.7	5 564.9	2 179.7	924.7	44 246.9
June	25 732.8	10 814.1	5 650.9	2 318.5	952.8	45 469.0
July	25 296.0	10 544.5	5 458.7	2 238.5	964.7	44 502.3
August	25 151.8	10 491.5	5 378.4	2 171.5	957.3	44 150.5
September	25 204.1	10 292.5	5 236.7	2 094.6	937.5	43 765.5
October	25 617.6	10 336.0	5 140.2	2 070.1	917.9	44 081.8
November	26 319.2	10 709.1	5 242.2	2 094.1	926.4	45 290.9
December	28 881.4	12 249.1	5 855.5	2 229.8	959.5	50 175.2

Table 7 Banknotes destroyed in 2002–2006. In millions of notes.

	1000-krone ¹⁾	500-krone	200-krone ²⁾	100-krone ³⁾	50-krone	Total
2002	12.7	5.8	62.6	33.2	11.8	126.2
2003	3.8	5.8	10.9	53.1	14.0	87.5
2004	2.7	7.8	12.5	11.6	12.3	46.8
2005	2.4	6.9	15.8	11.7	10.2	46.9
2006	2.6	7.8	16.5	12.2	10.5	49.6

The table shows the total number of banknotes destroyed apart from notes from older series (50- and 100-krone notes from Series III, IV and V and 500- and 1000-krone notes from Series III and IV). The notes are destroyed when they are worn or damaged, or when a series is replaced by another. The figures in the table are influenced by the following new issues:

- 1) A new 1000-krone banknote, Series VII, was put into circulation on 19 June 2001.
- 2) An upgraded 200-krone banknote, Series VII, was put into circulation on 16 April 2002.
- 3) An upgraded 100-krone banknote, Series VII, was put into circulation on 25 March 2003.

Table 8. Average life of banknotes 2002–2006. In years.

	1000-krone	500-krone	200-krone	100-krone	50-krone
2002	1.8	2.6	0.4	0.7	1.3
2003	5.8	2.7	2.2	0.4	1.1
2004	8.7	2.1	1.9	1.7	1.3
2005	10.3	2.6	1.5	1.7	1.6
2006	9.9	2.7	1.6	1.7	1.7

The figures show the volume of notes in circulation compared with the number destroyed in the year in question. For an explanation of the changes in banknote life, see footnote to Table 7.

Table 9. Inflow of notes to Norges Bank 2002–2006. In millions of notes.

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2002	38.6	107.1	225.7	109.5	31.3	512.3
2003	33.4	103.6	234.7	96.0	32.0	499.7
2004	32.4	104.9	230.1	90.2	33.1	490.7
2005	31.8	105.7	209.3	89.2	35.3	471.4
2006 ¹⁾	23.6	68.9	119.6	57.9	27.2	297.3

The table shows numbers of banknotes delivered to Norges Bank.

¹⁾ The large decline from 2005 to 2006 is due to changed conditions for the deposit and withdrawal of cash from Norges Bank and the establishment of private cash depots.

Table 10. Velocity of banknote circulation 2002–2006.

	1000-krone	500-krone	200-krone	100-krone	50-krone	Total
2002	1.71	7.02	9.87	4.82	2.11	5.21
2003	1.51	6.69	10.03	4.59	2.09	5.14
2004	1.37	6.33	9.60	4.48	2.09	4.91
2005	1.29	5.84	8.69	4.42	2.12	4.54
2006 ¹⁾	0.92	3.32	4.52	2.73	1.49	2.64

The table shows the average number of times notes pass through Norges Bank per year.

¹⁾ See footnote to Table 9.

Table 11. Inflow of coins to Norges Bank 2002–2006. In millions of coins.

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2002	149.0	120.1	80.2	348.2	54.5	752.1
2003	216.5	119.8	84.5	353.9	60.6	835.2
2004 ¹⁾	281.4	117.4	83.7	361.0	63.6	907.1
2005	114.2	159.7	127.6	361.5	94.4	857.3
2006	133.0	105.3	81.6	239.1	76.5	635.6

The table shows the number of coins delivered to Norges Bank.

¹⁾ The figures are estimates due to changes made in connection with the recording of coins in Norges Bank's books.

Table 12. Velocity of coin circulation 2002–2006.

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2002	2.15	1.11	0.79	0.52	0.15	0.57
2003	2.77	1.14	0.82	0.52	0.16	0.61
2004 ¹⁾	3.38	1.12	0.78	0.50	0.16	0.64
2005	1.28	1.48	1.13	0.48	0.23	0.58
2006	1.44	0.92	0.68	0.30	0.18	0.41

The table shows the average number of times coins pass through Norges Bank per year.

¹⁾ See footnote 1 in Table 11.

Table 13. Production of circulation coins at the Mint of Norway 2002–2006. In thousands of coins¹⁾.

