



NORGES BANK

# 2015 ANNUAL REPORT



# NORGES BANK'S BICENTENARY

The two-year-old Storting (the Norwegian parliament) adopted an act to establish a central bank for the new nation of Norway in 1816. The first Norges Bank Act was sanctioned by the King on 14 June 1816.

The bicentenary celebration is an opportunity for Norges Bank to open its doors, invite people in and reach out across the country to provide the public with deeper insight into its history and mission in society.

## SYMPOSIUM

A Norges Bank symposium will be held to celebrate the Bank's bicentenary: "The interaction between monetary policy and financial stability: going forward".

The symposium will focus on the lessons that can be drawn from the financial crisis – on the interaction between monetary policy and financial stability, experience and expectations of macroeconomic policy, and the scope for fine-tuning the financial sector.

## EDUCATION CENTRE

An interactive education centre targeting school-age students will be opened at Norges Bank. With its interactive game "Horisont", students will be set the task of building up an economy from scratch, from a barter economy to a modern monetary economy.

## BICENTENARY COIN

A special edition 20-krone bicentenary circulation coin will be launched in the bicentenary year.

## EVENTS IN THE BICENTENARY YEAR 2016

### 5 January

Launch of bicentenary portal:  
<http://www.norges-bank.no/en/200th-anniversary>

### 18 February

#### Annual Address

Norges Bank, Oslo

### 2 March

#### Annual Address for students

Case championship kick-off  
University of Oslo

### 7 April

#### Speech to invited foreign embassy representatives

Norges Bank, Oslo

### 12 April

#### Kongsberg

Speeches to Norges Bank's regional network and company visits. Opening of the exhibition at the Norwegian Mining Museum: "The king and the elk: Two hundred years of coin and medal design"

### 12 April

#### Speech at the Norwegian Academy of Science and Letters

Oslo

### 2 May

#### Molde

Speeches to Norges Bank's regional network and visit to Molde high school.

### 3 May

#### Bodø

Norges Bank will attend the business and industry conference, "Opplyst!", and meet with students.

### 18-19 May

#### Stavanger

Speeches to Norges Bank's regional network. Opening of exhibition at the Norwegian Petroleum Museum "From Petroleum Wealth to Financial Assets", company visits and preliminary case competitions for students.

### 10 June

#### Book Launch

Norges Bank 1816-2016  
Norges Bank 1816-2016: A Pictorial History

### 14 June

#### Trondheim: Official Bicentenary Celebration

The official event celebrating Norges Bank's bicentenary will be held on 14 June in Trondheim, where Norges Bank was headquartered from 1816 to 1897.

### 16 June

#### International Symposium

"The interaction between monetary policy and financial stability: going forward"  
Norges Bank, Oslo

### 19 June

#### Open House

A Norges Bank bicentenary celebration will be held in the square facing the entrance to the Bank, Bankplassen, and in the Bank itself.

The public is invited to participate in one of four lectures or a guided tour of the Bank to learn about the Bank's history and mission in society. Light refreshments will be served at Bankplassen, and there will be various activities for all the family.

Two temporary exhibitions will be opened in Norges Bank's previous premises at Bankplassen, which are now museums:

The exhibition "Open Up! Norges Bank's Bicentenary" will be on at the National Museum of Art, Archi-

ecture and Design. The exhibition will be displayed in the vault itself!

All the entries received in the contest to design the bicentenary circulation coin, including the winning design, will be on display at the Museum of Contemporary Art.

### 31 August

#### Kristiansand

Norges Bank will take part in a regional banking conference.

### 28 September

#### Bergen

Speeches to Norges Bank's regional network and preliminary case competitions for students. Opening of "The Silver Tax", a joint exhibition by the University Museum of Bergen, Bergen City Museum and KODE (Art Museums of Bergen).

### 11 October

#### Trondheim

Speeches to Norges Bank's regional network and preliminary case competitions for students.

### 12 October

#### Lillehammer

Regional network conference for local business and industry representatives and students.

### 27 October

#### Case championship finals

Norges Bank, Oslo

### 16 December

#### Speeches to Norges Bank's regional network

Norges Bank, Oslo

## THE BICENTENARY ON SOCIAL MEDIA

[www.norges-bank.no/200-ar/](http://www.norges-bank.no/200-ar/)

<http://www.norges-bank.no/en/200th-anniversary>



Norges Bank 200 years



Norges Bank



# 2015 ANNUAL REPORT



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# CONTENTS

<b>PART I</b>		<b>PART II</b>	
<b>ANNUAL REPORT OF THE EXECUTIVE BOARD 2015</b>	<b>5</b>	<b>NORGES BANK'S ANNUAL FINANCIAL STATEMENTS 2015</b>	<b>29</b>
<b>Norges Bank's Executive Board</b>	<b>6</b>	<b>Income statement</b>	<b>33</b>
<b>Responsibilities and governance structure</b>	<b>8</b>	<b>Balance sheet</b>	<b>34</b>
<b>Composition and work of the Executive Board in 2015</b>	<b>10</b>	<b>Statement of cash flows</b>	<b>36</b>
<b>Selected key figures</b>	<b>12</b>	<b>Statement of changes in equity</b>	<b>37</b>
<b>Annual Report of the Executive Board 2015</b>	<b>15</b>	<b>Notes</b>	<b>38</b>
Objectives and values	15	<b>Independent auditor's report</b>	<b>133</b>
Changes in the governance structure	15	<b>Resolution of the Supervisory Council on the financial statements for 2015</b>	<b>135</b>
Monetary policy	16	<b>The Supervisory Council's statement on the minutes of the meetings of the Executive Board and its supervision of the Bank</b>	<b>135</b>
Financial stability	17		
Investment management at Norges Bank	18		
Foreign exchange reserves	18		
Government Pension Fund Global	18		
Corporate governance, risk management and internal control	20		
Balance sheet composition and financial risk	21		
Financial statement highlights	22		
Distribution of total comprehensive income	22		
Corporate social responsibility	23		
A transparent central bank	23		
Responsible investment	23		
Research and knowledge-sharing	24		
Ethical conduct	25		
Human resources and working environment	26		
		<b>PART III</b>	
		<b>NORGES BANK'S ACTIVITIES</b>	<b>137</b>
		<b>Chapter 1</b>	
		<b>Monetary policy</b>	<b>139</b>
		Growth as expected, although somewhat weaker outlook in the period to the March monetary policy meeting	139
		Developments broadly in line with projections in the period to the May monetary policy meeting	140
		Weaker growth outlook in the period to the June monetary policy meeting	141
		Fall in oil prices and weaker growth outlook in the period to the September monetary policy meeting	142

## Norges Bank Oslo 2016

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Website: <http://www.norges-bank.no>

Governor: Øystein Olsen  
Deputy Governor: Jon Nicolaisen

Design: Brandlab  
Layout: 07 Media AS  
The text is set in 9 point. Azo Sans

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Slightly weaker-than-expected developments and weaker krone in the period to the November meeting	143		
Further fall in oil prices and somewhat weaker growth outlook in the period to the December meeting	144		
<b>Chapter 2</b>			
<b>Financial stability</b>	<b>151</b>		
Sound profitability and increase in capital ratios	151		
New liquidity requirements	153		
Advice on the countercyclical capital buffer	153		
<b>Chapter 3</b>			
<b>Markets and investment management</b>	<b>158</b>		
Management of banking system liquidity	158		
Banks' krone liquidity and Norges Bank's market operations in 2015	160		
Money market premiums	160		
Collateral for loans from Norges Bank	161		
Investment management	162		
Foreign exchange reserves	162		
Claims on the IMF	163		
Government Pension Fund Global (GPFG)	164		
Tasks performed on behalf of the Government	164		
Government debt in 2015	164		
Account management for the Government	166		
Transfers to the GPFG	166		
<b>Chapter 4</b>			
<b>Payment systems, banknotes and coins</b>	<b>167</b>		
Oversight of financial infrastructure	167		
Norges Bank's settlement system	168		
Banknotes and coins	169		
Counterfeit Norwegian banknotes	170		
Organisation of cash distribution	170		
Commemorative coin issues	171		
New banknote series	172		
<b>Chapter 5</b>			
<b>International cooperation</b>	<b>173</b>		
Increased quotas and credit agreements with the IMF	173		
Regular contact and cooperation with other central banks and international organisations	174		
Technical assistance to central banks in Malawi and Zambia	176		
<b>Chapter 6</b>			
<b>Research</b>	<b>177</b>		
Research activities	177		
Conferences, workshops and seminars	177		
Support for economic research and studies	178		
Book project to mark Norges Bank's bicentenary in 2016	179		
<b>Chapter 7</b>			
<b>Communication</b>	<b>180</b>		
Press conferences	180		
Speeches and lectures	180		
Norges Bank's website and social media	181		
Publications	181		
Establishment of the Norges Bank Education Centre	182		
<b>Appendix</b>	<b>183</b>		
Governing bodies, management and organisation 2016	183		





ANNUAL REPORT OF THE  
EXECUTIVE BOARD **2015**

# NORGES BANK'S EXECUTIVE BOARD

The composition of the Executive Board was changed at the beginning of 2016. Ms Liselott Kilaas resigned from the Executive Board after twelve years as a member. Ms Kathryn Moore Baker and Mr Steinar Juel were appointed as new members. Mr Egil Matsen was appointed to a new Deputy Governor position. On 31 December 2015, Mr Jan Erik Martinsen resigned as employee representative and was succeeded by Ms Mona Helene Sørensen.



## Øystein Olsen

B. 1952. Appointed Governor of Norges Bank and Chair of the Executive Board from 1 January 2011 for a term of up to six years.

Work experience includes posts as Director General of Statistics Norway and Director General at the Ministry of Finance. Mr Olsen has also chaired or served as a member of a number of government-appointed commissions. Mr Olsen holds a postgraduate degree in economics (cand. oecon.) from the University of Oslo.



## Jon Nicolaisen

B. 1959. Appointed Deputy Governor and First Deputy Chair of the Executive Board on 1 April 2014 for a term of up to six years.

Work experience includes posts as Head of Economic Policy Department of the Ministry of Finance, Head of Section in the OECD Secretariat and Executive Director of Norges Bank Monetary Policy. In the period 30 June 2015 to 30 June 2017, Mr Nicolaisen is co-chair of the Financial Stability Board's (FSB) Regional Consultative Group for Europe with the First Deputy Governor of Banque de France, Ms Anne Le Lorier. Mr Nicolaisen holds a postgraduate degree in economics (cand. oecon.) from the University of Oslo.



## Egil Matsen

B. 1968. Appointed Deputy Governor and Second Deputy Chair of the Executive Board on 18 January 2016 for a term of up to six years. Chair of the Ownership Committee and the Risk and Investment Committee of the Executive Board.

Work experience includes posts as Professor and Head of the Department of Economics at NTNU. He has also held a Fullbright scholarship at Harvard University and the post of economist at Norges Bank Research. Professor Matsen holds a PhD in economics (dr. oecon.) from the Norwegian School of Economics.



## Hilde Myrberg

B. 1957. Appointed board member for the period 1 January 2014–31 December 2017. Chair of the Remuneration Committee of the Executive Board.

Ms Myrberg holds several board positions including Vice Chair of the Board of Directors at Petoro. She has extensive experience in the business sector and has held a number of positions including Senior Vice President of Orkla. Ms Myrberg holds a degree in law (cand. jur.) from the University of Oslo and an MBA from INSEAD.



## Kjetil Storesletten

B. 1967. Appointed board member for the period 1 January 2014–31 December 2017. Member of the Risk and Investment Committee of the Executive Board.

Professor at the Department of Economics at the University of Oslo and guest professor at the University of Zürich. Previously affiliated with Stockholm University and the Federal Reserve Bank of Minneapolis. Professor Storesletten has also held a number of other positions including Chair of the Editorial Board of the Review of Economic Studies. Professor Storesletten has a business economics degree from the Norwegian School of Economics and a PhD in economics from Carnegie Mellon University.



**Karen Helene Ulltveit-Moe**

B. 1967. Appointed board member for the period 1 January 2014–31 December 2017. Chair of the Audit Committee and member of the Risk and Investment Committee of the Executive Board.

Professor at the Department of Economics at the University of Oslo and Research Fellow at the Centre for Economic Policy Research (CEPR) and CESifo. Professor Ulltveit-Moe was previously affiliated with the Norwegian School of Economics, has served on the board at a number of Norwegian companies and has chaired various government-appointed commissions. Professor Ulltveit-Moe has a business economics degree from the University of Mannheim and a PhD in economics from the Norwegian School of Economics.



**Kathryn Moore Baker**

B. 1964. Appointed board member for the period 1 January 2016–31 December 2019. Member of the Audit Committee and the Ownership Committee of the Executive Board.

Extensive board experience including member of the board at Akastor. Former partner in the private equity company Reiten & Co and consultant at McKinsey & Company. Ms Baker holds a degree in economics from Wellesley College and an MBA from Tuck School of Business at Dartmouth College.



**Steinar Juel**

B. 1950. Appointed board member for the period 1 January 2016–31 December 2019. Member of the Audit Committee of the Executive Board.

Senior Economist at Civita. Mr Juel has held several positions at Kreditkassen/Nordea, primarily as chief economist. Previous experience at Norges Bank, the Ministry of Finance, the Norwegian Bankers' Association, the EFTA Secretariat in Geneva and as advisor to finance ministers Rolf Presthus and Arne Skauge. Mr Juel holds a postgraduate degree in economics (cand. oecon.) from the University of Oslo.

**ALTERNATES:**

To be appointed.

**EMPLOYEE REPRESENTATIVES:**



**Gøril Bjerkhov Havro**

B. 1980. Employee representative for the period 1 January 2011–31 December 2016.

Norges Bank employee since 2008. Ms Havro graduated from the University of Oxford, holds a master's degree from Nelson Mandela Metropolitan University in South Africa and an MBA from HEC Paris.

Henrik Borchgrevink is alternate for Gøril Bjerkhov Havro.

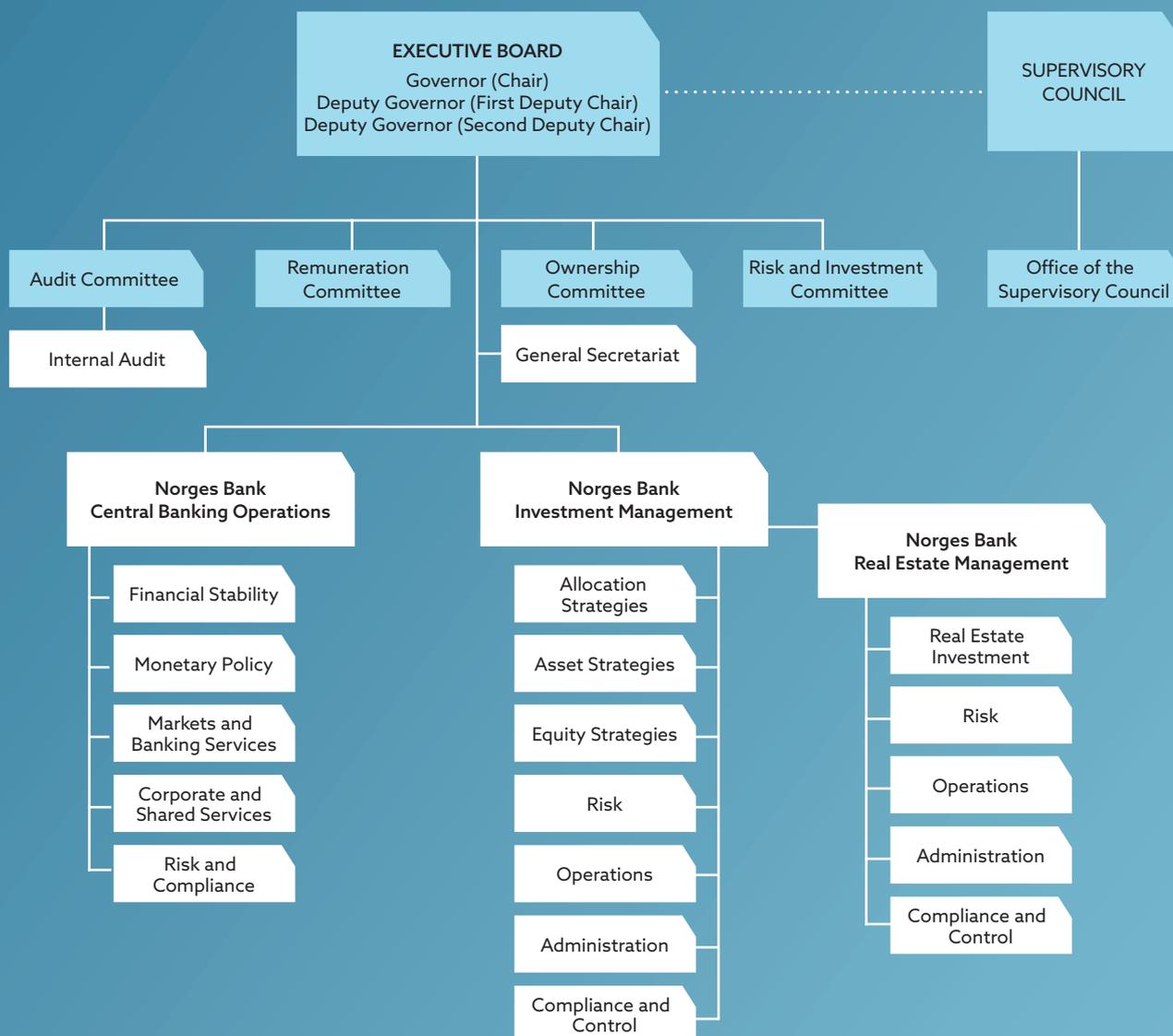


**Mona Helen Sørensen**

B. 1963. Employee representative for the period 1 January 2016–31 December 2016. Norges Bank employee since 1991. Chair and chief union representative of the Finance Sector Union of Norway at Norges Bank from 1 January 2016.

Ms Sørensen holds a degree in economics and administration and an Executive Master of Management with a specialisation in applied organisational psychology from BI Norwegian Business School.

# RESPONSIBILITIES AND GOVERNANCE STRUCTURE



Norges Bank's activities are regulated by the Act of 24 May 1985 relating to Norges Bank and the Monetary System etc. (the Norges Bank Act). The Act states that Norges Bank shall be an executive and advisory body for monetary, credit and foreign exchange policy. The Government has defined an inflation target for monetary policy in a regulation issued pursuant to the Norges Bank Act. The Bank shall issue banknotes and coins, promote an efficient payment system domestically and vis-à-vis other countries, and monitor developments in the money, credit and foreign exchange markets. The Act authorises the bank to implement measures customarily or ordinarily taken by a central bank.

Norges Bank's management of the Government Pension Fund Global (GPF) is regulated by the Government Pension Fund Global Act and the management mandate for the GPF issued by the Ministry of Finance.

The highest decision-making bodies of Norges Bank are the Executive Board and the Supervisory Council.

Executive and advisory authority is vested in the Executive Board, which manages the Bank's resources. As from 1 January 2016, the Executive Board comprises eight members, all appointed by the King in Council. The Governor is Chair and the two Deputy Governors are First Deputy Chair and Second Deputy Chair of the Executive Board. The other five members are not on the staff of Norges Bank. Two alternates for the external members, who attend and have the right to speak at Executive Board meetings, are also appointed. Two employee representatives attend Executive Board meetings when matters concerning the Bank's internal operations and conditions for the staff are discussed. The two external alternates also participate in such cases so that the Executive Board then has twelve members.

The Executive Board has four subcommittees: the Audit Committee, the Remuneration Committee, the Risk and Investment Committee, and the Ownership Committee. The committees are all preparatory bodies established to strengthen and streamline the Executive Board's discussions. Norges Bank is required to have audit and remuneration committees according to Section 10 of the Regulation on risk management and internal control at Norges Bank and Section 3 of the Regulation on remuneration arrangements in financial institutions, investment firms and investment management companies for securities funds. The Ownership Committee and the Risk and Investment Committee were established in 2015 in order to strengthen oversight of investment management (for more details, see Annual Report of the Executive Board on page 15).

Internal Audit provides the Executive Board with independent assessments of risk management and internal control. Internal Audit reports to the Audit Committee.

Norges Bank's Supervisory Council comprises 15 members appointed by the Storting (the Norwegian parliament). The Council's mandate is to provide assurance to the Storting through its activities and reports that Norges Bank operates in a prudent and appropriate manner and in compliance with legislation and other standards, including in the management of the GPF.

Pursuant to the Norges Bank Act, the Governor is responsible for the day-to-day management of the Bank, with the Deputy Governors as First and Second Deputy Chairs of the Executive Board. In the case of Norges Bank Investment Management (NBIM), decision-making authority has been delegated directly to the CEO of NBIM by the Executive Board and is embodied in the job description for the position.



# COMPOSITION AND WORK OF THE EXECUTIVE BOARD IN 2015

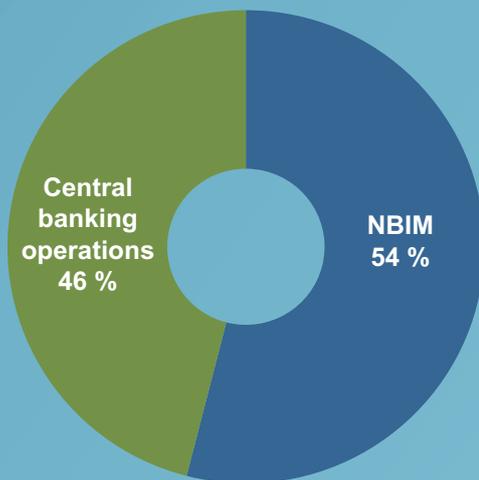
The composition of the Executive Board was as follows in 2015:

Composition of the Executive Board in 2015			
Members	Function	Change	Committee
Øystein Olsen	Chair		
Jon Nicolaisen	Deputy Chair		Chair of Ownership Committee Chair of Risk and Investment Committee
Liselott Kilaas	Member	Resigned 31 December 2015	Member of Audit Committee Member of Ownership Committee
Egil Matsen	Member	New function as Deputy Governor from 18 January 2016	Chair of Audit Committee Member of Risk and Investment Committee
Hilde Myrberg	Member		Chair of Remuneration Committee
Kjetil Storesletten	Member		Member of Remuneration Committee
Karen Helene Ulltveit-Moe	Member		Member of Audit Committee Member of Risk and Investment Committee
Espen R. Moen	Alternate	Resigned 29 February 2016	Member of Ownership Committee
Hege Sjo	Alternate	Resigned 1 February 2015	
Kathryn M. Baker	Alternate	Appointed alternate from 19 June 2015 and member from 1 January 2016	
Jan Erik Martinsen	Employee representative	Resigned 31 December 2015	
Gøril Bjerkhol Havro	Employee representative		

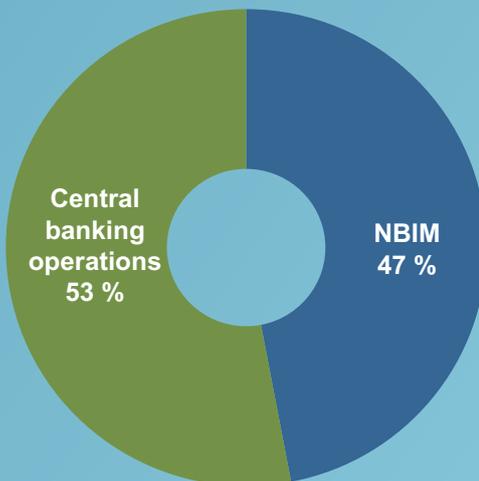
In 2015, 16 Executive Board meetings were held in addition to the meetings held by the four committees. Executive Board seminars were also held to prepare matters and topics.