	20-krone	10-krone	5-krone	1-krone	50-øre	Total
2002	20 459	1 125	3 618	21 298	23 958	70 458
2003	30 061	957	827	24 093	19 853	75 790
2004	499	513	503	25 151	14 806	41 472
2005	1 509	466	503	25 648	4 963	33 090
2006	44	497	509	57 909	30 227	89 186

¹⁾ The table shows figures for coins produced and delivered to Norges Bank, and cannot be used to indicate the number of coins minted with different years. Coin sets are included.

Table 14 Banknote Production at Norges Bank's Printing Works 2002–2006.
(Numbers of packets of 500 notes.)

	1000-kr.	500-kr.	200-kr.	100-kr.	50-kr.
2002	0	34 776	79 309	20 014 ¹⁾	0
2003	0	0	30 304	60 400	50 366 ²⁾
2004	24 700	0	70 380	54 556	1 584
2005	45 912	52 900	0	0	71 254
2006	0	26 882	30 200	127 072	0

1) Upgraded Series VII, put into circulation 25 March 2003

2) Upgraded Series VII, put into circulation in 2004.

Table 15. Norges Bank's banknote series 1877–2006. Period of production.

	Series I	Series II	Series III	Series IV	Series V	Series VI	Series VII
1000-krone notes	1877-98	1901-45	1945-47	1949-74	1975-89	1990-99	2001-
500-krone notes	1877-96	1901-44	-	1948-76	1978-85	1991-98	1999-
200-krone notes	-	-	-	-	-	-	1994-
100-krone notes	1877-98	1901-45	1945-49	1949-62	1962-77	1977-95	1995-
50-krone notes	1877-99	1901-45	1945-50	1950-65	1966-84	1984-96	1996-
10-krone notes	1877-99	1901-45	1945-53	1954-74	1972-85	-	-
5-krone notes	1877-99	1901-44	1945-54	1955-63	-	-	-
Low denomination banknotes							
1-krone notes	1917	1940-50					
2-krone notes	1918	1940-50					

Series I ceased to be legal tender on 13 July 1988. Series II notes were invalidated in connection with the monetary reform in 1945 and are no longer redeemable in Norges Bank. Notes in Series III and IV and 10-krone, 50-krone and 100-krone notes in Series V ceased to be legal tender on 13 July 1989. The 100-krone note in Series V ceased to be legal tender on 1 August 1991, as did the 500-krone note in Series V on 21 June 1992. 1-krone and 2-krone notes from the period 1917–1918 are no longer legal tender and are not redeemed by the Bank. 1-krone and 2-krone notes from the period 1940–1950 ceased to be legal tender on 13 July 1989.

Appendix B

Norges Bank's management and organisation

The Bank's governing bodies

The governing bodies of the Bank are the Executive Board and the Supervisory Council.

Pursuant to the Act on Norges Bank and the Monetary System of 24 May 1985, the executive and advisory authority is vested in the Executive Board. It is in charge of the Bank's operations and manages its funds. The Executive Board consists of seven members, appointed by the King. The Governor and Deputy Governor are chairman and deputy chairman respectively of the Executive Board. They are appointed to full-time positions for a term of six years. The other five members are appointed for four-year terms. Two employee representatives supplement the Executive Board when administrative matters are discussed. The Executive Board normally meets every three weeks. Every second meeting is a monetary policy meeting.

The Executive Board has appointed an administration committee, which has decision-making authority in administrative matters (the internal management of Norges Bank). This committee is composed of the following members: the Governor of Norges Bank, the Deputy Governor of Norges Bank, the executive director of Norges Bank Staff and Group Services and the employee representatives on the Executive Board.

In accordance with the Norges Bank Act, the Governor of Norges Bank is in charge of the Bank's administration and the implementation of Executive Board decisions.

The Supervisory Council ensures that the rules governing the Bank's activities are observed, organises the auditing of the Bank, adopts the annual accounts and approves the budget on the recommendation of the Executive Board. The Supervisory Council consists of fifteen members elected by the Storting for four-year terms. From among the members, the Storting selects the chairman and deputy chairman for terms of two years. The Supervisory Council usually meets five times a year.

*The composition of the Executive Board and Supervisory Council as at January 2007**

The Executive Board

Governor of Norges Bank Svein Gjedrem, Chairman
(reappointed 01.01.2005-31.12.2010)

Deputy Governor Jarle Bergo, Deputy Chairman
(reappointed 12.04.2002-11.04.2008)

Vivi Lassen, (reappointed 01.01.2006 -31.12.2009)
Alternate: Kari Broberg, (reappointed 01.01.2006-31.12.2009)

Brit K. Rugland, (reappointed 01.01.2006-31.12.2009)

Alternate: Berit Tennbakk, (01.12.2006-31.12.2009)

Øystein Thøgersen, (reappointed 01.01.2006-31.12.2009)