Meetings	2015	2014
Executive Board meetings	16	14
Seminars	9	8
Total time spent in Executive Board meetings and seminars	103 hours	78 hours
Matters considered by the Executive Board	218	179
Preparatory committee meetings:		
- Audit Committee	7	5
- Remuneration Committee	2	4
- Ownership Committee	7	-
- Risk and Investment Committee	7	-
Total time spent in committee meetings	44 hours	25 hours

Distribution of time,  
Executive Board 2015  
(meetings and seminars)



Distribution of time,  
Executive Board 2014  
(meetings and seminars)



# SELECTED KEY FIGURES

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## KEY POLICY RATE

# 0.75%

The key policy rate was reduced from 1.25% to 1% in June, with a further reduction to 0.75% in September.

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## INFLATION

# 2.1%

The operational target of monetary policy is annual consumer price inflation of close to 2.5% over time.

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## COUNTERCYCLICAL CAPITAL BUFFER

# 1%

The countercyclical capital buffer rate is set at 1% effective from 30 June 2015. The rate will increase to 1.5% effective from 30 June 2016.

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## FOREIGN EXCHANGE RESERVES

# NOK 468bn

The market value of the foreign exchange reserves increased in 2015 by NOK 19bn to a total of NOK 468bn.

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## EMPLOYEES

# 856 employees

The number of Norges Bank employees increased by 93 in 2015, most of whom are employed in Norges Bank Investment Management.

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## TRANSFER TO THE TREASURY

# NOK 26.6bn

As a result of the distribution of total comprehensive income for 2015, NOK 26.6bn will be transferred from Norges Bank's Transfer Fund to the Treasury in 2016.

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**GOVERNMENT PENSION FUND  
GLOBAL**

NOK  
7 475bn

The market value of the GPFG increased in 2015 by NOK 1 044bn to a total of NOK 7 475bn at the end of the year.

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**GOVERNMENT PENSION FUND  
GLOBAL**

2.7%

The return on the GPFG in 2015 was 2.7%, with the return on equity investments at 3.8%, fixed income investments at 0.3% and real estate at 10.0%.





# ANNUAL REPORT OF THE EXECUTIVE BOARD 2015

## OBJECTIVES AND VALUES

Norges Bank performs public tasks and manages assets on behalf of the nation. The aim of central banking operations is to promote stability in the economy. Norges Bank manages the Government Pension Fund Global (GPF) on behalf of the Ministry of Finance. The aim of investment management is to achieve the highest possible return on the GPF within the framework established by the political authorities.

In order to realise the Bank's objectives and values, the Executive Board establishes frameworks and principles for the Bank's operations and ensures that risk management and internal control are satisfactory in all areas of the Bank's activities. The Executive Board issues three-year strategic plans that describe the Bank's current status and its challenges and priorities.

The strategy for 2014-2016 states that Norges Bank will update and further develop work on its core tasks. The Bank aims to contribute to setting the international standard for the conduct of monetary policy, the oversight and analysis of financial stability and for global investment management.

Norges Bank is tasked with promoting efficient financial markets and a robust and well-run payment system. The Bank proactively seeks to improve the efficiency of the Norwegian money market, provide settlement services in the payment system and issue notes and coins in accordance with best international practice.

It is Norges Bank's objective to be a transparent and well-run central bank, with transparent, reliable and consistent communications. It seeks to make prudent and responsible use of resources commensurate with the Bank's tasks.

The Bank fosters a culture of excellence and teamwork, encouraging employees to develop their skills and share their knowledge,

promoting an environment conducive to change and renewal and attractive to professionals from leading specialist environments.

## CHANGES IN THE GOVERNANCE STRUCTURE

The Executive Board continued in 2015 to adapt the governance structure to changes in the Bank's tasks. The real estate organisation within Norges Bank Investment Management (NBIM) in particular has grown considerably, in pace with a large number of new real estate investments. The Executive Board decided that the CEO of NBIM was to delegate activities related to the management of the unlisted real estate portfolio to the CEO of Norges Bank Real Estate Management (NBREM) and a CEO for NBREM was appointed. The CEO of NBIM still has overall responsibility for the GPF.

The Risk and Investment Committee was also established under the Executive Board. The Committee is a preparatory and advisory body intended to strengthen and improve the efficiency of the Executive Board's work related to overall GPF risk management, the GPF management framework and decisions concerning large real estate investments.

The Ministry of Finance's revised guidelines for exclusion of companies from the GPF came into effect in January 2015. Observation and exclusion criteria are unchanged, but rather than advising the Ministry of Finance, the Council on Ethics now advises Norges Bank, which decides whether to act on the Council's advice. To achieve this, the Executive Board established the Ownership Committee in January 2015. The Committee is a preparatory and advisory body for matters concerning responsible investment activities and decisions on observation and exclusion of companies from the GPF.

In June 2015, the Storting adopted amendments to the Norges Bank Act which entailed an increase from one to two deputy governors, who will both be members of Norges Bank's

Executive Board. The aim is to strengthen the Executive Board's capacity, including with regard to investment management. With the five external members, the Board will thus have eight members. The change came into effect on 1 January 2016. At the same time, organisational adjustments were made to underpin the changes, including the establishment of the Central Secretariat serving the Executive Board and Norges Bank's executive management.

## MONETARY POLICY

In 2015, monetary policy in Norway was influenced by low external interest rates, a sharp drop in oil prices and lower growth in the Norwegian economy. The key policy rate was reduced from 1.25% to 0.75% over the course of the year. The rate reductions eased the restructuring of the Norwegian economy by underpinning the depreciation of the krone.

Growth in the world economy remained moderate in 2015, but with considerable differences across countries. Many advanced economies showed a gradual improvement, while growth slowed in emerging economies. Consumer price inflation had been close to zero among Norway's main trading partners, partly as a result of falling energy prices. In addition, cost pressures had been weak following several years of low wage growth.

Partly in response to the low level of inflation, several central banks implemented further monetary policy easing through 2015. Interest rates fell among trading partners as a whole. Policy rates in many countries were negative and a number of central banks were also using other instruments to counter the risk of deflation and stimulate economic activity. In the euro area, the European Central Bank's (ECB) asset purchase programme was expanded to include government bonds. In February, The Swedish central bank, the Riksbank, introduced a government bond purchase programme. In December, the Federal Reserve increased its policy rate for the first time since 2006.

External long-term interest rates fell in early 2015, but had rebounded by year-end to approximately the same level as at the beginning of the year. Money and bond market premiums increased somewhat through autumn.

Oil prices fell further through 2015. At the end of the year, oil prices had dropped to just under USD 40 per barrel, around a third of the level before the fall began 18 months earlier. Futures prices also declined through 2015. The decline in oil prices reflected large surpluses in the supply of oil. Weaker growth in emerging economies, particularly China, also curbed the rise in the demand for oil.

The fall in oil prices contributed to a sharp depreciation of the krone. As measured by the import-weighted krone exchange rate (I-44), the krone was 8% weaker at the end of 2015 than at the same time in 2014.

The effects of the fall in oil prices and the decline in oil investment on the Norwegian economy gradually became evident through 2015. The effects were particularly pronounced in regions and sectors closely linked to the oil industry. Confidence indicators suggested that Norwegian households had become more concerned about developments in the Norwegian economy. Growth in household consumption nonetheless remained fairly buoyant through 2015.

Business investment fell, driven by weak growth prospects and uncertainty regarding economic developments. Housing investment continued to rise even though the rise was curbed by falling oil prices in some parts of the country. Oil investment decreased and the decline in the global petroleum industry acted as a drag on Norwegian oil service exports. On the other hand, a weaker krone improved business competitiveness and contributed to raising total exports. Economic growth was underpinned by growth in public sector consumption and investment. Overall, economic growth in Norway slowed in 2015.

Unemployment rose somewhat in 2015, primarily in regions with close ties to the oil industry.

Capacity utilisation fell back through the year and was assessed to be lower than normal. Annual wage growth has declined in recent years and wage growth fell further in 2015. The moderation in wage growth partly reflected a high cost level, the fall in oil prices and lower capacity utilisation in the Norwegian economy.

The prolonged depreciation of the krone lifted inflation in 2015. At end-2015, the year-on-year rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) was 3.0%. The twelve-month rise in the consumer price index (CPI) was 2.3% at the end of 2015.

The growth outlook for the Norwegian economy weakened gradually through 2015. Projections for oil investment in the years ahead were revised down, which will have spillover effects on the mainland economy. On the other hand, a weaker krone contributed to supporting activity in the economy. Unemployment was expected to rise somewhat further, and projections for wage growth in the coming years were revised down. The krone depreciation is expected to support consumer price inflation through 2016. The decline in wage growth and the fading effects of a weaker krone are expected to dampen inflation ahead.

As the outlook for growth and the forces driving inflation further ahead had weakened, Norges Bank reduced the key policy rate twice in 2015, in June and in September, by a total of 0.5 percentage point. At end-2015, the key policy rate was 0.75%.

According to the Executive Board's assessment of the outlook for the Norwegian economy at its meeting on 16 December 2015, the key policy rate might be lowered in the first half of 2016.

## FINANCIAL STABILITY

In 2015, banking sector profitability was high and loan losses were low. Retained earnings and equity issuances have improved banks' capital ratios. All large Norwegian banks fulfil the CET1

capital ratio requirement by an ample margin. Some of the largest banks have announced that they will target higher CET1 capital ratios to be achieved by the end of 2016. More capital strengthens banks' resilience to a future downturn. At the same time, Norges Bank pointed out in its *Financial Stability Report* that high household debt, persistent real estate price inflation and banks' short-term foreign currency funding could place the Norwegian financial system in a vulnerable position.

In line with the regulation on the countercyclical capital buffer, Norges Bank has prepared a decision basis for and provided advice to the Ministry of Finance on the level of the countercyclical capital buffer for banks on a quarterly basis. The countercyclical capital buffer requirement is part of the total Tier 1 capital ratio requirement.

Norges Bank's assessment is based on the premise that banks should build and hold a countercyclical capital buffer when imbalances are building up or have built up over a period. In December 2013, the countercyclical capital buffer was set at 1% of risk-weighted assets, with effect from 30 June 2015.

The persistent increase in household debt ratios and high real estate price inflation in recent years are signs that financial imbalances continued to build up in the period after the buffer was set for the first time at the end of 2013. On this basis, Norges Bank's advice to the Ministry of Finance in June 2015 was to increase the buffer to 1.5% of risk-weighted assets. The Ministry decided to set the buffer at 1.5% in line with Norges Bank's advice with effect from 30 June 2016.

House prices continued to rise in 2015, although the rise slowed through autumn. Regional differences are considerable, and in areas with close ties to the oil industry house prices rose marginally or fell. Household debt continued to grow somewhat more rapidly than income.

Banks' residential mortgage lending rates were lowered through 2015. The spread between lending rates and money market rates narrowed somewhat.

Risk premiums on banks' long-term wholesale funding fell in recent years, but rose somewhat in 2015. Banks had ample access to wholesale funding. Banks have improved their funding structures and reduced liquidity risk since the financial crisis. At the same time, Norwegian banks have extensive short-term funding in foreign currency. Experience shows that short-term funding can dry up abruptly and prove difficult to replace. Norges Bank sent a consultation response on the liquidity coverage ratio (LCR) in 2015. The new liquidity regulations were laid down by the Ministry of Finance and came into effect on 31 December 2015.

The financial infrastructure in Norway is in general robust and efficient. There were few disruptions in interbank systems and securities settlement systems in 2015. Norwegian payment and settlement systems are generally in line with the international principles for such systems.

On the whole, the operation of Norges Bank's settlement system was stable in 2015. The settlement system handled a daily average of NOK 219bn in payments. At the end of 2015, banks' sight deposits and reserves on deposit with Norges Bank totalled NOK 35.2bn.

Since November 2015, Norges Bank has had access to an enhanced contingency solution for the settlement system (the Market Infrastructure Resiliency Service, MIRS) in addition to the operational solutions already in use. Through 2015, Norges Bank made preparations for a new ICT system for calculating and managing lendable values for banks' collateral for loans. The solution was introduced in January 2016.

Work to develop a new banknote series began in early 2013. Norges Bank plans to launch the new banknote series in three stages between 2017 Q2 and the end of 2019.

## INVESTMENT MANAGEMENT AT NORGES BANK

### FOREIGN EXCHANGE RESERVES

The foreign exchange reserves are divided into a money market portfolio and a long-term portfolio. The Bank also manages a petroleum buffer portfolio. The purpose of the petroleum buffer portfolio is to handle transfers of the government's net cash flow from petroleum activities to the GPF and to ensure an appropriate handling of the Government's need for conversion between foreign currency and NOK.

The foreign exchange reserves are to be used for transactions in the foreign exchange market as part of the conduct of monetary policy or in the interest of promoting financial stability, and to meet Norges Bank's international commitments.

The market value of the foreign exchange reserves was NOK 468.2bn at the end of 2015 Q4. Equities and long-term fixed income investments totalled NOK 411.1bn, while money market investments came to NOK 50.3bn and the petroleum buffer portfolio to NOK 6.8bn. The reserves increased by NOK 19.6bn through 2015. Returns in foreign currency increased the reserves by around NOK 12.8bn and a weaker krone exchange rate increased the value of the reserves by NOK 53.7bn. The krone exchange rate does not otherwise affect the international purchasing power of the reserves. Norges Bank gradually reduced the size of the petroleum buffer portfolio through 2015 by selling foreign exchange in the market.

Measured in foreign currency, the return on the foreign exchange reserves, excluding the petroleum buffer portfolio, was 1.67% in 2015.

### GOVERNMENT PENSION FUND GLOBAL

The market value of the investment portfolio of the GPF was NOK 7 475bn at the end of 2015, an increase of almost NOK 1 000bn on 2014.

The return for 2015 was 2.7% measured in foreign currency. A strong first quarter for equity



investments was followed by two quarters of negative returns. Markets picked up again in late 2015. The results were somewhat weaker than the average return over the past ten years. The GPFG's equity investments showed a return of 3.8%, while fixed income investments earned a return of 0.3%. The return on real estate investments was 10.0%.

The GPFG's overall exposure to various markets, sources of risk and return must be regularly adjusted. The objective of securing the highest possible return at an acceptable level of risk can best be achieved by broad investment in the global production of goods and services. The GPFG is invested in most markets, countries and currencies in order to achieve broad exposure to global economic growth.

The return on the GPFG's equity and fixed income investments are compared with returns on global benchmark equity and bond indices. The GPFG's benchmark index is defined by the Ministry of Finance based on indices compiled by the FTSE Group and Barclays. The Ministry of Finance and Norges Bank's Executive Board have set limits on how far the GPFG can deviate from the benchmark indices in the management of equity and fixed income investments.

In 2015, the GPFG's total return on equity and fixed income investments was 0.5 percentage point higher than the return on the benchmark indices. The result reflected a high relative return on equity investments, but was somewhat reduced by a negative relative return on fixed income investments. The GPFG's relative return has been 0.3 percentage point higher than the benchmark index since its inception and 0.1 percentage point higher over the past 10 years.

The GPFG received its first capital transfer from the Norwegian government in May 1996. At the end of 2015, total transfers since start-up amounted to NOK 3 499bn, while the total return on the GPFG was NOK 2 676bn. Norges Bank Investment Management was established on 1 January 1998 to manage GPFG assets. From start-up to the end of 2015, the GPFG had earned an annual return of 5.6%. After deducting management costs and adjusting for inflation, the return was 3.7%.

The market value of the GPFG is affected by the return on the GPFG, capital transfers and changes in exchange rates. In 2015, transfers from the government amounted to NOK 42bn, while the return on the portfolio amounted to NOK 334bn. Gains and losses as a result of changes in the krone exchange rate do not affect the GPFG's international purchasing power. The krone exchange rate depreciated through 2015 against several of the currencies in which the GPFG is invested, which in isolation increased the market value by NOK 668bn.

At year-end, the GPFG's investment portfolio comprised 61.1% equities, 35.7% fixed income instruments and 3.2% real estate.

In March 2010, Norges Bank received a mandate to gradually invest up to 5% of portfolio assets in real estate. In 2015, the Bank made a considerable number of new real estate investments. Real estate investments accounted for 3.2% of the value of the GPFG at year-end, compared with 2.2% in 2014.

## CORPORATE GOVERNANCE, RISK MANAGEMENT AND INTERNAL CONTROL

Corporate governance, including risk management and internal control, is based on the management model describing the Bank's organisational structure and management principles and the roles and responsibilities of the Bank's executive management. Management models have been established for Norges Bank Investment Management and for Norges Bank Central Banking Operations, with more detailed management principles for the two operational areas.

The Ministry of Finance has issued a regulation on risk management and internal control at Norges Bank, corresponding to the Regulations on Risk Management and Internal Control issued by Finanstilsynet (Financial Supervisory Authority of Norway).

The Executive Board has issued general risk management policies for Norges Bank. The operational areas have each established a unit for coordinating and following up risk management in their respective areas. In addition, they each have a compliance function for ensuring compliance with legislation and internal rules.

Operational risk reporting is an integral part of corporate governance. The Governor of Norges Bank assesses on an annual basis whether internal control has been implemented in a satisfactory manner. Independent and effective auditing is conducted to contribute to appropriate corporate governance, risk management and internal control and to reliable financial reporting. Pursuant to Section 30a of the Norges

Bank Act, Norges Bank is required to have an internal audit unit that reports to the Executive Board. Internal Audit operates under instructions from the Executive Board, which also approves Internal Audit's annual plans and budgets. Internal Audit submits an annual independent report on internal control at the Bank.

On the basis of reporting from the administration and Internal Audit, the Executive Board submits an annual assessment of risk at the Bank to the Supervisory Council.

No material deficiencies in the governance and control regime have been identified, and the Executive Board regards the control environment and control systems at Norges Bank as satisfactory.

## BALANCE SHEET COMPOSITION AND FINANCIAL RISK

Norges Bank's total assets at the end of 2015 amounted to NOK 8 013.1bn, including the investment portfolio of the GPFG of NOK 7 471.2bn. The Ministry of Finance deposits funds for investment in the GPFG as capital contributions in an account at Norges Bank (the krone account). The Bank reinvests the krone account in its own name in an investment portfolio consisting of equities, fixed income instruments and real estate. The net value of the investment portfolio is presented on a separate line as an asset in Norges Bank's balance sheet, and the krone account is presented as a liability in the same amount to the Ministry of Finance. These two balance sheet items are at all times identical in size and return. Norges Bank bears no financial risk associated with the management of the GPFG.

Excluding the GPFG, the Bank's foreign exchange reserves are the largest balance sheet asset. The foreign exchange reserves primarily consist of equities, government bonds and Treasury bills. In addition, financial derivatives are used in risk management. The foreign exchange reserves are reported on and followed up as a whole. The Executive Board receives a quarterly report on the management of the

foreign exchange reserves, and a summarised version of this report is published.

Excluding the krone account, the largest balance sheet liability is deposits from the government. At 31 December 2015, this amounted to NOK 100.6bn, compared with NOK 115.6bn in 2014. This item fluctuates considerably through the year owing to incoming and outgoing payments over the government's accounts, such as incoming tax payments, outgoing payments of wages and benefits and purchases of goods and services. Notes and coins in circulation and deposits from Norwegian banks are other large balance sheet liabilities. In recent years, notes and coins in circulation have remained relatively stable at around NOK 50bn. Bank reserves, which comprise sight deposits and reserve deposits, are managed by Norges Bank through its liquidity policy, which normally aims to maintain the level of reserves at NOK 35bn. At 31 December 2015, bank reserves amounted to NOK 35.2bn, compared with NOK 34.3bn in 2014.

The Bank's assets are primarily invested in foreign currency, whereas its liabilities are primarily in NOK. As a result, profit or loss for the year is affected by exchange rate movements, although this does not affect the Bank's ability to meet its obligations in foreign currency. This balance sheet composition contributes to an expected positive return in the long term if currency effects are disregarded as returns on investment in equities and bonds are expected to be higher than the interest paid on deposits made by the government and banks and seigniorage.

Norges Bank attaches considerable weight to managing and controlling risk and has laid down principles for measuring and managing the various types of risk. The composition of the foreign exchange reserves portfolios and the associated risk are primarily determined by the principles, benchmark index and guidelines laid down by the Executive Board and the Governor of Norges Bank.

Valuation, measurement of returns, management and control of risk in portfolio manage-

ment are required to comply with internationally recognised standards and methods. In its management of the foreign exchange reserves, Norges Bank is primarily exposed to various types of financial risk: market risk, credit risk and counterparty risk. In addition, the Bank is exposed to credit risk associated with lending to banks. Norges Bank is not exposed to liquidity risk in NOK.

## FINANCIAL STATEMENT HIGHLIGHTS

Cash flows at Norges Bank are primarily operational. Norges Bank's income mainly comprises net income from financial instruments from the Bank's own investment management, primarily the foreign exchange reserves. Gains and losses arise from changes in exchange rates, changes in equity prices and changes in interest rates that affect bond prices. This income is uncertain and unpredictable. Norges Bank's profit or loss depends on developments in these parameters, which can cause substantial annual fluctuations in net income. The Bank's profit or loss for the year depends on the Bank's income from its own investment management.

Norges Bank's net profit for 2015 was NOK 66.5bn, compared with a net profit of NOK 89.2bn in 2014. Net income from financial instruments in global securities markets showed a gain of NOK 67bn in 2015, compared with NOK 90.3bn in 2014. The Norwegian krone continued to depreciate against most of the principal currencies in the foreign exchange reserves, which resulted, translated into NOK, in a foreign exchange gain of NOK 54.7bn in 2015. In 2014, the depreciation of the krone resulted in a foreign exchange gain of NOK 58.8bn. Gains and losses arising from changes in the krone exchange rate have no effect on the international purchasing power of the foreign exchange reserves.

Other income comprises remuneration from the Ministry of Finance for the management of the GPFG, income from services for banks and the government and rent from external tenants. Other income amounted to NOK 4.1bn in 2015, compared with NOK 3.3bn in 2014. In accord-

ance with Section 5-1 of the mandate for the management of the GPFG, Norges Bank is remunerated for its expenses related to management of the GPFG up to a limit and will have this amount reimbursed as income from the Ministry of Finance. The management fee for the GPFG was NOK 3.9bn in 2015, equivalent to 5.7 basis points calculated as a share of average capital under management.

Total comprehensive income in the GPFG of NOK 998.0bn comprises the profit on the portfolio of NOK 1 001.9bn less management expenses of NOK 3.9bn. Total comprehensive income was added to the government's capital contributions to the GPFG at 31 December 2015. The return on the portfolio, after remuneration to Norges Bank is deducted, is transferred in its entirety to the krone account and thus does not affect Norges Bank's total comprehensive income or equity.

Norges Bank's equity capital at 31 December 2015 was NOK 245.4bn, compared with NOK 205.5bn at 31 December 2014. The Adjustment Fund and the Transfer Fund comprise the bank's capital. At the end of 2015, the Adjustment Fund stood at NOK 192.2bn and the Transfer Fund at NOK 53.2bn. Measured in relation to Norges Bank's total assets, excluding the GPFG, this is equivalent to an equity ratio of 45.3%. Fluctuations in Norges Bank's equity are primarily the result of fluctuations in the market value of the Bank's foreign exchange reserves.

## DISTRIBUTION OF TOTAL COMPREHENSIVE INCOME

Distribution of Norges Bank's total comprehensive income follows guidelines laid down by Royal Decree of 6 December 2002.

In accordance with the guidelines, the following transfers and allocations will be made: Norges Bank's total comprehensive income of NOK 66.5bn will be transferred, with NOK 7.6bn to the Adjustment Fund and NOK 58.9bn to the Transfer Fund. NOK 26.6bn will be transferred from the Transfer Fund to the Treasury.

## CORPORATE SOCIAL RESPONSIBILITY

Norges Bank performs important public tasks. The Bank has executive and advisory responsibilities in the area of monetary policy and promotes robust and efficient payment systems and financial markets. Norges Bank manages the Government Pension Fund Global (GPF) on behalf of the government. The Bank fulfils its corporate social responsibility through its work on these tasks.

In its activities, Norges Bank is committed to maintaining high ethical standards, respecting human rights, acting in a socially responsible manner and complying with current laws and regulations. Norges Bank does not accept any form of discrimination or corruption.

Norges Bank's corporate social responsibility also includes the Bank's work on and approach to responsible investment activities, transparent and clear communication, research and knowledge-sharing, ethical conduct and promoting equality and a sound working environment.

The Norges Bank building in the Kvadraturen district of Oslo is a monumental structure of high cultural and historical value. To encourage greater activity in Kvadraturen, the Bank works with public authorities and other property owners to promote a safe and attractive urban space.

### A TRANSPARENT CENTRAL BANK

Norges Bank is concerned to ensure transparent communication of the Bank's use of instruments and that the use of instruments is understood and is predictable for households, enterprises and financial market participants. Norges Bank publishes its analyses and the basis for its decisions and advice. The Bank communicates in the form of publications, reports, speeches and lectures, press conferences and seminars. The Executive Board's assessments are presented in the Bank's monetary policy and financial stability reports. It is considered important to visit all regions of Norway annually to give speeches and lectures including, in some cases, company visits. Moreover, Norges Bank has extensive contact with academia and the public authorities. Employer and employee organisations are also a target group for speeches and lectures.

Transparency is also important in investment management. In addition to quarterly and annual reports,

reports on the GPF's return and risk, real estate investments and responsible investment are also published.

### RESPONSIBLE INVESTMENT

The Bank responsibly manages the GPF to underpin the objective of securing the highest possible return at an acceptable level of risk. Responsible investment is therefore an integral part of the investment process.

The Ministry of Finance has laid down guidelines for observation and exclusion of companies from the GPF. The Ministry of Finance has established the Council on Ethics as an independent body providing advice on observation and exclusion of companies from the GPF portfolio. Norges Bank has been assigned responsibility for decisions regarding observation or exclusion of companies based on recommendations from the Council on Ethics, effective from 1 January 2015.

In March 2015, the Executive Board adopted new responsible investment principles for the GPF. Norges Bank Investment Management (NBIM) manages the GPF based on the objective of securing the highest possible return within the framework of the management mandate. Responsible investment is to underpin the GPF's mission by promoting a long-term economic return on investments and reducing economic risk related to corporate governance and environmental and social conditions in investee companies. This work is an integral part of the investment processes and takes place within the main categories of standard-setting, corporate governance and risk management. The Bank's aim is to promote sound corporate governance and well-functioning, legitimate and efficient markets.

Norges Bank is a large global investor with a long investment horizon, and the Bank seeks to take advantage of the GPF's distinguishing characteristics. The GPF is invested in most markets, sectors and countries in order to participate in global value creation and as far as possible spread risk.

Under the Bank's management mandate, responsible investment activities are to be integrated into the management of the GPF. The GPF has a long investment horizon. In its management, the Bank assesses corporate governance and environmental and social conditions that could have a considerable effect on the GPF's assets.

### International standards

Norges Bank cooperates with international organisations regarding standards and principles, and communicates its expectations to companies. These standards and principles include standards for corporate governance, sustainable business operations and the way financial markets operate. This work is in part based on the UN Global Compact, the OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises.

### Voting

The GPF's investment strategy entails broad diversification of investments across companies, sectors and countries. Although Norges Bank holds ownership stakes in more than 9 000 companies and votes at almost all of their annual general meetings (AGMs), gaining detailed insight into all of them is not possible. The Bank therefore places emphasis on good corporate governance and the roles of the board members, and focuses its corporate governance work on themes and companies where the potential to generate added value for the GPF is deemed to be greatest. The Bank has direct contact with the companies and their boards. Norges Bank's analyses include corporate finance models and assessment of companies' financial prospects. Corporate governance and environmental and social conditions are integral parts of these assessments. In 2015, Norges Bank voted at 11 562 AGMs and held 3 520 meetings with companies.

### Environment-related mandates

The scope of Norges Bank's investment in environmental technology is being increased through the environment-related mandates. At end-2015, the total market value of the environment-related mandates was NOK 53.8bn, invested in 224 companies. These investments achieved a return of 1.1% in 2015.

### Risk-based divestments

Norges Bank may also choose to divest from individual companies based on risk assessments. Norges Bank has divested from a number of companies in the past few years, based on assessments of environmental and social risk factors and corporate governance. In 2015, Norges Bank divested from 73 companies based on such risk assessments.

Risk management related to corporate governance and environmental and social conditions is important for safeguarding the Bank's investments. The Bank's approach to risk monitoring is systematic and based on conducting general assessments prior to focusing

on specific issues. For this work, the Bank needs data on corporate governance and environmental and social conditions and developing databases for such information has been given priority.

### Focus areas

Norges Bank has chosen to give particular focus to three areas within sustainability: children's rights, climate change and water management. Focusing on these areas allows the Bank to work with these themes over time. A number of companies have well-developed strategies and practices in these areas. The Bank's objective is to use the instruments available to promote sound market practices and to clearly express what it expects of investee companies.

### Real estate investment

Norges Bank invests in real estate in a responsible manner, based on the view that properties that are sustainably built and operated have lower costs and financial risk. Thorough environmental risk analyses are conducted for each investment, and sustainability is an important aspect of the Bank's real estate management. In working to promote environmentally friendly real estate, the Bank pays particular attention to energy efficiency, water consumption and waste disposal. The Bank's partners and the external asset managers report on these issues annually to the Global Real Estate Sustainability Benchmark (GRESB), an international organisation for sustainability reporting in the real estate sector. The Bank uses the GRESB data to compare the Bank's investments with the market and to identify measures that the Bank's asset managers can implement to raise the environmental standards and increase the operating efficiency of its properties. The Bank takes local and international standards into account in its assessments and gives particular weight to recognised certification systems for green construction.

## RESEARCH AND KNOWLEDGE-SHARING

The Bank conducts research on monetary policy, financial stability and investment management and maintains close links with international and Norwegian research communities. The Bank's research informs its policy decisions.

The Bank contributes to the development of standards through its contact with regulatory authorities and standard-setters. In 2015, 13 articles by Norges Bank researchers were accepted for publication in peer-reviewed journals. An overview of published articles can be found on the Bank's website.

Norges Bank participates in international cooperation through several channels to update and further develop international standards for the performance of core central bank tasks. On behalf of the Ministry of Finance, Norges Bank contributes to financing schemes for heavily indebted countries and the surveillance of the global financial system, which is conducted by the International Monetary Fund (IMF). Norges Bank also cooperates with the IMF on a project for the further development of the Bank of Zambia. The project will run for about five years.

In June 2016, one of the events to mark Norges Bank's bicentenary will be the opening of the Norges Bank Education Centre. The primary target group will be upper secondary school pupils and teachers, but the centre will also be open to students and the general public. The centre is built around an interactive game where visitors can learn how the economy works. As the centre has an annual visitor capacity of around 9 000, it will enable the Bank to communicate with a wide audience about its tasks and how they are executed.

## ETHICAL CONDUCT

### **Ethics and anti-corruption**

It is particularly important to the Executive Board that the Bank's employees in all respects conduct themselves with the necessary ethical awareness and that they are loyal to Norges Bank as their employer. The Executive Board has laid down ethical principles for employees that are intended to create a common attitude to ethical issues at Norges Bank. Under these principles, the Bank is committed to maintaining high ethical standards, respecting human rights, acting in a socially responsible manner and complying with current legislation. Rules have been issued on employees' personal trading, activities outside the Bank, gifts and loyalty to the Bank in general. Norges Bank does not accept any form of discrimination or corruption.

Further rules and procedures have been laid down to ensure compliance with the rules on personal trading. In 2015, no cases were reported to Finanstilsynet (Financial Supervisory Authority of Norway) concerning suspected violations of the rules on personal trading in Section 8 of the Securities Trading Act.

The Ministry of Finance has laid down a regulation concerning impartiality and conflicts of interest for Norges Bank's Executive Board, and an administrative procedure has been put in place to assist Board members in complying with the regulation. Ethical

rules for the Executive Board's external members have also been adopted.

The Executive Board has also laid down principles for internal disclosure of wrongdoing (whistleblowing) at Norges Bank. Norges Bank has established an internal whistleblowing procedure whereby an employee can report concerns about unethical or unlawful conduct. There is an operative whistleblowing channel with Internal Audit as report recipient. Reports are processed in line with the established case processing rules. The need to amend the rules is assessed on a regular basis. The ethical rules for employees in Norges Bank Central Banking Operations were revised in 2015, including the rules on personal trading.

Norges Bank places considerable emphasis on training staff and fostering awareness in relation to the most important areas of ethical risk. All new employees attend a training programme to ensure that they know and understand the rules, which includes e-learning and an introductory course on dilemma training. To ensure that all employees have the necessary knowledge of the rules, a compulsory test is conducted every year using an e-learning tool. In completing the annual test, each employee confirms that he or she has read and understood the rules and is aware of the consequences of noncompliance. Compliance with the rules is monitored and noncompliance is reported.

### **Direct environmental impact**

Norges Bank's direct impact on total greenhouse gas emissions and its environmental load are limited. The Bank's direct climate and environmental impact is primarily related to energy consumption, official travel and office waste. Efforts to find more environmentally friendly ways of operating, such as reducing electricity consumption and using renewable energy in the form of remote heating, are part of a continuous process rather than a specific, formalised strategy. Office waste is recycled and there is extensive re-use of interior structural elements and office furniture.

In 2015, the Bank's premises in Kvadraturen were classified under an environmental classification system (BREEAM) that determines the environmental footprint of commercial properties based on an overall assessment (i.e. both the inherent environmental quality of the building and how it is operated and used). The assessment result will be presented in spring 2016.

### **Responsible procurement and contracting**

By adhering to public procurement regulations and using economies of scale, Norges Bank conducts

cost-efficient procurement of goods and services, promoting competition for contracts. To counteract social dumping, standard terms and conditions for wages and working conditions are used in contracts where relevant. No instances of noncompliance with these terms and conditions were reported in 2015. Norges Bank accepts no more than two tiers of subcontractors.

Norges Bank Central Banking Operations has specific ethical rules for contractors with access to the Bank's premises and systems. These rules cover issues such as human rights, labour rights, corruption, discrimination and gifts. Investment management suppliers with access to the Bank's premises or systems are contractually bound by the same rules that apply to the Bank's employees.

## HUMAN RESOURCES AND WORKING ENVIRONMENT

### Personnel and expertise

The Bank works systematically to develop the skills of employees and provide for internal mobility, international trainee- and internships and further education.

The Bank's ambition is to recruit top candidates from leading specialist environments nationally and internationally. The Bank's international focus is on educa-

tional institutions that have proved to be a good source of qualified candidates. In Norway, the Bank focuses on building its reputation as a preferred employer. The objective is to attract the best executives and specialists within the relevant fields.

At year-end 2015, there were 856 permanent employees at Norges Bank, compared with 763 at year-end 2014. Of these, 518 were employed by NBIM, compared with 428 the previous year. The Bank has employees from a total of 38 countries.

### Gender equality and diversity

Norges Bank's ethical guidelines state that the Bank must respect human rights and practise zero tolerance for discrimination. Women and men at Norges Bank must be given the same opportunities with regard to salary, promotion and professional and personal development. According to the recruitment guidelines, the best qualified candidate must be hired, regardless of gender, age, ethnicity or disability. In 2015, the gender breakdown of employees at Norges Bank was 67% men and 33% women. Corresponding figures for 2014 were 65% and 35%.

The Executive Board has set a minimum target of 40% for female employees as a long-term goal. Strategic work and action plans are based on this objective.

## PERCENTAGE OF WOMEN ON THE PERMANENT STAFF OF NORGES BANK AT YEAR-END 2015 AND 2014

Level	2015		2014	
	NBCBO	NBIM	NBCBO	NBIM
Executive	33 %	22 %	36 %	16 %
Non-executive	43 %	29 %	47 %	29 %
Sum	41 %	27 %	44 %	27 %

## PAY LEVEL FOR WOMEN AS A PERCENTAGE OF PAY LEVEL FOR MEN AT YEAR-END 2015 AND 2014

Level	2015		2014	
	NBCBO	NBIM	NBCBO	NBIM
Executive	98 %	96 %	97 %	85 %
Non-executive	90 %	80 %	91 %	84 %
Sum	89 %	81 %	89 %	77 %

For the "Non-executive" group, pay for women and men is approximately equal in each of the job categories in this group. Average pay for women as a whole is nevertheless lower than average pay in each of the job categories because of a lower percentage of women in job categories with the highest pay.

Measures to boost the percentage of women include choosing female economists to promote Norges Bank at educational institutions and to actively encourage internal and external female candidates to apply for vacant management positions and assume responsibility for important projects and reports. NBIM has established a women's network to attract, retain and develop female employees.

Norges Bank takes the needs of employees in all phases of life into account by offering employees the opportunity to reduce their working hours or work from home if necessary. Employees over the age of 62 years are entitled to five extra paid vacation days per year.

#### Health, safety and the environment

Norges Bank's priority is protecting the lives and health of all those who work in the Bank. At end-2015, eight workplace accidents or injuries directly relating to work conducted at Norges Bank's office premises or conference and holiday facilities had been reported. None were deemed to be serious and none were reported to the Norwegian Labour Inspection Authority as occupational injuries.

Reconstruction projects at the Bank are based on the principles of universal design and the Bank provides aids and protective equipment as needed. The Bank

has well-equipped fitness facilities for employees. The Bank receives feedback on the physical and psychosocial working environment through annual individual employee health appraisal interviews conducted by the Bank's health service and from the Bank's annual climate surveys. According to the reports, job satisfaction is high and working conditions in general are satisfactory. The Bank's Working Environment Committee, comprised of management and employee representatives, assesses the working environment and climate at the Bank as positive.

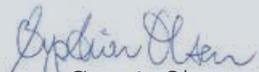
#### Cooperation with labour unions

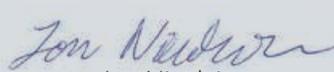
The Bank's management has close and regular contact with labour unions. The cooperation is constructive and helps the Bank to develop and adapt in pace with requirements for companies in general and for the Bank in particular. The basis for a good workplace is created through negotiations and discussions. The dialogue with labour unions also takes place in the Codetermination and Personnel Committee and at regular contact meetings. Two employee representatives attend Executive Board meetings when the Board deals with administrative matters.

#### Sickness absence and an inclusive workplace

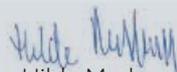
Sickness absence at the Bank has remained stable at a low level in 2015 at 2.2%, unchanged from 2014. As an inclusive workplace enterprise, the Bank is committed to working systematically and with a long-term perspective to maintain sickness absence at a low level. The Bank accommodates employees needing special adaptations and enables older employees to extend their professional careers in line with national objectives.

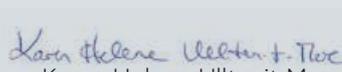
Oslo, 10 February 2016

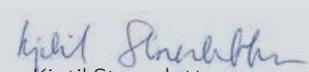
  
Øystein Olsen  
(Governor/Chair)

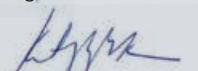
  
Jon Nicolaisen  
(First Deputy Chair)

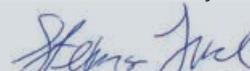
  
Egil Matsen  
(Second Deputy Chair)

  
Hilde Myrberg

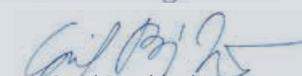
  
Karen Helene Ulltveit-Moe

  
Kjetil Storesletten

  
Kathryn M. Baker

  
Steinar Juel

  
Mona Helen Sørensen  
(Employee representative)

  
Gøril Bjerkehol Havro  
(Employee representative)





# NORGES BANK'S ANNUAL FINANCIAL STATEMENTS **2015**

# MAIN POINTS

Financial key figures (amounts in NOK millions)	2015	2014
Foreign exchange reserves	468 182	448 627
Government Pension Fund Global	7 471 220	6 427 537
Net income from financial instruments	12 288	31 526
Foreign exchange gains/losses	54 749	58 766
Operating expenses	5 007	4 050
Total comprehensive income	66 469	89 198
Equity	245 356	205 476
Transfer to the Treasury	26 589	10 419

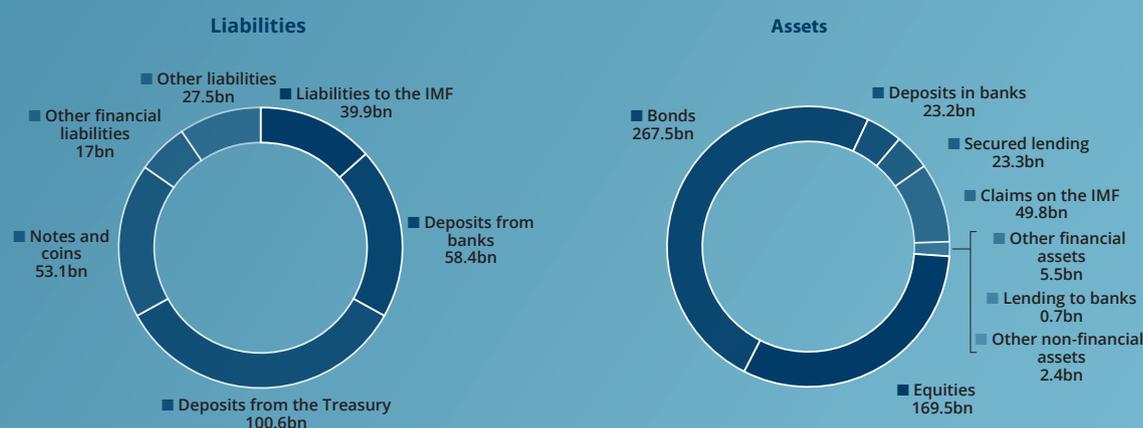
## Assets

At the end of 2015, total assets, excluding the Government Pension Fund Global (GPFG), amounted to NOK 541 894m, an increase of NOK 28 186m from 2014. Foreign exchange reserves account for most of the assets, totalling NOK 468 182m at the end of 2015, or 86% of total assets. The value of the foreign exchange reserves' equity investments rose by NOK 29 097m to NOK 169 522m, while fixed income investments rose by NOK 28 561m to NOK 267 466m.

Claims on the IMF comprise loans, the IMF quota subscription and holdings of SDRs. These claims amount to NOK 49 796m and are at the same level as in previous years.

## Liabilities

At the end of 2015, total liability items, excluding the GPFG, amounted to NOK 296 538m, a reduction of NOK 11 693m from 2014. Government deposits were NOK 100 593m at the end of 2015, a decline of NOK 15 039m compared with 2014. The amount of these deposits varies through the year with inflows and outflows to and from the government's current accounts. The value of banknotes and coins in circulation at the end of 2015 was NOK 53 136m. At the end of 2015, banks' deposits in their accounts with Norges Bank amounted to NOK 58 418m, which comprise sight deposits and F-deposits. At 31 December 2015, liability items to the IMF are at the same level as in previous years, NOK 39 864m.



## Income

Net income from financial instruments in 2015 was NOK 67 037m, NOK 23 255m lower than in 2014. The decline mainly reflects a lower contribution from equity and fixed income investments. Foreign exchange gains were NOK 54 750m in 2015.

Remuneration from the Ministry of Finance for the management of the GPFG was NOK 3 933m in 2015, compared with NOK 3 202m in 2014.

Other operating income, comprising rent and services for the government and banks, was NOK 126m in 2015.

## Expenses

Total operating expenses in 2015 amounted to NOK 5 007m, compared with NOK 4 050m in 2014. Personnel expenses totalled NOK 1 686m, while other operating expenses amounted NOK 3 149m. Other operating expenses largely comprise expenses related to investment management, including custody and settlement services, IT expenses, analytical research services and management fees.

Depreciation, amortisation and impairment losses for the year totalled NOK 172m.

## Equity

Norges Bank's equity comprises the Adjustment Fund and the Transfer Fund. The Adjustment Fund comprises the Bank's restricted equity, and the Transfer Fund comprises the basis for transfers to the Treasury. Norges Bank's capital is governed by separate guidelines. Total equity at the end of 2015 was NOK 245 356m, of which NOK 53 178m pertains to the Transfer Fund.