Alternate: Ingunn Myrtveit, (reappointed 01.01.2006-31.12.2009)

Liselott Kilaas, (01.01.2004-31.12.2007)

Alternate: Aage Thor Falkanger, (01.12.2006-31.12.2009)

Asbjørn Rødseth. (01.01.04-31.12.2007)

Alternate: Eirik Wærness, (01.12.2006-31.12.2007)

Employee representatives:

Jan Erik Martinsen

Torgrim Roll

Hege Anderson (alternate)

Gunnvald Grønvik (alternate)

Supervisory Council

Mary Kvidal, 2006-2009 (reelected) (Chairman 2004-2007)

Alternate: Lars Gjedebo, 2006-2009 (new)

Liv Røssland, 2006-2009 (new) (Deputy Chairman 2006-2007)

Alternate: Frode Klemp, 2006-2009 (new)

Solveig Nordkvist, 2004-2007

Alternate: Liv Stave, 2004-2007

Terje Ohnstad, 2004-2007

Alternate: Herdis Maihack Engen, 2006-2007 (new)

Eva Karin Gråberg, 2004-2007

Alternate: Jan Elvheim, 2004-2007

Tom Thoresen (2004-2007)

Alternate: Hans Kolstad, 2004-2007

Runbjørg Bremset Hansen, 2004-2007

Alternate: Camilla Bakken Øvald, 2004-2007

Hans Petter Kvaal, 2004-2007

Alternate: Arent Kragh, 2004-2007

Kåre Harila, 2004-2007

Alternate: Liv Sandven, 2004-2007

Trond Lode, 2006-2007 (new) (for Anne Tingelstad

Wøien who has leave of absence)

Alternate: Ivar B. Prestbakmo, 2006-2007 (new) (for

Steinulf Tungesvik who has leave of absence)

Anne Strifeldt, 2006-2009 (new, previous alternate)

Alternate: Inger Spangen, 2006-2009 (new)

Reidar Åsgård, 2006-2009 (new)

Alternate: Ola Røtvei, 2006-2009 (new)

Frank Sve, 2006-2009 (new)

Alternate: Erland Vestli, 2006-2009 (new)

Oskar Grimstad, 2006-2009 (new)

Alternate: Pål Morten Borgli, 2006-2009 (new)

Terje Johansen, 2006-2009 (new)

Alternate: Torhild Skogsholm, 2006-2009 (new)

Audit

Svenn Erik Forsstrøm

State Authorised Public Accountant

Norges Bank's management and organisation

Management

Svein Gjedrem, Governor of Norges Bank
Jarle Bergo, Deputy Governor

Norges Bank Monetary Policy

Jan F. Qvigstad, Executive Director

Research Department

Øyvind Eitrheim, Director

International Department

Audun Grønn, Director

Department for Market Operations and Analysis

Jannecke Ebbesen, Director

Monetary Policy Department

Amund Holmsen, Director

Human Resources and Administration

Audun Grønn, Director

Economics Department

Anne Berit Christiansen, Director

Norges Bank Financial Stability

Kristin Gulbrandsen, Executive Director

Financial Markets Department

Birger Vikøren, Director

Payment Systems Department

Inger-Johanne Sletner, Director

Interbank Settlement Department

Kjetil Heltne, Director

Cashier's Department

Trond Eklund, Director

Contingency planning

Arild J. Lund, Director

Norges Bank Investment Management

Knut N. Kjær, Executive Director

Equities - Investments

Yngve Slyngstad, Chief Investment Officer

Equities - Operations

Stephen A. Hirsch, Chief Operating Officer

Fixed income - Investments

Dag Løtveit, Chief Investment Officer

Fixed Income - Operations

Bjørn Egge, Chief Operating Officer

Risk, Performance and Accounting

Ilse Bache, Chief Technology Officer

IT Infrastructure

Ilse Bache, Chief Technology Officer

Legal Department

Marius Nygaard Haug, Chief of Staff and General Counsel

Finance

Bjørn Taraldsen, Assistant Director

Staff

Kristin Skauan Kleven, Head of Human Resources

Corporate Governance

Henrik Syse, Doctor of Arts

Norges Bank Staff and Group Services

Harald Bøhn, Executive Director

Staff Services

Anne-Britt Nilsen, Director

Norges Bank's Printing Works

Jan Erik Johansen, Director

Property Management Department

Marit Kristine Liverud, Director

Security Department

Arne Haugen, Head of Security

Shared Services

Torkel Fagerli, Director

ICT Department

Øyvind Seljeseth, Director

Communications Department

Siv Meisingseth, Director of Communications

Legal Department

Marius Ryel, Executive Director

Norges Bank
Bankplassen 2
P.O. Box 1179, Sentrum,
N-0107 Oslo
Telephone: +47 22 31 60 00
Telefax: +47 22 41 31 05
www.norges-bank.no

ISSN 0078-1185