In accordance with the guidelines for the Bank's equity capital, NOK 26 589m will be transferred to the Treasury in 2016.

## GPFG

The GPFG is managed by Norges Bank on behalf of the Ministry of Finance. The Ministry of Finance has deposited funds for investment in an account with Norges Bank and Norges Bank is not exposed to financial risk from its management of the GPFG. At the end of 2015, the market value of the GPFG, less the management fee, was NOK 7 471 220m. The GPFG comprises 61.2% equity investments, 35.7% fixed income investments and 3.1% real estate investments. The return in 2015, in terms of the GPFG's currency basket, was 2.7%. The return on equity investments was 3.8%, 0.3% on fixed income investments and 10% on real estate investments.

# ANNUAL FINANCIAL STATEMENTS 2015

<b>INCOME STATEMENT</b>	<b>33</b>
<b>BALANCE SHEET</b>	<b>34</b>
<b>STATEMENT OF CASH FLOWS</b>	<b>36</b>
<b>STATEMENT OF CHANGES IN EQUITY</b>	<b>37</b>
<b>NOTES</b>	<b>38</b>
Note 1 General information	38
Note 2 Accounting policies	39
Note 3 Income/expense from equities, units, bonds and other fixed income instruments	43
Note 4 Holdings of equities, units, bonds and other fixed income instruments	44
Note 5 Foreign exchange reserves	45
Note 6 Fair value measurement	49
Note 7 Risk	54
Note 8 Secured lending and borrowing	63
Note 9 Collateral and offsetting	66
Note 10 Pension	68
Note 11 Personnel expenses	72
Note 12 Management fee, GPFG	78
Note 13 Other non-financial assets	78
Note 14 Other operating expenses and operating income	80
Note 15 Notes and coins in circulation	81
Note 16 International Monetary Fund (IMF)	81
Note 17 Bank for International Settlements (BIS)	85
Note 18 Lending to banks, deposits from banks and deposits from the Treasury	85
Note 19 Related parties	88
Note 20 Government Pension Fund Global (GPFG)	89
GPFG Note 1 General information	93
GPFG Note 2 Accounting policies	93
GPFG Note 3 Returns per asset class	93
GPFG Note 4 Income/Expense from Equities and units, Bonds and Financial derivatives	94
GPFG Note 5 Holdings of Equities and units, Bonds and Financial derivatives	95
GPFG Note 6 Unlisted real estate	98
GPFG Note 7 Fair value measurement	100
GPFG Note 8 Risk	108
GPFG Note 9 Tax	121
GPFG Note 10 Management costs	122
GPFG Note 11 Secured lending and borrowing	124
GPFG Note 12 Collateral and offsetting	127
GPFG Note 13 Other assets and other liabilities	129
GPFG Note 14 Related parties	130
GPFG Note 15 Interests in other entities	130
<b>INDEPENDENT AUDITOR'S REPORT</b>	<b>133</b>
<b>RESOLUTION OF THE SUPERVISORY COUNCIL ON THE FINANCIAL STATEMENTS FOR 2015</b>	<b>135</b>
<b>THE SUPERVISORY COUNCIL'S STATEMENT ON THE MINUTES OF THE MEETINGS OF THE EXECUTIVE BOARD AND ITS SUPERVISION OF THE BANK</b>	<b>135</b>

# INCOME STATEMENT

Amounts in NOK millions

	Note	2015	2014
<b>NET INCOME FROM FINANCIAL INSTRUMENTS</b>			
Net income/expense from:			
– Equities and units*	3,17	10 243	18 658
– Bonds and other fixed income instruments*	3	2 573	13 658
– Financial derivatives		-29	4
– Secured lending*	8,9	69	98
Interest income and expense from deposits and short-term borrowing		-8	2
Interest income from lending to banks	18	68	80
Interest expense paid on deposits from banks and the Treasury	18	-592	-949
Net interest income from claims on/liabilities to the IMF	16	7	11
Tax expenses	3	-42	-47
Other financial income/expenses		-1	11
<b>Net income from financial instruments before foreign exchange gains/losses</b>		<b>12 288</b>	<b>31 526</b>
Foreign exchange gains/losses		54 749	58 766
<b>Net income from financial instruments</b>		<b>67 037</b>	<b>90 292</b>
<b>MANAGEMENT OF THE GOVERNMENT PENSION FUND GLOBAL (GPFG)</b>			
Total comprehensive income, investment portfolio, GPFG	20	997 984	1 242 691
Withdrawn from/Transferred to the krone account of the GPFG	20	-997 984	-1 242 691
Of which management fees, GPFG	12	3 933	3 202
<b>Management of the Government Pension Fund Global</b>		<b>3 933</b>	<b>3 202</b>
<b>OTHER OPERATING INCOME</b>			
Other operating income	14	126	128
<b>Total other operating income</b>		<b>126</b>	<b>128</b>
<b>OTHER OPERATING EXPENSES</b>			
Personnel expenses	11	-1 686	-1 151
Other operating expenses	14	-3 149	-2 776
Depreciation, amortisation and impairment losses	13	-172	-123
<b>Total other operating expenses</b>		<b>-5 007</b>	<b>-4 050</b>
<b>Profit/loss for the period</b>		<b>66 089</b>	<b>89 572</b>
<b>STATEMENT OF COMPREHENSIVE INCOME</b>			
Profit/loss for the period		66 089	89 572
Change in actuarial gains/losses	10	380	-374
<b>Total comprehensive income</b>		<b>66 469</b>	<b>89 198</b>

\* Secured lending includes net income/expense from reverse repurchase agreements as well as income from agency securities lending. Income from agency securities lending has been previously presented within *Income/expenses from Equities and units and Bonds and other fixed income instruments*. Comparatives for 2014 have been restated.

# BALANCE SHEET

Amounts in NOK millions

Assets	Note	31 Dec. 2015	31 Dec. 2014
<b>FINANCIAL ASSETS</b>			
Deposits in banks		23 173	32 325
Secured lending	8,9	23 304	50 807
Unsettled trades		9	720
Equities and units	4,17	164 414	134 021
Equities lent	4,8,9	5 108	6 404
Bonds and other fixed income instruments	4	267 466	238 905
Financial derivatives		9	27
Claims on the IMF	16	49 796	44 041
Lending to banks	18	716	1
Other financial assets	12	5 474	4 252
<b>Total financial assets</b>		<b>539 469</b>	<b>511 503</b>
<b>INVESTMENTS, GOVERNMENT PENSION FUND GLOBAL</b>			
Investments, GPFG	20	7 471 220	6 427 537
<b>Total investments, GPFG</b>		<b>7 471 220</b>	<b>6 427 537</b>
<b>NON-FINANCIAL ASSETS</b>			
Other non-financial assets	13	2 425	2 204
<b>Total non-financial assets</b>		<b>2 425</b>	<b>2 204</b>
<b>TOTAL ASSETS</b>		<b>8 013 114</b>	<b>6 941 244</b>

Amounts in NOK millions

Liabilities and equity	Note	31 Dec. 2015	31 Dec. 2014
<b>FINANCIAL LIABILITIES</b>			
Short-term borrowing		-	19
Secured borrowing	8,9	827	762
Unsettled trades	8,9	14 686	13 250
Financial derivatives		-	1
Other financial liabilities		1 525	1 568
Liabilities to the IMF	16	39 864	34 434
Deposits from banks, etc.	18	58 418	77 800
Deposits from the Treasury	18	100 593	115 632
Notes and coins in circulation	15	53 136	53 016
<b>Total financial liabilities</b>		<b>269 049</b>	<b>296 482</b>
<b>DEPOSITS IN KRONE ACCOUNT, GOVERNMENT PENSION FUND GLOBAL</b>			
Deposits in krone account, GPFG	20	7 471 220	6 427 537
<b>Total deposits in krone account, GPFG</b>		<b>7 471 220</b>	<b>6 427 537</b>
<b>OTHER LIABILITIES</b>			
Pensions	10	251	577
Other liabilities	19	27 238	11 172
<b>Total other liabilities</b>		<b>27 489</b>	<b>11 749</b>
<b>Total liabilities</b>		<b>7 767 758</b>	<b>6 735 768</b>
<b>EQUITY</b>			
Equity		245 356	205 476
<b>Total equity</b>		<b>245 356</b>	<b>205 476</b>
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>8 013 114</b>	<b>6 941 244</b>

Oslo, 10 February 2016



Øystein Olsen  
(Governor/Chair)



Jon Nicolaisen  
(First Deputy Chair)



Egil Matsen  
(Second Deputy Chair)



Hilde Myrberg



Karen Helene Ulltveit-Moe



Kjetil Storesletten



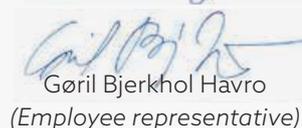
Kathryn M. Baker



Steinar Juel



Mona Helen Sørensen  
(Employee representative)



Gøril Bjerkholt Havro  
(Employee representative)

# STATEMENT OF CASH FLOWS

Amounts in NOK millions  
inflows (+)/ outflows (-)

	2015	2014
<b>Operating activities</b>		
Dividends received from investments in equities and units	3 796	2 934
Interest received on bonds	5 389	4 790
Net interest and fees received from secured lending and borrowing	106	99
<i>Interest, dividends and fees received from holdings of equities, units and bonds</i>	9 291	7 823
Net cash flow arising from purchase and sale of equities and units	-7 351	8 705
Net cash flow arising from purchase and sale of bonds and other fixed income instruments	300	-13 301
Net cash flow arising from financial derivatives	-181	450
Net cash flow arising from cash collateral related to derivative transactions	-	-
Net cash flow arising from interest received from deposits in banks and interest paid on bank overdraft	327	-172
Net cash flow arising from secured lending and borrowing	36 716	-8 082
Net cash flow related to other expenses, other assets and other liabilities	-4 485	-3 907
Cash flow related to other financial assets and other financial liabilities	-20 740	3 891
Net cash flows from the Treasury	-15 039	26 168
<i>Of which inflows from the Treasury to the GPFG</i>	-45 836	-150 894
Management fee received from the GPFG	3 202	2 889
<b>Net cash outflow from operating activities</b>	<b>2 040</b>	<b>24 464</b>
<b>Investing activities</b>		
Net cash flow related to non-financial assets and liabilities	-359	-250
<b>Net cash flow from investing activities</b>	<b>-359</b>	<b>-250</b>
<b>Financing activities</b>		
Cash flow to the Treasury from the Transfer Fund	-10 419	-
<b>Net cash flow from financing activities</b>	<b>-10 419</b>	<b>-</b>
<b>Net change in cash and cash equivalents</b>		
Cash and cash equivalents at 1 January	32 306	6 294
Net cash payments in the period	-8 739	24 214
Foreign exchange gains/losses on cash and cash equivalents	-394	1 799
<b>Cash and cash equivalents at 31 December</b>	<b>23 173</b>	<b>32 307</b>



## ACCOUNTING POLICY

The statement of cash flows has been prepared in accordance with the direct method. Major classes of cash receipts and cash payments are presented separately. Specific categories of cash flows, primarily arising from the purchase and sale of financial instruments, are shown on a net basis. All investment activities and the management fee to Norges Bank that is charged to the GPFG are defined as operating activities. Cash comprises *Deposits in banks* and *Short-term borrowing*.

Cash transfers to the GPFG, in the form of inflows from the Norwegian government, are classified as a financing activity in the statement of cash flows in the GPFG's financial statements. In Norges Bank's financial statements, transfers are classified as operating activities, since Norges Bank is the manager of the GPFG.

# STATEMENT OF CHANGES IN EQUITY

Amounts in NOK millions

	Adjustment Fund	Transfer Fund	Total equity
1 January 2014	126 697	-	126 697
Total comprehensive income	57 940	31 258	89 198
Transferred to Other liabilities	-	-10 419	-10 419
<b>31 December 2014</b>	<b>184 637</b>	<b>20 839</b>	<b>205 476</b>
1 January 2015	184 637	20 839	205 476
Total comprehensive income	7 541	58 928	66 469
Transferred to Other liabilities	-	-26 589	-26 589
<b>31 December 2015</b>	<b>192 178</b>	<b>53 178</b>	<b>245 356</b>



## ACCOUNTING POLICY

Norges Bank's equity comprises an Adjustment Fund and a Transfer Fund. The Adjustment Fund comprises the Bank's restricted equity, and the Transfer Fund comprises the basis for transfers to the Treasury. Norges Bank's capital is governed by guidelines for provisions and allocations laid down by the Council of State on 7 February 1986, most recently amended by Royal Decree of 6 December 2002, 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\*\*\*, other claims/liabilities abroad\*\*\*\* or any other commitments that the Executive Board considers to involve a not insignificant foreign exchange risk. The immunisation portfolio is that part of Norges Bank's foreign exchange reserves that is included in a separate portfolio. The return on this portfolio will be credited to/debited from the Treasury in the accounts of the same year. The same applies to the Government Petroleum Fund portfolio. If the size of the Adjustment Fund exceeds the levels specified in point 1, first paragraph, the surplus shall be reversed to profit or loss.*

*2. If the Adjustment Fund falls below 25% of the Bank's net foreign exchange reserves excluding the immunisation portfolio and capital managed by the Government Petroleum Fund and other claims/liabilities abroad at the end of the year, available capital shall be reversed from the Transfer Fund to Norges Bank's financial statements until the Adjustment Fund reaches full size according to point 1.*

*3. Any profit after provisions to or transfers from the Adjustment Fund shall be allocated to the Transfer Fund.*

*4. Any loss following the allocations described in point 2 shall be covered by transfers from the Adjustment Fund.*

*5. In connection with the closing of the books each year, an amount equal to one third of the capital in the Transfer Fund shall be transferred to the Treasury.*

\* The Bank does not hold any Norwegian securities at 31 December 2015.

\*\* The immunisation portfolio is not in use at 31 December 2015.

\*\*\* Government Pension Fund Global (GPF).

\*\*\*\* Primarily net claims on/liabilities to the IMF.

# NOTES

## NOTE 1 GENERAL INFORMATION

### 1. INTRODUCTION

Norges Bank is Norway's central bank. Norges Bank performs important public tasks and manages substantial assets on behalf of the nation. The aim of central banking operations is to promote stability in the economy. Norges Bank has executive and advisory responsibilities in the area of monetary, credit and foreign exchange policy and is responsible for promoting robust and efficient payment systems and financial markets. The Bank manages Norway's foreign exchange reserves and the Government Pension Fund Global (GPFG).

The GPFG shall support saving to finance future government expenditure and underpin long-term considerations relating to the use of Norway's petroleum revenues. The Storting (Norwegian Parliament) has established the legal framework in the Government Pension Fund Act, and the Ministry of Finance has formal responsibility for the fund's management. The GPFG is managed by Norges Bank on behalf of the Ministry of Finance, in accordance with Section 2, second paragraph, of the Government Pension Fund Act and the management mandate for the GPFG issued by the Ministry of Finance. The Executive Board of Norges Bank has delegated day-to-day management of the GPFG to Norges Bank Investment Management (NBIM).

The Ministry of Finance has placed funds for investment in the GPFG in the form of a Norwegian krone deposit with Norges Bank (the krone account). Norges Bank manages the krone account in its own name by investing the funds

in an investment portfolio consisting of equities, fixed income instruments and real estate. The GPFG is invested in its entirety outside of Norway.

In accordance with the management mandate for the GPFG, transfers are made to and from the krone account. When the government's petroleum revenues exceed government spending of petroleum revenues over the central government budget, funds will be deposited in the krone account. In the opposite case, funds will be withdrawn. Transfers to and from krone account entail a corresponding change in *Owner's capital* in the GPFG.

Norges Bank is not exposed to financial risk from its management of the GPFG. The return on the portfolio is transferred in its entirety to the krone account and does not affect total comprehensive income or equity in Norges Bank. The investment portfolio under management is equal to the amount on deposit in the krone account at the time in question. The net value of the investment portfolio is presented on a separate line as an asset in Norges Bank's balance sheet, and the krone account is presented as a liability in the same amount to the Ministry of Finance.

### 2. APPROVAL OF THE FINANCIAL STATEMENTS

The annual financial statements of Norges Bank for 2015, which include the financial reporting for the GPFG, were approved by the Executive Board on 10 February 2016 and adopted by the Supervisory Council on 3 March 2016.

## NOTE 2 ACCOUNTING POLICIES

### REFERENCES TO ACCOUNTING POLICIES, SIGNIFICANT ESTIMATES AND CRITICAL ACCOUNTING JUDGEMENTS

This note describes significant accounting policies, significant estimates and critical accounting judgements that are relevant to the financial statements as a whole. Additional accounting policies, significant estimates or critical accounting judgements are included in the respective statements and notes.

### EXPLANATION OF SIGNIFICANT ESTIMATES AND CRITICAL ACCOUNTING JUDGEMENTS

The preparation of the financial statements involves the use of estimates and judgements that may affect assets, liabilities, income and expenses. Estimates and judgements are based on historical experience and expectations about future events that are considered probable at the time the financial statements are presented. Estimates are based on best judgement; however actual results may deviate from estimates.

### 1. BASIS OF PREPARATION

Pursuant to Section 30, second paragraph, of the Norges Bank Act, the annual financial statements of Norges Bank have been prepared in accordance with the Accounting Act and the regulation concerning annual financial reporting for Norges Bank, which has been laid down by the Ministry of Finance.

The regulation requires that Norges Bank's financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, but sets certain specific requirements for the presentation of the GPFG and subsidiaries. Norges Bank's financial statements include the financial reporting for the GPFG (Note 20 *Government Pension Fund Global (GPFG)*). Pursuant to the regulation concerning annual financial reporting for Norges Bank, the financial reporting for the GPFG shall be prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.

The annual financial statements are prepared with a closing date of 31 December, and are presented in Norwegian kroner (NOK), rounded to the nearest million kroner.

### 2. CHANGES IN ACCOUNTING POLICIES AND IMPLEMENTATION OF NEW AND/OR AMENDED STANDARDS OR INTERPRETATIONS

The accounting policies applied are consistent with those of the previous financial year. No new and/or amended standards and interpretations and/or amendments to IFRS became effective for accounting periods starting 1 January 2015 that have had a material effect on the financial statements.

### 3. ACCOUNTING POLICIES FOR THE FINANCIAL STATEMENTS AS A WHOLE

#### 3.1 Subsidiaries

Subsidiaries are established that exclusively constitute investments as part of the management of the GPFG. These subsidiaries are entities over which the GPFG has control. Principle subsidiaries are listed in Note 20.15 *Interests in other entities*.

IFRS 10 *Consolidated Financial Statements* has been applied. IFRS 10 defines an investment entity and introduces a mandatory exemption from consolidation for investment entities.

## ! ACCOUNTING JUDGEMENT

The GPFG is an investment entity based on the following:

- a) It obtains funds from the Norwegian government, a related party and its sole owner, and delivers professional investment services, being the management of the fund, to the Norwegian government,
- b) It commits to the Norwegian government that its business purpose is to invest solely for capital appreciation and investment income,
- c) It measures and evaluates returns for all its investments exclusively on a fair value basis.

An investment entity shall have a strategy that defines the time horizon for the realisation of investments. The GPFG has a very long time horizon. After an overall assessment, it has been concluded that the GPFG meets the criteria in the definition of an investment entity.

Subsidiaries that provide investment related services for the GPFG and that are not investment entities in their own right are consolidated in the financial statements of the GPFG. Other subsidiaries are measured at fair value through profit or loss in accordance with the exemption from consolidation for investment entities.

### ***Subsidiaries measured at fair value through profit or loss***

Subsidiaries measured at fair value through profit and loss are presented in the balance sheet as *Unlisted real estate*. The subsidiaries invest, through other entities, exclusively in real estate. For further information on accounting policies for financial assets that are applied to subsidiaries measured at fair value through profit or loss, see Section 3.3. See Note 20.6 for accounting policies specific to unlisted real estate.

### ***Consolidated subsidiaries***

Consolidated subsidiaries perform investment-related services for the GPFG associated with management of unlisted real estate investments. These companies do not own, directly or indirectly, investments in real estate. Intra-group

transactions and intercompany balances are eliminated on consolidation.

### **3.2 Currency**

The functional currency is the Norwegian krone (NOK). Transactions in foreign currency are recognised in the financial statements at the exchange rate prevailing on the transaction date. Assets and liabilities in foreign currencies are translated into NOK using the exchange rate at the balance sheet date. The presentation currency for the financial statements is the Norwegian krone.

In the income statement, the foreign exchange element linked to realised and unrealised gains and losses on assets and liabilities is disaggregated and presented on a separate line. Foreign exchange adjustments for the period are estimated on the basis of the cost in foreign currency and changes in exchange rates between the time of purchase, or the previous balance sheet date for financial instruments purchased in earlier periods, and the balance sheet date. Upon realisation, the exchange rate at the transaction date is used.

### ! SIGNIFICANT ESTIMATE

Gains and losses on securities and financial derivatives are based on changes in the price of the security/instrument (before foreign exchange gains and losses) and changes in foreign exchange rates (foreign exchange gains and losses). These are presented separately in the income statement. The method of allocating total gains and losses in NOK to a security element and a foreign exchange element is an estimate. Different methods will result in different estimates.

#### *Foreign exchange element*

Unrealised gains and losses due to changes in foreign exchange rates are calculated based on the cost of the holding in local currency and the change in the foreign exchange rate from the time of purchase until the balance sheet date. If the holding has been purchased in a previous period, gains and losses from previous periods that have already been recognised in profit or loss are deducted to arrive at the gain or loss for the current period. Accordingly, for realised gains or losses, the foreign exchange rate on the date of sale is used instead of the closing rate at the end of the reporting period, and previously recognised unrealised gains or losses for the holding are reversed in the current period.

#### *Security element*

Unrealised gains and losses from changes in the security price are calculated based on the change in the security price from the purchase date to the balance sheet date and the closing exchange rate at the balance sheet date. Gains and losses recognised in the income statement in previous periods are deducted to arrive at the gain or loss from security prices for the current period. Realised gains and losses from changes in security prices are based on the selling price as opposed to the price on the balance sheet date, and previously recognised unrealised gains or losses for the holding are reversed in the current period.

### 3.3 Financial assets and liabilities

#### **Recognition and derecognition**

Financial assets or liabilities are recognised in the balance sheet upon becoming a party to the instrument's contractual provisions, or when the risks and rewards of ownership are transferred, if this occurs at a different point in time. The transaction is recognised at trade date, where the purchase or sale of the instrument involves settlement under normal market conditions.

Financial assets are derecognised when the contractual rights to the cash flows expire, or when the financial asset and substantially all the risks and rewards of ownership are transferred. Average acquisition cost is used upon derecognition. See Note 20.11 *Secured lending and borrowing* for details on transferred assets that are not derecognised.

Financial liabilities are derecognised when the obligation has been settled, extinguished or cancelled.

#### **Classification**

Financial assets and liabilities are measured at fair value on initial recognition, and all financial assets and liabilities are classified depending on the type of instrument, the contractual terms and the purpose of the investment in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*.

#### **Fair value through profit or loss (fair value option)**

Financial assets or liabilities that are managed and whose performance is evaluated on a fair value basis in accordance with a documented risk management and investment strategy are designated at *fair value through profit or loss* on initial recognition. This implies that a fair value business model is used for the portfolios comprising these financial assets and/or liabilities

and that the primary objective is to achieve gains over the longer term connected to changes in fair value. The vast majority of financial assets and liabilities are classified as at fair value through profit or loss.

#### ***Held for trading***

Financial assets and liabilities that are derivatives are classified as *held for trading* on initial recognition.

#### ***Loans and receivables***

Financial assets and liabilities other than those classified either as at *fair value through profit or loss* or as *held for trading* are classified as *loans and receivables* on initial recognition.

### **4. NEW STANDARDS WITH EFFECT FROM 2016 OR LATER**

IASB final standards and IFRIC-interpretations with application dates from 2016 or later:

#### ***IFRS 9 Financial Instruments***

IFRS 9 includes requirements for recognition, measurement, impairment and derecognition of financial instruments, and replaces IAS 39 *Financial Instruments: Recognition and Measurement*.

Under IFRS 9, financial assets with basic loan features shall be carried at amortised cost,

unless the business model indicates that they should be carried at fair value. All other financial assets shall be carried at fair value.

Classification and measurement of financial liabilities under IFRS 9 is a continuation of IAS 39, with the exception of financial liabilities designated as at *fair value through profit or loss* (fair value option), where changes in fair value relating to own credit risk shall be separated and presented in other comprehensive income.

Financial assets and liabilities are expected to qualify for fair value measurement under IFRS 9 as at 31 December 2015. The exceptions are certain items measured at amortised cost in the balance sheet. However, implementation of IFRS 9 is not at this time expected to entail material changes to these items.

The effective date of IFRS 9 has been set by the IASB for periods starting on or after 1 January 2018. It is expected that the standard will be applied once it has been endorsed by the EU. Application of IFRS 9 is not expected to result in material changes in classification, recognition or measurement for the financial reporting on the transition date.

## NOTE 3 INCOME/EXPENSE FROM EQUITIES, UNITS, BONDS AND OTHER FIXED INCOME INSTRUMENTS



### ACCOUNTING POLICY

*Dividends* are recognised when the dividends are formally approved by the shareholders' meeting or comparable responsible party.

*Realised gain/loss* represents amounts realised when assets or liabilities have been derecognised. Realised gains/losses include transaction costs, which are expensed as incurred. Transaction costs are defined as all costs directly attributable to the completed transaction. For investments in *Equities and units* and *Bonds and other fixed income instruments*, these normally include commission fees and stamp duties.

*Unrealised gain/loss* represents changes in fair value for the period for the related balance sheet line item that are not attributable to the aforementioned categories.

*Interest income is recognised in profit or loss when the interest is earned. Interest expense is recognised in profit or loss as incurred.*

Tables 3.1 and 3.2 specify the income and expense elements for *Equities and units* and *Bonds and other fixed income instruments*,

respectively, where the totals show the amount recognised in the respective income statement line.

Table 3.1 Income/expense from equities and units

Amounts in NOK millions

	2015	2014
Dividends	3 731	3 045
Realised gain/loss	5 948	3 752
Unrealised gain/loss	564	11 861
Income/expense from equities and units before foreign exchange gains/losses	10 243	18 658

Table 3.2 Income/expense from bonds and other fixed income instruments

Amounts in NOK millions

	2015	2014
Interests	5 066	5 090
Realised gain/loss	5 504	-692
Unrealised gain/loss	-7 997	9 260
Income/expense from bonds and other fixed income instruments before foreign exchange gains/losses	2 573	13 658

## TAX EXPENSE

Tax expense comprises taxes in accordance with IAS 12 *Income Taxes* and comprises income tax that will not be refunded under local tax rules or tax treaties to Norges Bank. This pertains to withholding tax on dividends, which gives rise to

tax expenses related to the foreign exchange reserves. Tax expense for 2015 was NOK 42m, compared with NOK 47m in 2014.

Accounting policies for taxation are further detailed in Note 20.9 *Tax*.

## NOTE 4 HOLDINGS OF EQUITIES, UNITS, BONDS AND OTHER FIXED INCOME INSTRUMENTS



### ACCOUNTING POLICY

Investments in equities, units, bonds and other fixed income instruments are designated upon initial recognition as at *fair value through profit or loss* and are carried in the balance sheet at fair value.

Earned and accrued dividends and interest are presented in the balance sheet on the same line as the respective financial asset or liability and are specified in Tables 4.1 and 4.2.

Lent equities, units and bonds are presented separately. For more information on lent securities, see Note 8 *Secured lending and borrowing*.

For further information on fair value measurement of equities, units, bonds and other fixed income instruments, see Note 6 *Fair value measurement*.

Changes in fair value for the period are recognised in the income statement and specified in Note 3 *Income/expense from equities, units, bonds and other fixed income instruments*

Table 4.1 Equities and units

Amounts in NOK millions

	31 Dec. 2015		31 Dec. 2014	
	Fair value including dividends	Accrued dividends	Fair value including dividends	Accrued dividends
Equities and units	169 522	195	140 425	260
<i>Of which equities lent</i>	<i>5 108</i>	<i>-</i>	<i>6 404</i>	<i>-</i>

Table 4.2 Bonds and other fixed income instruments

Amounts in NOK millions

	31 Dec. 2015			31 Dec. 2014		
	Nominal value*	Fair value including accrued interest	Accrued interest	Nominal value*	Fair value including accrued interest	Accrued interest
Government bonds	247 672	267 458	1 676	215 697	236 986	1 999
Corporate bonds	330	8	-	321	35	-
Securitised bonds	372	-	-	194	-	-
Treasury bills	-	-	-	1 884	1 884	-
<b>Total bonds and other fixed income instruments</b>	<b>248 374</b>	<b>267 466</b>	<b>1 676</b>	<b>218 096</b>	<b>238 905</b>	<b>1 999</b>

\* Nominal values have been translated into NOK at the closing rate at the balance sheet date. The nominal value comprises the face value of the instrument or principal.

Bonds and other fixed income instruments in Norges Bank's balance sheet are in their entirety associated with management of the foreign exchange reserves. Norges Bank issues government debt and enters into financial contracts in

the area of government debt management in the name of the Ministry of Finance. Transactions related to government debt management are recognised in the government accounts and not in Norges Bank's balance sheet.

## NOTE 5 FOREIGN EXCHANGE RESERVES

### FRAMEWORK FOR THE MANAGEMENT OF NORGES BANK'S FOREIGN EXCHANGE RESERVES

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

The foreign exchange reserves shall be invested so that at least SDR 10bn (an international reserve asset created by the IMF), including the entire money market portfolio, can be used within a single trading day without having to realise any appreciable losses.

The long-term portfolio shall be invested in equities and fixed income instruments. The benchmark index for the long-term portfolio is a

composite of global equity and bond indices. The equity allocation in the strategic benchmark index is 40%.

The money market portfolio shall be between SDR 3.5bn and SDR 4.5bn and be invested in short-term fixed income instruments. The benchmark index for the money market portfolio is a composite of USD and EUR overnight money market indices and Treasury bill indices for the same currencies.

The petroleum buffer portfolio is intended to receive the government's cash flow from petroleum activities, provide for an appropriate management of the government's need for converting foreign currency and NOK and manage transfers to and from the GPF. Estimates of foreign exchange transactions for the coming month shall be based on an expected minimum size of the petroleum buffer portfolio at the end of the month of NOK 5bn. The petroleum buffer portfolio is invested in short-term fixed income instruments. No benchmark index has been set for the petroleum buffer portfolio.

Tables 5.1 and 5.2 show income statements and balance sheets, respectively, for the foreign exchange reserves by portfolio. Since the foreign exchange reserves are presented as they

are operationally managed by Norges Bank, there may be minor differences between this presentation and presentation under the IMF definition.

Table 5.1 Foreign exchange reserves by portfolio

Amounts in NOK millions

Results	PORTFOLIOS			2015
	Long-term	Money market	Petroleum buffer	Total exchange reserves
Net income/expenses:				
- Equities and units	10 221	-	-	10 221
- Bonds and other fixed income instruments	2 565	8	-	2 573
- Financial derivatives	-29	-	-	-29
- Secured lending	51	18	-	69
Interest income and expense from deposits and short-term borrowing	-1	5	-12	-8
Tax expense	-42	-	-	-42
Other financial income/expenses	1	-	-	1
<b>Net income from financial instruments before foreign exchange gains/losses</b>	<b>12 766</b>	<b>31</b>	<b>-12</b>	<b>12 785</b>
Foreign exchange gains/losses	43 899	6 777	3 023	53 699
<b>Net income from financial instruments</b>	<b>56 665</b>	<b>6 808</b>	<b>3 011</b>	<b>66 484</b>

Amounts in NOK millions

Results	PORTFOLIOS			2014
	Long-term	Money market	Petroleum buffer	Total exchange reserves
Net income/expenses:				
- Equities and units	18 640	-	-	18 640
- Bonds and other fixed income instruments	13 634	24	-	13 658
- Financial derivatives	4	-	-	4
- Secured lending	63	8	26	97
Interest income and expense from deposits and short-term borrowing	-	1	1	2
Tax expense	-47	-	-	-47
Other financial income/expenses	1	-	-1	-
<b>Net income from financial instruments before foreign exchange gains/losses</b>	<b>32 295</b>	<b>33</b>	<b>26</b>	<b>32 354</b>
Foreign exchange gains/losses	41 705	8 013	7 594	57 312
<b>Net income from financial instruments</b>	<b>74 000</b>	<b>8 045</b>	<b>7 620</b>	<b>89 666</b>

Table 5.2 Foreign exchange reserves by portfolio

Amounts in NOK millions

31 Dec. 2015				
Balance	PORTFOLIOS			
	Long-term	Money market	Petroleum buffer	Total exchange reserves
<b>FINANCIAL ASSETS</b>				
Deposits in banks	40	16 480	6 486	23 006
Secured lending	827	14 737	7 740	23 304
Unsettled trades	9	-	-	9
Equities and units	164 213	-	-	164 213
Equities lent	5 108	-	-	5 108
Bonds and other fixed income instruments	240 911	26 555	-	267 466
Financial derivatives	3	1	5	9
Other financial assets	828	-	-	828
<b>Total financial assets</b>	<b>411 939</b>	<b>57 773</b>	<b>14 231</b>	<b>483 943</b>
<b>FINANCIAL LIABILITIES</b>				
Secured borrowing	827	-	-	827
Unsettled trades	9	7 444	7 232	14 686
Financial derivatives	-	-	-	-
Other financial liabilities	-	-	248	248
<b>Total financial liabilities</b>	<b>836</b>	<b>7 444</b>	<b>7 481</b>	<b>15 761</b>
<b>Net foreign exchange reserves</b>	<b>411 103</b>	<b>50 329</b>	<b>6 750</b>	<b>468 182</b>

Amounts in NOK millions

31 Dec. 2014				
Balance	PORTFOLIOS			
	Long-term	Money market	Petroleum buffer	Total exchange reserves
<b>FINANCIAL ASSETS</b>				
Deposits in banks	361	5 574	26 286	32 221
Secured lending	760	24 548	25 499	50 807
Unsettled trades	720	-	-	720
Equities	133 821	-	-	133 821
Equities lent	6 404	-	-	6 404
Bonds and other fixed income instruments	206 634	32 271	-	238 905
Financial derivatives	8	-	19	27
Other financial assets	121	-	-	121
<b>Total financial assets</b>	<b>348 829</b>	<b>62 393</b>	<b>51 804</b>	<b>463 026</b>
<b>FINANCIAL LIABILITIES</b>				
Secured borrowing	762	-	-	762
Unsettled trades	755	12 495	-	13 250
Financial derivatives	-	1	-	1
Other financial liabilities	1	-	384	385
<b>Total financial liabilities</b>	<b>1 518</b>	<b>12 496</b>	<b>384</b>	<b>14 398</b>
<b>Net foreign exchange reserves</b>	<b>347 311</b>	<b>49 897</b>	<b>51 420</b>	<b>448 628</b>

Table 5.3 shows the foreign exchange reserves broken down by the currencies most used during the year.

Table 5.3 Foreign exchange reserves by currency

Amounts in NOK millions

	USD	EUR	GBP	JPY	CHF	CAD	31 Dec. 2015 Other	TOTAL
<b>FINANCIAL ASSETS</b>								
Deposits in banks	16 305	6 669	13	30	-	-	-11	23 006
Secured lending	6 305	16 999	-	-	-	-	-	23 304
Unsettled trades	8	-1	-	2	-	-	-	9
Equities	98 965	19 881	11 861	15 671	6 484	4 496	6 855	164 213
Equities lent	895	1 055	49	1 919	29	26	1 135	5 108
Bonds and other fixed income instruments	127 166	92 559	23 740	24 000	-	-	-	267 466
Financial derivatives	6	3	-	-	-	-	-	9
Other financial assets	1 156	-261	1	140	-213	38	-33	828
<b>Total financial assets</b>	<b>250 807</b>	<b>136 904</b>	<b>35 664</b>	<b>41 762</b>	<b>6 300</b>	<b>4 560</b>	<b>7 946</b>	<b>483 943</b>
<b>FINANCIAL LIABILITIES</b>								
Secured borrowing	827	-	-	-	-	-	-	827
Unsettled trades	2 494	12 190	-	2	-	-	-	14 686
Financial derivatives	-	-	-	-	-	-	-	-
Other financial liabilities	248	-	-	-	-	-	-	248
<b>Total financial liabilities</b>	<b>3 569</b>	<b>12 190</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15 761</b>
<b>Net foreign exchange reserves</b>	<b>247 238</b>	<b>124 714</b>	<b>35 664</b>	<b>41 760</b>	<b>6 300</b>	<b>4 560</b>	<b>7 946</b>	<b>468 182</b>

Amounts in NOK millions

	USD	EUR	GBP	JPY	CHF	CAD	31 Dec. 2014 Other	TOTAL
<b>FINANCIAL ASSETS</b>								
Deposits in banks	7 862	24 062	6	119	-	93	79	32 221
Secured lending	44 921	5 886	-	-	-	-	-	50 807
Unsettled trades	655	36	29	-	-	-	-	720
Equities	78 443	14 487	10 785	9 816	4 574	5 192	10 524	133 821
Equities lent	2 515	657	10	2 193	47	32	950	6 404
Bonds and other fixed income instruments	116 716	81 863	21 254	19 072	-	-	-	238 905
Financial derivatives	16	10	-	-	-	-	1	27
Other financial assets	340	-246	-64	-	-42	26	107	121
<b>Total financial assets</b>	<b>251 468</b>	<b>126 755</b>	<b>32 020</b>	<b>31 200</b>	<b>4 579</b>	<b>5 343</b>	<b>11 661</b>	<b>463 026</b>
<b>FINANCIAL LIABILITIES</b>								
Secured borrowing	756	-	6	-	-	-	-	762
Unsettled trades	11 356	1 843	42	18	-	-21	12	13 250
Financial derivatives	-	1	-	-	-	-	-	1
Other financial liabilities	384	-	1	-	-	-	-	385
<b>Total financial liabilities</b>	<b>12 496</b>	<b>1 844</b>	<b>49</b>	<b>18</b>	<b>-</b>	<b>-21</b>	<b>12</b>	<b>14 398</b>
<b>Net foreign exchange reserves</b>	<b>238 972</b>	<b>124 911</b>	<b>31 971</b>	<b>31 182</b>	<b>4 579</b>	<b>5 364</b>	<b>11 649</b>	<b>448 628</b>

## NOTE 6 FAIR VALUE MEASUREMENT



### ACCOUNTING POLICY

All assets and liabilities presented as *Equities and units, Bonds and other fixed income instruments, Unlisted real estate, Financial derivatives, Secured lending and borrowing, Deposits in banks and Posted and received cash collateral* are held at fair value in the balance sheet.

Fair value, as defined by IFRS 13 *Fair Value Measurement*, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

### 1. INTRODUCTION

The fair value of the vast majority of assets and liabilities is based on quoted market prices. If the market for a security or an asset is not active, fair value is established by using a standard valuation technique to estimate fair value. Estimating fair value introduces valuation uncertainty, mostly due to the use of unobservable inputs in valuation models. The valuation environment is followed up by the control environment at Norges Bank, which governs fair value measurement, and is described in Section 6 of this note.

- Assets and liabilities classified as Level 2 are valued using models with observable inputs. Inputs are considered observable if they can be directly observed from transactions in an active market, or if there is compelling external evidence demonstrating an executable exit price. Holdings classified as Level 2 have some valuation uncertainty.
- Assets classified as Level 3 are valued using models with considerable use of unobservable inputs, leading to a high degree of valuations uncertainty.

### 2. VALUATION UNCERTAINTY AND THE FAIR VALUE HIERARCHY

All securities in the foreign exchange reserves have been categories in the three categories of the fair value hierarchy presented in Table 6.1. The level of valuation uncertainty determines the categorisation:

- Level 1 comprises assets that are valued on the basis of quoted prices in active markets and are considered to have very limited valuation uncertainty.

An overview of models and valuation techniques with their respective observable and unobservable inputs, categorised by type of instrument, is provided in Section 4 of this note.



### SIGNIFICANT ESTIMATE

Level 3 investments consist of instruments held at fair value that are not traded or quoted in active markets. The fair values are determined using valuation techniques that use models with unobservable inputs. This implies a high degree of uncertainty regarding the determination of fair value.

Table 6.1 classifies investments by level of valuation uncertainty in the fair value hierarchy and

includes all balance sheet elements measured at fair value.

Table 6.1 Specification of investments by level of valuation uncertainty

Amounts in NOK millions

	Level 1		Level 2		Level 3		Total	
	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014
<b>Equities*</b>	<b>168 801</b>	<b>139 759</b>	<b>520</b>	<b>460</b>	<b>-</b>	<b>6</b>	<b>169 321</b>	<b>140 225</b>
Government bonds	267 457	236 986	-	-	-	-	267 457	236 986
Corporate bonds	-	7	-	-	8	28	8	35
Treasury bills	-	1 884	-	-	-	-	-	1 884
<b>Total bonds</b>	<b>267 457</b>	<b>238 877</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>28</b>	<b>267 465</b>	<b>238 905</b>
Financial derivatives (assets)	9	27	-	-	-	-	9	27
Financial derivatives (liabilities)	-	-1	-	-	-	-	-	-1
<b>Total financial derivatives</b>	<b>9</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>26</b>
<b>Other**</b>	<b>-</b>	<b>-</b>	<b>31 387</b>	<b>69 412</b>	<b>-</b>	<b>-</b>	<b>31 387</b>	<b>69 412</b>
<b>Total</b>	<b>436 267</b>	<b>378 662</b>	<b>31 907</b>	<b>69 872</b>	<b>8</b>	<b>34</b>	<b>468 182</b>	<b>448 568</b>
<b>Total (percentage)</b>	<b>93.2</b>	<b>84.4</b>	<b>6.8</b>	<b>15.6</b>	<b>-</b>	<b>-</b>	<b>100.0</b>	<b>100.0</b>

\* *Equities* include only equities related to the foreign exchange reserves.

\*\* *Other* comprises other assets and liabilities limited to money market instruments, including reverse repurchase agreements, deposits in banks, short-term borrowing, unsettled trades, posted and received cash collateral and other assets and liabilities.

At year-end 2015, the valuation uncertainty for the foreign exchange reserves overall was generally unchanged compared with year-end 2014. The majority of the total portfolio is associated with low valuation risk and is classified as Level 1. Almost all equity holdings (99.7%) are classified as Level 1. Valuation of bonds is more uncertain and complex than valuation of equi-

ties. Norges Bank carries out analyses at each reporting date to identify the extent to which there have been transactions and price transparency with related market liquidity for different types of bonds as well as for a number of individual holdings. All government bonds have been allocated to Level 1 and valuation is thus almost entirely based on quoted market prices.

### 3. MOVEMENTS BETWEEN LEVELS IN THE HIERARCHY

#### Level 3 analysis

Table 6.2 shows a reconciliation of changes in carrying amounts for all Level 3 holdings.

Table 6.2 Specification of changes in Level 3 holdings

Amounts in NOK millions

	1 Jan. 2015	Net gains/losses	Purchases	Sales	Settled	Transferred to Level 3	Transferred from Level 3	Foreign exchange gains/losses	31 Dec. 2015
Equities	6	-6	-	-	-	-	-	-	-
Bonds and other fixed income instruments	28	-22	-	-	-	-	-	2	8
<b>Total</b>	<b>34</b>	<b>-28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>8</b>

Amounts in NOK millions

	1 Jan. 2014	Net gains/losses	Purchases	Sales	Settled	Transferred to Level 3	Transferred from Level 3	Foreign exchange gains/losses	31 Dec. 2014
Equities	1	-	5	-1	-	1	-	-	6
Bonds and other fixed income instruments	43	-31	-	-	-16	-	-9	41	28
<b>Total</b>	<b>44</b>	<b>-31</b>	<b>5</b>	<b>-1</b>	<b>-16</b>	<b>1</b>	<b>-9</b>	<b>41</b>	<b>34</b>

Holdings allocated to Level 3 in the fair value hierarchy decreased by NOK 26m during 2015, which is unchanged relative to the size of the portfolio. The main reason for the reduction was a net loss on bonds and equities.

### 4. VALUATION TECHNIQUES

Norges Bank has defined hierarchies for which price sources are to be used for valuation. Holdings in the benchmark indices are normally priced in accordance with the index providers' prices, while the remaining holdings of equities and bonds are priced almost exclusively by other reputable independent external valuation providers. The next section sets out the main valuation techniques used for those instruments included in Level 2 and Level 3 of the fair value hierarchy. Furthermore, it highlights the most significant observable and unobservable inputs to the valuation models and their interaction with sensitivity testing for instruments classified as Level 3.

#### Equities and units (Level 2 and Level 3)

Equities and units valued on the basis of models using observable inputs from providers in accordance with the pricing hierarchy are classified as Level 2. These holdings are often instruments that are not traded daily or listed equities that have been suspended from trading. The valuation models take into account several types of observable inputs, such as the price of comparable equities, last traded date, volumes and reasons for suspension.

Unlisted equities and units are valued using discounted cash flow techniques with unobservable inputs such as estimated future earnings and discount rates. Other Level 3 equities and units, such as illiquid holdings or equities that have been suspended for a prolonged period, are mainly valued on the basis of a regression analysis, depending on the circumstances surrounding the holding.

### Bonds (Level 3)

Bonds valued by external valuation providers on the basis of models with extensive use of unobservable inputs such as probability of expected cash flows, outdated indirect quotes on compa-

table issues and spread against reference curves are classified as Level 3. These holding include defaulted and highly illiquid bonds.

## 5. SENSITIVITY ANALYSIS FOR LEVEL 3 HOLDINGS

Table 6.3 Additional specification of Level 3 sensitivities

Amounts in NOK millions

	Specification of Level 3 at 31 Dec. 2015	Unfavourable changes	2015 Favourable changes
Equities	-	-	-
Bonds and other fixed income instruments	8	-2	2
<b>Total</b>	<b>8</b>	<b>-2</b>	<b>2</b>

Amounts in NOK millions

	Specification of Level 3 at 31 Dec. 2014	Unfavourable changes	2014 Favourable changes
Equities	6	-1	1
Bonds and other fixed income instruments	28	-4	3
<b>Total</b>	<b>34</b>	<b>-5</b>	<b>4</b>

Norges Bank's analyses indicate that valuation risk relating to Level 3 investments had been marginally reduced during 2015. Holdings declined somewhat, with a corresponding reduction in the potential outcome. However, the proportion of investments classified as Level 3 is relatively small, compared with total foreign exchange.

### 6. CONTROL ENVIRONMENT

The control environment for fair value measurement in Norges Bank Investment Management and Norges Bank Markets and Banking Services is organised around a formalised and documented accounting and valuation policy and guidelines which are supported by work and control procedures. The Norges Bank Investment Management policy document lays down

valuation policies and outlines procedures for Norges Bank Investment Management's valuation committee. The portfolios managed by Norges Bank Markets and Banking Services contain only short-dated financial instruments, where valuation risk is very low. Therefore, Norges Bank Markets and Banking Services does not have its own valuation committee, but any questions are discussed by a separate management committee.

The valuation environment has been adapted in accordance with market standards and established practices for valuation. This is implemented in practice in the form of daily valuation of all holdings. These processes are scalable to market changes and are based on internal and external data solutions.

All holdings and investments are generally valued by external, independent valuation providers. They have been chosen on the basis of analyses performed by the Norges Bank units responsible for valuation.

Valuation providers are monitored on an ongoing basis through regular discussions, controls and price challenges for individual securities. For a large portion of holdings, prices from independent price providers are based on quoted market prices. For holdings that are not sufficiently liquid for valuation to be based on quoted prices, widely accepted models are used. Observable inputs are used where possible, but in some cases, owing to illiquid markets, unobservable inputs are used.

The valuation process is subject on a daily basis to numerous controls by the valuation departments. Controls are based on defined thresholds and sensitivities, which are monitored and adjusted in accordance with prevailing market

conditions. At each month-end for financial instruments, more extensive controls are performed to ensure valuation in accordance with fair value. As part of this review, particular attention is paid to illiquid financial instruments, i.e. investments deemed to pose valuation challenges. Illiquid instruments are identified using sector and currency classifications, credit rating indicators, bid/ask spreads, and activity in the market.

In Norges Bank Investment Management, a valuation memo and report are prepared at each quarter-end documenting the results of the controls performed and the most important sources of uncertainties in the valuations.

The valuation committee, which comprises Norges Bank Investment Management's leader group, meets every quarter prior to the publication of the financial reporting. The committee reviews the documentation, discusses major pricing issues and approves the valuation.

## NOTE 7 RISK

### FRAMEWORK FOR INVESTMENT RISK

The Executive Board has established principles for risk management. These are detailed further through policies and guidelines. The composition of the foreign exchange reserves' portfolios and the associated risk are determined primarily by the benchmark index defined by the governor. In the investment mandate for the portfolios, there are a number of limits and restrictions within the combined equity and bond asset class, and within each asset class. The restrictions regulate the degree of active management, in addition to the rule-based capital allocation. The portfolios primarily contain equities, government bonds and Treasury bills, but may also contain forward exchange contracts, futures contracts, interest rate swaps and repurchase/reverse repurchase agreements.

Through management of the foreign exchange reserves, Norges Bank is exposed to various types of financial risk, including market risk, credit risk and counterparty risk. The Bank is also exposed to credit risk associated with lending to banks and to the IMF.

Risk management is defined as management of market risk, credit risk, counterparty risk, operational risk and risk related to environmental, social and governance factors. The first three items listed are defined as investment risk. In Norges Bank Investment Management and in Norges Bank Markets and Banking Services, the investment area has responsibility for managing the portfolio and individual mandate risk, while the risk management areas independently measure, manage and report investment risk across portfolios, asset classes and other levels within the portfolios that reflect the investment process.

#### Investment risk – market risk

Norges Bank defines market risk as the risk of loss or a change in the market value of the portfolio, or parts of the portfolio, as a result of changes in financial market variables. Market risk for the portfolios in the foreign exchange

reserves is measured along the following dimensions: concentration (absolute and relative to the benchmark), volatility and correlation risk, systematic factor risk and liquidity risk. Market risk is actively taken to generate investment returns in line with the objectives of the investment mandates.

#### Investment risk – credit risk

Norges Bank defines credit risk as the risk of loss due to an issuer being unable to meet its payment obligations. Credit risk is measured both in relation to single issuers, where the probability of default and loss due to default are taken into account, and portfolio credit risk, where credit risk takes into account the correlation of credit losses between instruments and issuers. Credit risk is associated with fixed income instruments and is actively taken to generate investment returns in line with the investment mandates' objectives.

#### Investment risk – counterparty risk

Norges Bank defines counterparty risk as the risk of loss due to counterparty bankruptcy or other events leading to counterparties defaulting. Counterparties are required to ensure efficient liquidity management and efficient trading and management of market and credit risk. Counterparty risk also arises in connection with securities lending and in the management of the equity and bond portfolios. Counterparty risk is controlled and mitigated to the greatest extent possible, given the investment strategy.

#### Risk management process

Norges Bank employs several measurement methodologies, processes and systems to control investment risk. Robust and widely accepted risk management systems and processes are complemented by internally developed measurement methods and processes.

### MARKET RISK

Norges Bank measures market risk in both absolute terms for the actual portfolio, and the relative market risk for investments in the portfolio.

Continuous monitoring, measurement and assessment of market risk are performed along multiple risk dimensions, employing a number of methodologies and approaches. Combining different and complementary risk measures provides a better insight into the risk profile of the holdings in the portfolio.

#### *Asset class by region*

The foreign exchange reserves are invested across several asset classes and regions, as shown in Table 7.1 below.

Table 7.1 Allocation by asset class and region

Amounts in NOK millions

				31 Dec. 2015
		Market value in percentage by region	Market value in percentage by asset class	Assets minus liabilities
<b>LONG-TERM PORTFOLIO</b>				
Equities	Americas	61.7		
	Europe	25.2		
	Asia and Oceania	13.1		
<b>Total equities</b>			<b>41.2</b>	<b>169 245</b>
Bonds	Americas	45.3		
	Europe	44.7		
	Asia and Oceania	10.0		
<b>Total bonds</b>			<b>58.8</b>	<b>241 857</b>
<b>MONEY MARKET PORTFOLIO</b>				
Securities	Americas	70.4		18 690
	Europe	29.6		7 866
<b>Total securities</b>			<b>52.8</b>	<b>26 556</b>
Deposits	Americas	80.4		19 124
	Europe	19.6		4 649
<b>Total deposits</b>			<b>47.2</b>	<b>23 773</b>
<b>PETROLEUM BUFFER PORTFOLIO</b>				
Deposits	Americas	16.5		260
	Europe	83.5		6 491
<b>Total deposits</b>			<b>100.0</b>	<b>6 751</b>

Amounts in NOK millions

			31 Dec. 2014	
		Market value in percentage by region	Market value in percentage by asset class	Assets minus liabilities
<b>LONG-TERM PORTFOLIO</b>				
Equities	Americas	61.7		
	Europe	23.4		
	Asia and Oceania	14.9		
<b>Total equities</b>			<b>40.3</b>	<b>139 984</b>
Bonds	Americas	45.9		
	Europe	44.7		
	Asia and Oceania	9.4		
<b>Total bonds</b>			<b>59.7</b>	<b>207 326</b>
<b>MONEY MARKET PORTFOLIO</b>				
Securities	Americas	68.0		
	Europe	32.0		
<b>Total securities</b>			<b>64.7</b>	<b>32 271</b>
Deposits	Americas	88.6		
	Europe	11.4		
<b>Total deposits</b>			<b>35.3</b>	<b>17 626</b>
<b>PETROLEUM BUFFER PORTFOLIO</b>				
Deposits	Americas	49.8		
	Europe	50.2		
<b>Total deposits</b>			<b>100.0</b>	<b>51 419</b>

#### Concentration risk

The foreign exchange reserves contain substantial investments in bonds issued by sovereigns. The reserves are also invested private companies that issue equities.

Table 7.2 below shows the largest holdings of bonds issued by sovereigns. These nominal government bonds issued in local currency or in foreign currency, and inflation-linked bonds in local currency.

Table 7.2 Holdings within the segment government bonds

Amounts in NOK millions

	Market value	
	31 Dec. 2015	31 Dec. 2014
US	127 169	116 721
France	48 612	39 749
Germany	43 944	42 109
UK	23 740	21 254
Japan	24 001	19 072

Table 7.3 Largest holdings excluding sovereigns

Amounts in NOK millions

		31 Dec. 2015
	Sector	Equities
Apple Inc	Technology	3 260
Alphabet Inc	Technology	2 434
Microsoft Corp	Technology	2 209
Exxon Mobil Corp	Oil & Gas	1 802
Johnson & Johnson	Healthcare	1 572
General Electric Co	Manufacturing	1 554
Wells Fargo & Co	Finance	1 512
Amazon.com Inc	Consumer goods	1 385
JPMorgan Chase & Co	Finance	1 341
Berkshire Hathaway Inc	Finance	1 333

Amounts in NOK millions

		31 Dec. 2014
	Sector	Equities
Apple Inc	Technology	2 440
Exxon Mobil Corp	Oil & Gas	1 478
Microsoft Corp	Technology	1 294
Alphabet Inc*	Technology	1 112
Johnson & Johnson	Healthcare	1 082
Wells Fargo & Co	Finance	1 069
Berkshire Hathaway Inc	Finance	1 041
General Electric Co	Manufacturing	953
Procter & Gamble Co/The	Consumer goods	923
Nestlé SA	Consumer goods	909

\* Formerly Google Inc.

**Volatility and correlation risk**

Norges Bank uses models to quantify the risk of value changes associated with the foreign exchange reserves. Volatility is a standard risk measurement technique based on the statistical concept of standard deviation, which takes into account correlations between different instruments in the portfolio. This risk measure provides an estimate of how much one can expect the portfolio value to change or fluctuate in the course of a year, based on market conditions over the past three years. In two out of three years, portfolio return is expected to be lower

than the estimated volatility and higher than the negative value of the estimated volatility.

Expected volatility can be expressed in terms of the portfolio's absolute risk or relative risk. For the long-term portfolio, the model uses equally weighted weekly return data from the past three years and a parametric calculation methodology. The same model is used for both portfolio risk and relative volatility. In addition to this model, other models are employed that better capture the market dynamics of recent periods and the risk measure that measures so-called tail risk.

Table 7.4 Expected volatility and expected relative volatility

	Expected volatility, in percent							
	31 Dec. 2015	Min 2015	Max 2015	Avg. 2015	31 Dec. 2014	Min 2014	Max 2014	Avg. 2014
Long-term portfolio	10.0	7.7	10.0	9.1	7.7	7.2	8.1	7.7
<i>Equities</i>	13.5	11.2	13.6	12.5	11.4	11.2	14.0	12.7
<i>Bonds</i>	10.4	8.6	10.4	9.7	8.9	8.5	10.0	9.4
Money market portfolio	0.04	0.02	0.08	0.05	0.03	0.03	0.09	0.06

	Expected relative volatility, basis points							
	31 Dec. 2015	Min 2015	Max 2015	Avg. 2015	31 Dec. 2014	Min 2014	Max 2014	Avg. 2014
Long-term portfolio	6	3	18	5	6	5	40	7
<i>Equities</i>	16	6	23	10	9	8	101	12
<i>Bonds</i>	4	2	28	6	8	6	13	9
Money market portfolio	3	1	7	4	3	2	7	3

Risk measured by the risk model showed an increase for the long-term portfolio. Risk measured at year-end was 10%. This means that for the portfolio, yearly value fluctuations on the order of NOK 41bn can be expected. The portfolio's expected relative volatility at year-end 2015 was 6 basis points, the same as at year-end 2014.

At year-end 2015, the money market portfolio had a measured risk of 4 basis points, which was an increase from 3 basis points from 2014. This means that for the portfolio, yearly value fluctuations on the order of NOK 150m can be expected. The portfolio's expected relative volatility at year-end 2015 was 3 basis points, the same as at year-end 2014.

#### Strengths and weaknesses

The strength of these types of risk models is that one can estimate the risk in a portfolio across different asset classes, markets, currencies, securities and derivatives and express this risk as a single numerical value, which takes into account the correlation between different asset classes, securities and risk factors.

The model-based risk estimates are based on historical relationships and will provide reliable forecast in markets without significant changes

in volatility. Estimates will be less reliable in periods marked by significant changes in volatility and correlation. Calculated volatility gives a point estimate of risk and provides little information about the total risk profile and any tail risk. Annualisation means that it is assumed that volatility and portfolio composition are consistent over time. To compensate for these shortcomings, complementary models and methods are employed, such as stress tests, and analyses of concentration risk and realised return.

#### Verification of models

Regular testing of the models is performed to validate the model's ability to estimate risk.

#### CREDIT RISK

Credit risk is the risk of losses resulting from issuers of bonds defaulting on their payment obligations. Bonds in the portfolio's benchmark index are all rated investment grade by one of the major credit rating agencies. Investments in bonds are made on the basis of internal assessments of expected return and risk.

Table 7.5 Bond portfolio specified by credit rating

Amounts in NOK millions

	31 Dec. 2015				
	AAA	AA	A	Lower rating	Total
Government bonds	171 104	72 352	24 001	-	267 457
Corporate bonds	-	-	-	8	8
Treasury bills	-	-	-	-	-
<b>Total bonds and other fixed income instruments</b>	<b>171 104</b>	<b>72 352</b>	<b>24 001</b>	<b>-</b>	<b>267 465</b>

Amounts in NOK millions

	31 Dec. 2014				
	AAA	AA	A	Lower rating	Total
Government bonds	156 642	61 208	19 136	-	236 986
Corporate bonds	-	-	-	35	35
Treasury bills	1 884	-	-	-	1 884
<b>Total bonds and other fixed income instruments</b>	<b>158 526</b>	<b>61 208</b>	<b>19 136</b>	<b>35</b>	<b>238 905</b>

Table 7.6 Bond portfolio by credit rating and currency, in percent

	31 Dec. 2015				
	AAA	AA	A	Lower rating	Total
US dollar	47.5	-	-	-	47.5
Euro	16.5	18.2	-	-	34.7
British pound	-	-	9.0	-	9.0
Japanese yen	-	8.8	-	-	8.8
<b>Total</b>	<b>64.0</b>	<b>27.0</b>	<b>9.0</b>	<b>-</b>	<b>100.0</b>

	31 Dec. 2014				
	AAA	AA	A	Lower rating	Total
US dollar	48.8	-	-	-	48.8
Euro	17.7	16.6	-	-	34.3
British pound	-	8.9	-	-	8.9
Japanese yen	-	-	8.0	-	8.0
<b>Total</b>	<b>66.5</b>	<b>25.5</b>	<b>8.0</b>	<b>-</b>	<b>100.0</b>

The bond portfolio's credit quality was somewhat reduced during 2015. Table 7.6 shows that the share of the actual portfolio of AAA bonds decreased to 64% at year-end 2015 from 66.5% at year-end 2014. The share of AA bonds increased to 27% at year-end 2015 from 25.5% at year-end 2014. At year-end 2015, there were no holdings with a credit rating lower than A.

In addition to the credit ratings from credit rating agencies, measurement of credit risk is complemented with credit risk models, one of which is based on credit ratings and the other is based on observable credit premiums. Both these methods also take into account correlation and expected value of bonds in a bankruptcy situation. The models are used for risk measurement and monitoring of credit risk in the fixed income portfolio.

#### COUNTERPARTY RISK

Counterparties are required to ensure efficient liquidity management and efficient trading and management of market and credit risk. Exposure to counterparty risk is related to trading in OTC derivatives and currency contracts, reverse repurchase agreements, securities lending and securities posted as collateral in derivative trades and securities lending. Unsecured deposits in banks are also defined as counterparty risk. Such counterparty risk also arises in connection with day-to-day liquidity management.

Furthermore, there is exposure to counterparty risk related to counterparties in international settlement and custody systems where transactions settle. This can occur both in currency trades and with purchase and sale of securities. Settlement risk and exposure from trades with long maturities are also defined as counterparty risk.

Various counterparties are used to reduce concentration risk and there are strict requirements for counterparty credit rating. Credit rating requirements are generally higher for counterparties to unsecured deposits in banks than in situations where collateral is received. Changes

in counterparty's credit ratings are monitored continuously.

Netting agreements are in place for trades in OTC derivatives, currency contracts and reverse repurchase agreements, in order to reduce counterparty risk. Further reduction of counterparty risk is achieved through collateral requirements for counterparty net positions with a positive market value. For instruments where collateral is used, minimum requirements have been set, relating to the credit quality, time to maturity and concentration of the collateral. Netting and collateral agreements are entered into for all counterparties approved for these types of trades.

Counterparty risk is also reduced by setting exposure limits for individual counterparties. Exposure per counterparty is measured daily against set limits. The methods used to calculate counterparty risk are in accordance with internationally recognised standards. Counterparty risk is measured primarily in accordance with the Basel rules for banks, with certain adjustments based on internal analyses. The risk models calculate the expected counterparty exposure in the event of a counterparty default. For OTC derivatives and currency contracts, the current exposure method in the Basel rules is used. For each contract, the market value and a rate of future anticipated exposure is calculated. Netting agreements and collateral are taken into account in the calculation of net exposure.

For securities lending transactions executed through an external agent and securities posted as collateral in derivatives trades, a method is used that adds a premium to the market value to reflect the position's volatility. These positions are also adjusted for netting and actual collateral received and posted when determining net exposure.

Exposure to counterparty risk is related to counterparties in the settlement and custody systems, both in currency trades and in purchase and sale of securities. Settlement risk for

most currency trades is low. The settlement risk is reduced through the use of currency settlement system CLS (Continues Linked Settlement) or by trading directly with settlement banks.

Table 7.7 Counterparty risk by type of position

Amounts in NOK millions

	31 Dec. 2015			
	Gross exposure	Effect of netting	Collateral and guarantees	Net exposure
Time deposits and unsecured bank deposits*	22 966	-	-	22 966
Repurchase and reverse repurchase agreements	7 800	-	8 085	-285
Securities lending transactions	637	-	-	637
Cash and bonds posted as collateral for derivative trades	-	-	-	-
<b>Total</b>	<b>31 403</b>	<b>-</b>	<b>8 085</b>	<b>23 318</b>

\* Time deposits and unsecured bank deposits mainly comprise deposits with the Federal Reserve and the BIS.

Amounts in NOK millions

	31 Dec. 2014			
	Gross exposure	Effect of netting	Collateral and guarantees	Net exposure
Time deposits and unsecured bank deposits*	32 146	-	-	32 146
Repurchase and reverse repurchase agreements	37 552	-	39 190	-1 638
Securities lending transactions	594	-	552	42
Cash and bonds posted as collateral for derivative trades	291	-	-	291
<b>Total</b>	<b>70 583</b>	<b>-</b>	<b>39 742</b>	<b>30 840</b>

\* Time deposits and unsecured bank deposits mainly comprise deposits with the Federal Reserve and the BIS.

Counterparty risk measured by gross exposure decreased in 2015, while counterparty exposure measured by net exposure was virtually unchanged. Gross risk exposure was reduced primarily on account of low cash holdings and low risk exposure from cash and bonds posted as collateral in derivatives trades at year-end 2015. Gross risk exposure from securities lending increased somewhat at year-end, while

net risk exposure rose considerably. The reason for the increase in net risk exposure was that the securities lending agent reduced his guarantee responsibilities at the end of 2015 (see the column *Collateral and guarantees* for the guarantee effect. At year-end 2015, net risk exposure from securities lending was identical to gross risk exposure.

Norges Bank's counterparties have a credit rating from independent credit rating agencies. An internal credit evaluation can only be used as the basis for counterparty approval in instances when the counterparty risk is considered very

low. Credit ratings of the Bank's counterparties are monitored and complemented by alternative credit risk indicators. Table 7.8 shows Norges Bank's counterparties (number) classified according to credit rating category.

Table 7.8 Counterparties\* by credit rating

	Norges Bank's counterparties (excluding brokers)		Brokers	
	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014
AAA	-	-	-	-
AA	28	22	28	23
A	62	56	70	72
BBB	16	3	24	28
BB	-	-	5	3
B	-	-	15	13
<b>Total</b>	<b>106</b>	<b>81</b>	<b>142</b>	<b>139</b>

\* As counterparties are counted per legal entity, several counterparties may be included per corporate group.

## OTHER RISK

### Liquidity risk

Liquidity risk is the risk of being unable to meet financial obligations at the agreed time. As a central bank, Norges Bank is not exposed to this type of liquidity risk in local currency.

### Foreign exchange rate risk

Foreign exchange rate risk is the risk that the value of financial instruments will change owing to movements in foreign exchange rates. Norges Bank has, primarily through the foreign exchange reserves, invested in securities issued and traded in currencies other than the Norwegian krone. Consequently, the value of Norges Bank's investments will change in a positive or

negative direction owing to movements in foreign exchange rates and the value of these investments is therefore exposed to foreign exchange rate risk. See Table 5.3 *Foreign exchange reserves by currency* in Note 5 *Foreign exchange reserves* for an overview of the six largest currencies at year-end.

### Credit risk associated with lending to banks

Norges Bank extends loans with fixed maturities (F-loans) and overnight loans (D-loans) to banks. D-loans may be intraday and overnight. Loans to banks are extended against collateral in the form of securities pledged to Norges Bank, or F-deposits with Norges Bank or collateral in the form

of intraday deposits with Sveriges Riksbank or Danmarks Nationalbank.

Norges Bank stipulates more detailed terms for pledging securities and fund units as collateral for loans in Norges Bank pursuant to Section 9 of the Regulation on banks' access to loans and deposits in Norges Bank etc. The current guidelines have been issued in Norges Bank's Circular No. 1/8 February 2012.

The rules for pledging collateral are intended to limit Norges Bank's risk associated with lending to banks and facilitate appropriate levels of bank borrowing. Risk is limited, since only high quality securities are eligible and since the loan value is lower than the market value of the collateral (haircut).

At 31 December 2015, there was a D-loan outstanding in the amount of NOK 0.7bn. Banks

have pledged collateral to Norges Bank in a substantially larger amount, and the risk is therefore considered to be limited.

#### **Credit risk associated with loans to the IMF**

Norges Bank's loans to the IMF have been made to bolster the IMF's general borrowing agreements which follow IMF guidelines. Norges Bank is not directly exposed to risk in the loan portfolio managed by the IMF. The IMF has never realised a loss on its loans under their general borrowing agreements. The IMF has preferred creditor status, which means that the IMF has priority over all other creditors. If the IMF should incur a loss on its loans, this will initially affect the IMF's own assets and, if necessary, paid-in subscriptions. In Norges Bank's assessment, the risk related to IMF loans is low, and no impairment losses have been recognised with regard to these loans.

## **NOTE 8 SECURED LENDING AND BORROWING**

Norges Bank is a party to reverse repurchase agreements and similar transactions and to agency securities lending. These collateralised transactions are referred to collectively as *Secured lending and borrowing*.

### **REVERSE REPURCHASE AGREEMENTS**

Reverse repurchase agreements are entered into in connection with investing liquidity. The counterparty transfers securities to Norges Bank, and Norges Bank posts cash collateral to the counterparty.

Cash collateral received through securities lending programmes may be reinvested in reverse repurchase agreements, where the purpose is to create additional income.

### **AGENCY SECURITIES LENDING**

An agreement has been entered into with an external agent giving this agent the right to lend securities owned by Norges Bank to other

market participants with securities borrowing requirements. Both equities and bonds are lent. The purpose of the lending activity is to generate additional returns for Norges Bank from its securities holdings. A net income is earned from the securities lending programme.

The agent acts on behalf of, and in the interest of, Norges Bank. Norges Bank is exposed to counterparty risk from securities lending. When securities are lent, the borrower transfers collateral to the agent in the form of cash or securities. The collateral is used to mitigate losses in case of a borrower default. The collateral includes a margin and is held on behalf of the lender. In the event of a borrower default, the borrower will not return borrowed securities. Norges Bank will be exposed to losses in the event a borrower defaults and collateral received is insufficient to buy back the lent securities in the market.



## ACCOUNTING POLICY

### *Income and expense recognition of secured lending and borrowing transactions*

Net income from agency securities lending comprises the lending fee, expenses related to cash collateral received, interest, reinvestment income and the deduction of the agent's fees relating to handing of the transaction. The net income is recognised on a straight-line basis over the term of the security loan and is presented in the income statement as *Income/expense from secured lending*.

*Net income/expense from repurchase and reverse repurchase agreements* represents a change in fair value for the period of these balance sheet items, which is mostly attributable to interest income/expense from the agreements. Income/expense from repurchase and reverse repurchase agreements is presented in the income statement as *Income/expense from secured borrowing* and *Income/expense from secured lending*, respectively.

Table 8.1 Income/expense from secured lending and borrowing

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Income/expense from secured lending	69	98
Income/expense from secured borrowing	-	-
Net income/expense from secured lending and borrowing	69	98



## ACCOUNTING POLICY

### *Transferred financial assets*

Securities lent to counterparties in connection with secured lending and borrowing are not derecognised when the agreement is entered into, as the derecognition criteria are not met. As the counterparty has the right to sell or pledge the security, the security is considered transferred. Lent securities are presented on separate lines in the balance sheet, as *Equities lent* and *Bonds lent*. During the lending period, the accounting for the underlying securities is in accordance with accounting policies for the relevant securities.

### *Secured lending*

Cash collateral posted to counterparties under a reverse repurchase agreement is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised as an asset, *Secured lending*. This asset is designated at initial recognition as a financial asset measured at *fair value through profit or loss*.

### *Secured borrowing*

Cash collateral received in connection with repurchase agreements is recognised as *Deposits in banks* together with a corresponding liability, *Secured borrowing*. This liability is designated at initial recognition as a financial liability measured at *fair value through profit or loss*.

### *Collateral received in the form of securities*

Collateral received in the form of securities through *Secured lending and borrowing* transactions, where Norges Bank has the right to sell or pledge the security, is not recognised in the balance sheet, unless reinvested.

Table 8.2 Secured lending

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Secured lending	23 304	50 807
Of which unsettled trades (liability)	14 677	12 496
<b>Secured lending excluding unsettled trades</b>	<b>8 627</b>	<b>38 311</b>
<b>Associated collateral in the form of securities (off-balance sheet)</b>		
Equities received as collateral	582	520
Bonds received as collateral	8 389	39 480
<b>Total security collateral received related to lending</b>	<b>8 971</b>	<b>40 000</b>

Table 8.3 Transferred financial assets and secured borrowing

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
<b>Transferred financial assets</b>		
Equities lent	5 108	6 404
<b>Total transferred financial assets</b>	<b>5 108</b>	<b>6 404</b>
<b>Associated cash collateral, recognised as liability</b>		
Secured borrowing	827	762
<b>Secured borrowing excluding unsettled trades</b>	<b>827</b>	<b>762</b>
<b>Associated collateral in the form of securities (off-balance sheet)</b>		
Equities received as collateral	3 646	5 522
Bonds received as collateral	1 200	779
<b>Total security collateral received related to transferred financial assets</b>	<b>4 846</b>	<b>6 301</b>

Cash collateral received is reinvested in its entirety in reverse repurchase agreements. No securities received as collateral have been reinvested at year-end 2015 or 2014. Therefore, these securities are not recognised in the balance sheet.

## NOTE 9 COLLATERAL AND OFFSETTING



### ACCOUNTING POLICY

#### *Cash collateral*

Cash collateral posted in connection with OTC derivative transactions is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised as an asset as *Cash collateral posted*. Cash collateral received in connection with OTC derivative transactions is recognised as *Deposits in banks* together with a corresponding liability, *Cash collateral received*. Both *Cash collateral posted* and *Cash collateral received* are designated at initial recognition as financial assets/liabilities measured at *fair value through profit or loss*.

#### *Offsetting*

Financial assets and liabilities are only offset, and presented net in the balance sheet, if there is a legally enforceable right to set off the recognised amounts and the intention to settle on a net basis, or to realise the asset and settle the liability simultaneously, in accordance with IAS 32 *Financial Instruments: Presentation*. The aforementioned criteria are not met for any financial assets and liabilities, hence no amounts are offset and presented net in the balance sheet. For this reason, Table 9.1 does not include a column for amounts offset/netted in the balance sheet.

### COLLATERAL

For various counterparties and transaction types, cash collateral will be both posted to and received from the same counterparty. Therefore, received cash collateral can be netted against posted cash collateral and vice-versa (Table 9.1). *Cash collateral posted* and *Cash collateral received* are exclusively associated with OTC derivative transactions. See Note 8 *Secured lending and borrowing* for further information.

### OFFSETTING

Table 9.1 shows an overview of financial assets and liabilities, the effects of legally enforceable netting agreements and related collateral to reduce credit risk. The column *Assets/Liabilities in the balance sheet subject to netting* shows the carrying amounts of financial assets and liabilities that are subject to legally enforceable netting agreements. These amounts are adjusted for effects of potential netting with the same counterparty of recognised financial assets and liabilities, together with posted or received cash collateral that results in a net exposure in the column *Assets/Liabilities after netting and collateral*.

Some netting agreements have been found not to be legally enforceable. Transactions under such contracts are shown together with unsettled trades in the column *Unsettled trades and assets/liabilities not subject to enforceable netting agreements*. Unsettled trades can be cancelled if the counterparty defaults before assets involved in the trade are transferred.

In the event of counterparty default, a collective settlement between Norges Bank and the bankruptcy estate could be performed for certain groups of instruments, irrespective of whether the instruments belong to the GPF or Norway's foreign exchange reserves. Such cross nettings will be settled between these portfolios and are therefore not adjusted for in this table.

Table 9.1 Assets and liabilities subject to netting agreements

Amounts in NOK millions

Description	Amounts subject to enforceable netting agreements					Unsettled trades and assets not subject to enforceable netting agreements	Gross financial assets as recognised in the balance sheet
	Assets in the balance sheet subject to netting	Financial liabilities related to same counterparty	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral		
Secured lending	8 627	-	365	8 262	-	14 677	23 304
Financial derivatives	-	-	-	-	-	9	9
<b>Total</b>	<b>8 627</b>	<b>-</b>	<b>365</b>	<b>8 262</b>	<b>-</b>	<b>14 686</b>	<b>23 313</b>

Amounts in NOK millions

Description	Amounts subject to enforceable netting agreements					Unsettled trades and liabilities not subject to enforceable netting agreements	Gross financial liabilities as recognised in the balance sheet
	Liabilities in the balance sheet subject to netting	Financial assets related to same counterparty	Cash collateral posted (recognised as assets)	Security collateral posted (not derecognised)	Liabilities after netting and collateral		
Secured lending	827	-	365	462	-	-	827
Financial derivatives	-	-	-	-	-	-	-
<b>Total</b>	<b>827</b>	<b>-</b>	<b>365</b>	<b>462</b>	<b>-</b>	<b>-</b>	<b>827</b>

Amounts in NOK millions

Description	Amounts subject to enforceable netting agreements					Unsettled trades and assets not subject to enforceable netting agreements	Gross financial assets as recognised in the balance sheet
	Assets in the balance sheet subject to netting	Financial liabilities related to same counterparty	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral		
Secured lending	38 311	-	384	37 923	-	12 496	50 807
Financial derivatives	-	-	-	-	-	27	27
<b>Total</b>	<b>38 311</b>	<b>-</b>	<b>384</b>	<b>37 923</b>	<b>-</b>	<b>12 523</b>	<b>50 834</b>

Amounts in NOK millions

Description	Amounts subject to enforceable netting agreements					Unsettled trades and liabilities not subject to enforceable netting agreements	Gross financial liabilities as recognised in the balance sheet
	Liabilities in the balance sheet subject to netting	Financial assets related to same counterparty	Cash collateral posted (recognised as assets)	Security collateral posted (not derecognised)	Liabilities after netting and collateral		
Secured lending	762	-	384	378	-	-	762
Financial derivatives	-	-	-	-	-	1	1
<b>Total</b>	<b>762</b>	<b>-</b>	<b>384</b>	<b>378</b>	<b>-</b>	<b>1</b>	<b>763</b>

## NOTE 10 PENSION



### ACCOUNTING POLICY

Accounting treatment of pension and other benefit obligations is in accordance with IAS 19 *Employee Benefits*. Calculations for fund-based plans through Norges Bank's pension fund are based on actuarial assumptions regarding life expectancy, expected wage growth and adjustment of the National Insurance basic amount (G). The net benefit obligation is the difference between the present value of the benefit obligation and the fair value of plan assets.

Plan assets are measured at fair value. Benefit obligations and plan assets are measured on the balance sheet date. Employers' National Insurance contributions are included and are estimated on the basis of net actual underfunding. Pension expense is calculated on the basis of a straight-line attribution of benefit over the period of service and consists of the current service cost, less the return on plan assets. Recognised pension expense is presented in its entirety under the line *Personnel expenses*. Actuarial gains and losses are recognised in total comprehensive income.

Norges Bank has funded and unfunded pension and other benefit obligations. All funded and unfunded plans are included in the Bank's actuarial settlement.

Norges Bank's funded pension benefit obligations are covered by Norges Bank's own pension fund, which is organised as a separate legal entity. Retirement benefits are equal to two-thirds of the employee's salary at the time of

retirement. The period of service for full benefits is 30 years. Employees contribute 2% of their gross annual salary into the pension fund. Norges Bank's contributions are covered by cash payments or the premium fund. Since Norges Bank's pension plan is considered to be a public sector plan, benefits from the pension fund are coordinated with benefits from the National Insurance scheme.

Table 10.1 Number of pension plan members (funded plan)

	31 Dec. 2015	31 Dec. 2014
Members drawing retirement benefits	933	959
Active members (including all those affected by restructuring)	713	662
Members who have left the Bank with vested rights	781	744
<b>Total number of pension plan members</b>	<b>2 427</b>	<b>2 365</b>

The basis for retirement benefits covered by the funded plan is limited to an amount equivalent to 12 times the basic pension (G). An unfunded pension plan funded out of current income was established as from 2007 to cover that portion of pensionable salaries in excess of 12G for those employees who already had an agreement entitling them to pension over and above this limit. For those whose employment began after 1 January 2007, the basis for retirement benefits is limited to 12G. The pension plan complies with public service pension requirements.

#### NORGES BANK'S BENEFIT OBLIGATIONS

Norges Bank has funded pension plans associated with membership of Norges Bank's pension fund. In addition, the Bank has unfunded plans funded out of current income. These are special and allocated pensions, the unfunded portions of pensions for employees with salaries higher than 12G earned after 1 January 2007, contractual early retirement pensions calculated on the basis of an expected 15% take-up rate and early retirement pensions and redundancy pay agreements related to restructuring. The benefit obligation related to restructuring is the present value of all agreements, including agreements with disbursements in 2015 or later.

#### ! SIGNIFICANT ESTIMATE

Measurement of the present value of Norges Bank's pension benefit obligation requires determination of a number of economic and actuarial assumptions. Changes in these assumptions may affect the pension expense and the pension benefit obligation recognised in the balance sheet. Norges Bank follows Norwegian Accounting Standards Board (NASB) guidelines in determining assumptions, where the guideline assumptions are assessed against actual conditions at Norges Bank before a decision is made to apply them.

Table 10.2 Economic and demographic assumptions

	31 Dec. 2015	31 Dec. 2014
Discount rate	2.70%	2.30%
Interest rate on assets	2.70%	2.30%
Rate of compensation increase	2.50%	2.75%
Rate of pension increase	1.50%	1.75%
Increase in social security base amount (G)	2.25%	2.50%
Expected annual attrition	2% up to age 50. then 0	2% up to age 50. then 0
Payroll tax/social security tax	14.10%	14.10%
Mortality table	K2013FT	K2013FT
Disability table	KU	KU

Table 10.3 Reconciliation of net liability recognised in the balance sheet

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
<b>CHANGE IN DEFINED BENEFIT OBLIGATION (DBO) INCL. PAYROLL TAX</b>		
DBO at beginning of year	4 187	3 789
Service cost	154	124
Interest cost	95	144
Plan amendments	-	-179
Payroll tax on employer contribution	-13	-15
Benefits paid	-150	-152
Remeasurement loss (gain)	-426	476
<b>DBO at year-end</b>	<b>3 847</b>	<b>4 187</b>
<b>CHANGE IN PLAN ASSETS</b>		
Fair value of assets at beginning of year	3 611	3 423
Interest income	78	115
Employer contribution incl. payroll tax	103	123
Payroll tax on employer contribution	-13	-15
Benefits paid	-136	-136
Remeasurement (loss) gain	-46	101
<b>Fair value of assets at year-end</b>	<b>3 597</b>	<b>3 611</b>
Pension scheme not recognised in the actuarial calculation	1	1
<b>Net amount recognised in the balance sheet</b>	<b>-251</b>	<b>-577</b>

Table 10.4 Specification of funded and unfunded plans

Amounts in NOK millions

	31 Dec. 2015			31 Dec. 2014		
	Funded plan	Unfunded plans	Total	Funded plan	Unfunded plans	Total
Accrued benefit obligations	3 649	199	3 848	4 001	187	4 188
Plan assets	-3 597	-	-3 597	-3 611	-	-3 611
<b>Net benefit obligation</b>	<b>52</b>	<b>199</b>	<b>251</b>	<b>390</b>	<b>187</b>	<b>577</b>

Table 10.5 Allocation of plan assets for funded (defined-benefit) plan

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Bonds	2 133	2 149
Equities	1 083	1 098
Real estate	381	364
<b>Total</b>	<b>3 597</b>	<b>3 611</b>

## PENSION EXPENSE FOR EMPLOYEES IN NORWAY

Pension expense has been calculated in accordance with IAS 19 *Employee Benefits* and includes current service cost, interest expense and expected return on plan assets.

The change in special and allocated benefits is included in the Bank's overall pension expense.

Table 10.6 Pension expense

Amounts in NOK millions

	2015	2014
<b>Service cost and cost of benefit changes</b>	<b>158</b>	<b>-51</b>
Service cost incl. interest and payroll tax	154	124
Administration cost incl. payroll tax	4	4
Effect of plan amendments incl. payroll tax	-	-179
<b>Financial cost (income)</b>	<b>13</b>	<b>27</b>
Net interest cost (income) incl. payroll tax	13	7
Investment management cost incl. payroll tax	-	20
<b>Net periodic pension cost (income)*</b>	<b>171</b>	<b>-24</b>
<b>Other comprehensive income (OCI) in the period</b>		
Remeasurement loss (gain) - change in discount rate	-349	1 667
Remeasurement loss (gain) - change in other economic assumptions	-223	-1 065
Remeasurement loss (gain) - experience adjustments, DBO	146	-127
Remeasurement loss (gain) - experience adjustments, assets	30	-118
Investment management cost	16	17
<b>OCI losses (gains) in the period*</b>	<b>-380</b>	<b>374</b>

\* In 2009, the Storting approved a number of changes to public sector pension plans, including life expectancy adjustments of pensions. The effect of the life expectancy adjustment is stated in the accounts as a plan amendment in 2014, with appurtenant recognition in the income statement.

## PENSION PLANS FOR LOCALLY EMPLOYED STAFF OF FOREIGN OFFICES

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

plans in London and New York amounted to NOK 20.6m in 2015 and NOK 12.5m in 2014. Locally employed staff at Norges Bank's offices in Singapore and Shanghai have no pension plan beyond what has been established by the authorities, which is in line with market practice.

## SENSITIVITY ANALYSIS

The sensitivity analysis has been prepared in the light of possible changes in the discount rate and general wage growth. The other actuarial assumptions are kept unchanged in the sensitivity analysis.

Table 10.7 Sensitivity analysis

Amounts in NOK millions

	31 Dec. 2015			
	Discount rate	General compensation increase	ABO pensioners/ DBO other	Change*
Assumptions at 31 Dec. 2015	2.70%	2.50%	3 847	N/A
Discount rate + 0.5%	3.20%	2.50%	3 508	-8.81%
Discount rate - 0.5%	2.20%	2.50%	4 261	10.76%
General compensation increase + 0.5%	2.70%	3.00%	4 273	11.07%
General compensation increase + 0.5%	2.70%	2.00%	3 499	-9.05%

\* Percentage change in the pension benefit obligation.

## NOTE 11 PERSONNEL EXPENSES

Table 11.1 Personnel expenses

Amounts in NOK millions

	2015	2014
Salary and fees	1 115	875
Employer's social security contributions	142	112
Pension expense/(income) (see Note 10)	171	-24
Other personnel expenses	258	188
<b>Personnel expenses</b>	<b>1 686</b>	<b>1 151</b>

Table 11.2 Number of employees/FTEs

	2015	2014
Number of employees at 31 Dec.	856	763
Number of FTEs at 31 Dec.	851	755

## BENEFITS TO GOVERNING BODIES AND SENIOR MANAGEMENT

### Supervisory Council

With regard to remuneration to the director of the Office of the Supervisory Council, see the Supervisory Council's report to the Storting for 2015.

Table 11.3 Remuneration to the Supervisory Council and the Permanent Committee

Amounts in NOK

	2015		
	Total remuneration	Supervisory Council	The Permanent Committee
Chair	136 000	54 000	82 000
Deputy chair	88 000	34 000	54 000
Three members of the Permanent Committee	80 500	26 500	54 000
10 members of the Supervisory Council	26 500	26 500	-
15 alternates*	4 400	4 400	-

\* In addition, alternates to the Supervisory Council received NOK 2 550 for each meeting attended and alternates to the Permanent Committee received NOK 3 150 for each meeting attended.

Amounts in NOK

	2014		
	Total remuneration	Supervisory Council	The Permanent Committee
Chair	136 000	54 000	82 000
Deputy chair	88 000	34 000	54 000
Three members of the Permanent Committee	80 500	26 500	54 000
10 members of the Supervisory Council	26 500	26 500	-
15 alternates*	4 400	4 400	-

\* In addition, alternates to the Supervisory Council received NOK 2 550 for each meeting attended and alternates to the Permanent Committee received NOK 3 150 for each meeting attended.

Total remuneration paid in 2015 was 839 700, of which NOK 796 500 was fixed remuneration and NOK 43 200 was remuneration of alternates for attending meetings. Remuneration rates for 2015 were set by the Storting as from 1 January 2014 (cf. Recommendation 56 S (2013-2014)). Total remuneration paid in 2014 was NOK 832 200.

#### Executive Board – external members

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

Table 11.4 Remuneration to the Executive Board

Amounts in NOK

	2015					
Navn	Total remuneration	Executive Board	Audit Committee	Remuneration Committee*	Ownership Committee**	Risk and Investment Committee**
Liselott Kilaas	315 000	212 000	61 000	-	42 000	-
Egil Matsen	323 500	212 000	72 500	-	-	39 000
Hilde Myrberg	223 200	212 000	-	11 200	-	-
Kjetil Storesletten	223 200	212 000	-	11 200	-	-
Karen Helene Ulltveit-Moe	312 000	212 000	61 000	-	-	39 000
Espen Moen (alternate)	182 000	140 000	-	-	42 000	-
Hege Sjo (alternate)***	11 667	11 667	-	-	-	-
Kathryn M. Baker (alternate)***	74 773	74 773	-	-	-	-

\* Members of the Executive Board are remunerated for service at a fixed rate. Remuneration for service on the Remuneration Committee was NOK 5 600 for each meeting. Service on other committees is remunerated at fixed annual rates.

\*\* Committee established in 2015.

\*\*\* Hege Sjo stepped down as alternate on 1 February and Kathryn M. Baker became an alternate on 19 June 2015.

Amounts in NOK

Navn	Total remuneration	Executive Board	Audit Committee	2014
				Remuneration Committee*
Liselott Kilaas	264 000	205 000	59 000	-
Egil Matsen	275 000	205 000	70 000	-
Hilde Myrberg	226 600	205 000	-	21 600
Kjetil Storsletten	226 600	205 000	-	21 600
Karen Helene Ulltveit-Moe	264 000	205 000	59 000	-
Espen Moen (alternate)	135 000	135 000	-	-
Hege Sjø (alternate)	135 000	135 000	-	-

\* Remuneration for service on the Remuneration Committee was NOK 5 400 for each meeting.

Total remuneration to members and alternates of the Executive Board and its committees was NOK 1 665 340 in 2015, compared with NOK 1 526 200 in 2014. In addition, Egil Madsen and Kjetil Storsletten received NOK 22 400 each for coordination of an ad hoc expert group in 2015.

#### Governor and deputy governor

The salaries of the governor and deputy governor of Norges Bank are determined by the Ministry of Finance. In addition, they have a free tele-

phone, free newspaper subscription and insurance covered by their employer. The governor has a company car at his disposal. The governor and deputy governor are members of Norges Bank's pension fund. The terms and conditions of the retirement benefits are the terms and conditions for the pension fund in force on the date in question. The deputy governor has entitlements retained from previous employment at Norges Bank. Neither the governor nor the deputy governor receives any performance-based or other variable remuneration.

Table 11.5 Remuneration to the governor and deputy governor

Amounts in NOK

	Name	Gross salary	Value of other benefits	Pension benefits earned	2015
					Employee loan
Governor	Øystein Olsen	2 188 218	136 692	379 826	-
Deputy governor	Jon Nicolaisen	1 795 603	7 865	407 589	303 333

Amounts in NOK

	Name	Gross salary	Value of other benefits	Pension benefits earned	2014
					Employee loan
Governor	Øystein Olsen	2 131 355	146 157	397 514	-
Deputy governor	Jon Nicolaisen*	1 329 281	6 813	274 883	100 000
Deputy governor	Jan F. Qvigstad**	429 330	30 089	400 811	1 640 000

\* Jon Nicolaisen became deputy governor on 1 April 2014. Remuneration is shown as from the date the appointment became effective.

\*\* Jan F. Qvigstad retired from the position of deputy governor on 31 March 2014. Remuneration is shown up until his retirement date.

## SALARIES AND RETIREMENT BENEFITS FOR OTHER SENIOR EXECUTIVES AT NORGES BANK

Senior executives are entitled to the same retirement benefits and have the same borrowing rights as the Bank's other employees. Pension plans are discussed in Note 10 *Pension* and loans to employees are discussed in a separate section in this note.

## Benefits to senior executives in Norges Bank's Central Banking Operations

The Executive Board sets a salary cap for area directors in Central Banking Operations. The governor determines annual salary under this cap. Senior executives in Central Banking Operations do not receive any performance-based or other variable remuneration.

Table 11.6 Remuneration to senior executives in Norges Bank's Central Banking Operations

Amounts in NOK

						2015
	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan	
Executive director, Financial Stability	Ida Wolden Bache*	1 319 914	12 599	256 955	-	
Executive director, Monetary Policy	Birger Vikøren	1 588 113	16 997	349 700	906 054	
Executive director, Markets and Banking Services	Kristin Gulbrandsen	1 607 457	7 017	390 871	1 911 749	
Executive director, Corporate and Shared Services	Jannecke Ebbesen	1 548 539	13 151	355 939	-	
Director, Internal Audit	Ingunn Valvatne	1 592 547	9 402	394 168	1 064 259	
Director, Communications and External Relations	Hilde Singaas**	1 396 737	7 021	374 750	-	
General counsel	Marius Ryel	1 616 468	16 244	399 262	-	

\* Ida Wolden Bache became Executive Director of Financial Stability on 10 February 2015. Remuneration is shown from the date she assumed the position.

\*\* Hilde Singaas resigned from the position of Director of Communications and External Relations on 31 October 2015. Remuneration is shown until the date her resignation became effective.

Amounts in NOK

						2014
	Name	Gross salary	Value of other benefits	Pension benefits earned	Employee loan	
Executive director, Financial Stability	Amund Holmsen	1 514 729	9 084	251 694	2 665 000	
Executive director, Monetary Policy	Birger Vikøren	1 536 252	11 263	289 830	968 542	
Executive director, Markets and Banking Services	Kristin Gulbrandsen	1 558 532	7 044	364 262	1 984 635	
Executive director, Corporate and Shared Services	Jannecke Ebbesen	1 499 485	10 875	321 491	2 500 000	
Executive director, General Secretariat	Jon Nicolaisen*	337 500	2 271	91 628	-	
Director, Internal Audit	Ingunn Valvatne	1 532 534	14 230	366 804	1 120 129	
Director, Communications and External Relations	Hilde Singaas	1 295 269	9 084	429 451	-	
General counsel	Marius Ryel	1 565 217	14 751	362 645	-	

\* Jon Nicolaisen became deputy governor on 1 April 2014. Remuneration is shown until the date he assumed the position of deputy governor.

### Remuneration to senior executives in Norges Bank Investment Management

The Executive Board sets a salary band for the chief executive officer (CEO) of Norges Bank Investment Management. The governor determines annual salary for the CEO within this band. Salaries for other members of the Norges Bank Investment Management leader group are determined by the CEO in consultation with the Executive Board and following annual assessments. Stated remuneration pertains to the

period during which the employee was a member of the leader group. Senior executives in Norges Bank Investment Management do not earn performance-based or other variable remuneration. Senior executives who previously held positions entitling them to performance-based pay will not earn additional entitlements, but will be paid remaining performance-based pay in accordance with the Norges Bank Investment Management Long-term Performance Plan.

Table 11.7 Remuneration to senior executives in Norges Bank Investment Management

Amount in NOK

						2015
	Name	Gross salary	Performance pay***	Value of other benefits	Pension benefits earned	Employee loan
<b>Norges Bank Investment Management</b>						
Chief Executive Officer	Yngve Slyngstad	6 285 184	-	7 860	528 943	402 709
Deputy CEO and CAO	Trond Grande	4 281 238	-	7 599	369 071	-
Chief Compliance and Control Officer	Stephen A. Hirsch*	283 333	-	655	22 037	-
Chief Investment Officer Equity Strategies	Petter Johnsen**	8 424 354	-	94 904	842 435	-
Chief Investment Officer Asset Strategies	Øyvind Gjærevoll Schanke	4 655 131	1 157 664	177 741	578 934	-
Chief Investment Officer Allocation Strategies	Ole Christian Bech-Moen	4 044 819	959 224	179 870	312 798	2 520 000
Chief Risk Officer	Dag Huse	4 298 316	1 318 655	7 860	565 898	-
Chief Operating Officer	Age Bakker	3 283 862	-	7 599	402 712	-
<b>Norges Bank Real Estate Management</b>						
Chief Investment Officer	Karsten Kallevig	4 257 705	-	7 860	356 189	-
Chief Administrative Officer	Mie Caroline Holstad	1 711 938	-	7 860	271 409	1 983 914
Chief Operating Officer	Nina Kathrine Hammerstad	2 514 702	-	7 860	376 992	2 108 986
Chief Risk Officer	Lars Oswald Dahl	3 075 042	-	7 860	331 987	-
Chief Compliance and Control Officer	Jan Thomsen	3 446 713	-	7 860	352 581	-

\* Began in this position on 1 December 2015. Remuneration is shown as from the date the appointment became effective.

\*\* Receives a salary in GBP, amounts therefore include the foreign currency translation effect.

\*\*\* New members of the leader group previously entitled to performance-based pay are no longer a part of this arrangement, but over the coming years will receive accrued performance-based pay that has been held back.

Amount in NOK

		2014				
	Name	Gross salary	Performance pay***	Value of other benefits	Pension benefits earned	Employee loan
Chief Executive Officer	Yngve Slyngstad	6 247 170	-	9 084	479 580	503 387
Deputy CEO and CAO	Trond Grande	4 027 805	-	9 084	330 432	-
Chief Compliance Officer	Jan Thomsen	3 446 715	-	9 084	324 387	-
Chief Investment Officer	Petter Johnsen***	6 884 774	-	87 769	688 477	-
Chief Investment Officer	Øyvind Gjærevoll Schanke*	1 062 500	-	66 204	123 457	-
Chief Investment Officer	Ole Christian Bech-Moen*	937 500	-	84 204	68 547	2 520 000
Chief Risk Officer	Dag Huse*	1 062 500	-	2 271	123 473	-
Chief Operating Officer	Age Bakker	3 182 418	-	9 137	370 546	-
Chief Investment Officer	Karsten Kallevig	4 241 414	-	9 084	315 124	-
Chief Administrative Officer	Mie Caroline Holstad*	437 500	-	2 346	57 473	2 052 899
Chief Operating Officer	Nina Kathrine Hammerstad*	625 000	-	2 371	85 161	2 166 138

\* Began in this position on 1 October 2014. Remuneration is shown as from the date the appointment became effective.

\*\* Members of the Norges Bank Investment Management leader group receive only a fixed salary. New members of the leader group previously entitled to performance-based pay are no longer a part of this arrangement, but over the coming years will receive accrued performance-based pay that has been held back.

\*\*\* Receives a salary in GBP, amounts therefore include the foreign currency translation effect.

### Performance-based pay

In 2011, a variable salary scheme was established under the provisions of Regulation No. 1507 of 1 December 2010 relating to remuneration schemes in financial institutions, investment firms and management companies for securities funds.

Norges Bank's Executive Board sets the rules for the salary system of Norges Bank Investment Management. In addition to a fixed salary, employees whose work directly involves investment decisions may be entitled to performance-based pay. Performance-based pay is calculated on the basis of the performance of the GPF, group and individual measured against set targets. Accrued performance-based pay is paid over several years, with 50% paid the year after it is accrued. The other 50% is held back and paid over the following three years. The amount held back is adjusted for the return on the GPF.

The Executive Board and the governor lay down principles and guidelines, respectively, for performance-based pay in other areas of the Bank. In addition to a fixed salary, employees whose work directly involves investment decisions for

the foreign exchange reserves may be entitled to performance-based-pay. Performance-based pay is calculated on the basis on performance measured against set targets for the management of the foreign exchange reserves. Accrued performance-based pay is paid over several years, with two-thirds paid in the year after it is accrued. The remaining third is held back and paid over the following two years.

### Loans to employees

The Bank's loan scheme for its employees comprises residential mortgages and consumer loans. Mortgages are provided in accordance with guidelines from the Supervisory Council within 80% of assessed value, limited to NOK 2 680 000 and a maximum term of 30 years. Consumer loans are limited to a maximum of four times the employee's monthly salary, though not exceeding NOK 350 000. The loan schemes apply to all employees. The interest rate is linked to the norm rate for loans on favourable terms from an employer. The Ministry of Finance sets the norm rate six times a year.

Total loans to employees in 2015 amounted to NOK 544m, compared with NOK 763m in 2014.

## NOTE 12 MANAGEMENT FEE, GPFG



### ACCOUNTING POLICY

The management fee accrues during the financial year, but is cash-settled in the following year. Management fee receivable is classified as a financial asset and measured at amortised cost.

Norges Bank's total operating expenses related to the management of the GPFG are reimbursed by the Ministry of Finance as principal. The management fee corresponds to actual costs incurred by Norges Bank, including performance-based fees to external managers. The management fee is recognised in the income

statement of the GPFG as an expense, and is recognised in Norges Bank's income statement as income, on the line *Of which management fee, GPFG*. The management fee was NOK 3 933m in 2015 and NOK 3 202m in 2014. See Note 20.10 *Management costs* for a specification and detailed description.

## NOTE 13 OTHER NON-FINANCIAL ASSETS



### ACCOUNTING POLICY

Non-current assets are recognised at cost, less accumulated straight-line depreciation over their expected useful life.

#### *Gold:*

Norges Bank has holdings of gold coins and gold bars as part of the Bank's historical collections. The holdings were measured at fair value on the date the gold was reclassified from international reserves to non-current assets.

#### *Art and numismatic collections:*

Norges Bank has a collection of art and numismatic objects such as medals, banknotes and coins. The collection was recognised at estimated cost on the basis of the most recent appraisal.

#### *Impairment testing:*

An impairment test is performed if there is an indication that an asset is impaired. If the carrying amount exceeds fair value, the carrying amount will be reduced to fair value. In the event the metallic value of gold rises, the holdings of gold are not revalued.

Table 13.1 Other non-financial assets

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Non-current assets	1 974	1 787
Gold	291	291
Art and numismatic collections	84	83
Other assets	76	43
<b>Other non-financial assets</b>	<b>2 425</b>	<b>2 204</b>

## NON-CURRENT ASSETS

Table 13.2 shows a specification of non-current assets broken down into tangible and intangible assets.

Table 13.2 Non-current assets

Amounts in NOK millions

	Intangible assets					Property, plant and equipment		2015
	Software	Buildings	Land	Other	Plant under construction	Total		
Cost at 1 Jan.	401	2 659	60	188	187	3 495		
+ Additions	99	140	-	16	103	358		
- Disposals	14	-	-	2	-	16		
<b>Cost at 31 Dec.</b>	<b>486</b>	<b>2 799</b>	<b>60</b>	<b>202</b>	<b>290</b>	<b>3 837</b>		
- Accumulated depreciation and impairment	280	1 441	-	142	-	1 863		
<b>Carrying amount at 31 Dec.</b>	<b>206</b>	<b>1 358</b>	<b>60</b>	<b>60</b>	<b>290</b>	<b>1 974</b>		
Depreciation for the year	65	78	-	29	-	172		
Impairment for the year	-	-	-	-	-	-		
Depreciation schedule, no. of years	3-6	5-75	none	4-10	none	-		

Amounts in NOK millions

	Intangible assets					Property, plant and equipment		2014
	Software	Buildings	Land	Other	Plant under construction	Total		
Cost at 1 Jan.	268	2 583	60	177	175	3 263		
+ Additions	138	76	-	24	12	250		
- Disposals	5	-	-	13	-	18		
<b>Cost at 31 Dec.</b>	<b>401</b>	<b>2 659</b>	<b>60</b>	<b>188</b>	<b>187</b>	<b>3 495</b>		
- Accumulated depreciation and impairment	230	1 363	-	115	-	1 708		
<b>Carrying amount at 31 Dec.</b>	<b>171</b>	<b>1 296</b>	<b>60</b>	<b>73</b>	<b>187</b>	<b>1 787</b>		
Depreciation for the year	43	54	-	26	-	123		
Impairment for the year	-	-	-	-	-	-		
Depreciation schedule, no. of years	3-6	5-75	none	4-10	none	-		

## BUILDINGS

Bankplassen 4 is being leased to the government for 80 years, beginning in November 1986. The building is fully depreciated and its carrying amount at 31 December 2015 is NOK 0.

## NOTE 14 OTHER OPERATING EXPENSES AND OPERATING INCOME

### OTHER OPERATING EXPENSES

Table 14.1 Other operating expenses

Amounts in NOK millions

	2015	2014
Custody costs	413	480
IT services, systems and data	831	673
Research, consulting and legal fees	361	264
Other costs	351	265
Base fees to external managers	615	445
Performance-based fees to external managers	578	649
<b>Total other operating expenses</b>	<b>3 149</b>	<b>2 776</b>

Table 14.2 Fees, external auditor

Amounts in NOK thousands, inclusive VAT

	Norges Bank		Subsidiaries*	
	2015	2014	2015	2014
Statutory audit	17 374	17 044	3 707	3 731
Other assurance services**	5 186	3 572	-	-
Tax advice	104	123	49	157
Other services	-	-	155	185
<b>Total fees, external auditor</b>	<b>22 664</b>	<b>20 739</b>	<b>3 911</b>	<b>4 073</b>

\* Norges Bank has established subsidiaries whose activities exclusively constitute investments as part of the management of the investment portfolio of the GPF. G.

\*\* In 2015, the external auditor assisted the Office of the Supervisory Council on a number of supervisory reviews. Fees related to this are shown as *Other assurance services*.

### OTHER OPERATING INCOME

Table 14.3 Other operating income

Amounts in NOK millions

	2015	2014
Services, banks	59	59
Services, government (see Note 19 <i>Related parties</i> )	37	37
Rent (see Note 19 <i>Related parties</i> )	25	26
Other income	5	8
<b>Other operating income</b>	<b>126</b>	<b>128</b>

#### Services for banks

Norges Bank performs settlement services for banks through Norges Bank's settlement system (NBO). To promote efficient and robust settlement of payments in Norges Bank, expenses for account maintenance and settle-

ment services are covered by the annual fees for NBO. The assumption is that revenues will cover two-thirds of the overall cost of implementing and operating the settlement system. A third of expenses is attributable to central banking functions and covered by Norges Bank.

## NOTE 15 NOTES AND COINS IN CIRCULATION



### ACCOUNTING POLICY

Notes and coins in circulation are recognised at face value when they are placed into circulation and derecognised when they are withdrawn from circulation and no later than the expiry of the ten-year deadline for redemption, in accordance with Section 15 of the Norges Bank Act. Notes and coins not redeemed by the ten-year deadline are recognised as income in profit or loss as *Other financial income/expenses*. After the ten-year deadline, notes and coins may be redeemed and are then recognised as an expense on the same line in profit or loss. Expenses for the production of notes and coins are recognised in profit or loss as incurred in *Other expenses*.

No invalidated notes and coins were recognised as income in 2015 or 2014. In 2015, invalidated

notes and coins were redeemed in the amount of NOK 19.9m, compared with NOK 12.9m in 2014.

## NOTE 16 INTERNATIONAL MONETARY FUND (IMF)



### ACCOUNTING POLICY

#### *Allocated Special Drawing Rights (SDRs):*

SDRs are recognised as an asset in the balance sheet. The value of SDRs is calculated on the basis of a currency basket comprising USD, EUR, GBP and JPY. The equivalent value of SDR allocations by the IMF shows Norges Bank's total allocations of SDRs and is recognised as a liability. Norges Bank's holdings of SDRs are measured at amortised cost.

#### *Reserve tranche position:*

The reserve tranche positions comprises Norges Bank's allocated IMF quota less the IMF's krone deposit with Norges Bank. The outstanding balance with the IMF are recognised gross in the balance sheet. The IMF quota and the krone liability to the IMF are measured at amortised cost.

#### *Loans to the IMF and international commitments under the auspices of the IMF:*

Loans and international commitments are recognised in the balance sheet at fair value at initial recognition. Subsequent measurement is at amortised cost.

Pursuant to Section 25 of the Norges Bank Act, Norges Bank administers Norway's financial rights and fulfils the obligations ensuing from participation in the International Monetary Fund (IMF). The IMF works to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth and reduce poverty around the world. The primary activities of the IMF are monitoring economic developments, giving advice to member countries and providing temporary funding in the event of balance of payments problems.

Norway helps to finance the IMF in the following manner:

1. Through Norway's IMF quota subscription
2. Through various lending agreements with the IMF:
  - a. The multilateral lending programme New Arrangements to Borrow (NAB)
  - b. Bilateral borrowing agreements with the IMF
  - c. Financing the Poverty Reduction and Growth Trust (PRGT) programme

Table 16.1 Claims on and liabilities to the IMF

Amounts in NOK millions

					31 Dec. 2015
	Loan resource commitments*	Amounts drawn on commit- ments	Subscrip- tion**	SDRs	Total amount recognised
<b>Financial assets</b>					
IMF subscription (quota)	-	-	23 072	-	23 072
Holdings of Special Drawing Rights (SDRs)	-	-	-	18 449	18 449
Loans to the IMF - NAB	47 411	4 619	-	-	4 619
Loans to the IMF - Bilateral borrowing agreement	73 486	-	-	-	-
Loans to the IMF - PRGT	3 674	3 656	-	-	3 656
<b>Claims on the IMF</b>	<b>124 571</b>	<b>8 275</b>	<b>23 072</b>	<b>18 449</b>	<b>49 796</b>
<b>Financial liabilities</b>					
Krone liability to the IMF	-	-	20 719	-	20 719
Equivalent value of SDR allocations	-	-	-	19 145	19 145
<b>Liabilities to the IMF</b>	<b>-</b>	<b>-</b>	<b>20 719</b>	<b>19 145</b>	<b>39 864</b>
<b>Net positions with the IMF</b>	<b>124 571</b>	<b>8 275</b>	<b>2 353</b>	<b>-696</b>	<b>9 932</b>

\* Commitments giving the IMF a borrowing facility with Norges Bank up to an agreed amount. Only the portion drawn is recognised in the balance sheet. The change in loan resource commitments is in its entirety related to movements in foreign exchange rates.

\*\* The net subscription refers to the reserve tranche position and is Norway's quota less Norway's krone liability to the IMF. If necessary, Norges Bank may without condition request to borrow from the IMF an amount equal to Norway's reserve tranche position.

Amounts in NOK millions

					31 Dec. 2014
	Loan resource commitments*	Amounts drawn on commit- ments	Subscrip- tion**	SDRs	Total amount recognised
<b>Financial assets</b>					
IMF subscription (quota)	-	-	20 421	-	20 421
Holdings of Special Drawing Rights (SDRs)	-	-	-	16 064	16 064
Loans to the IMF - NAB	41 961	5 021	-	-	5 021
Loans to the IMF - Bilateral borrowing agreement	65 041	-	-	-	-
Loans to the IMF - PRGT	3 252	2 535	-	-	2 535
<b>Claims on the IMF</b>	<b>110 254</b>	<b>7 556</b>	<b>20 421</b>	<b>16 064</b>	<b>44 041</b>
<b>Financial liabilities</b>					
Krone liability to the IMF	-	-	17 489	-	17 489
Equivalent value of SDR allocations	-	-	-	16 945	16 945
<b>Liabilities to the IMF</b>	<b>-</b>	<b>-</b>	<b>17 489</b>	<b>16 945</b>	<b>34 434</b>
<b>Net positions with the IMF</b>	<b>110 254</b>	<b>7 556</b>	<b>2 932</b>	<b>-881</b>	<b>9 607</b>

\* Commitments giving the IMF a borrowing facility with Norges Bank up to an agreed amount. Only the portion drawn is recognised in the balance sheet. The change in loan resource commitments is in its entirety related to movements in foreign exchange rates.

\*\* The net subscription refers to the reserve tranche position and is Norway's quota less Norway's krone liability to the IMF. If necessary, Norges Bank may without condition request to borrow from the IMF an amount equal to Norway's reserve tranche position.

The IMF has created an international reserve asset called the Special Drawing Right (SDR). All rights in and commitments to the IMF are denominated in SDRs. The value of the SDR is calculated on the basis of a currency basket comprising USD, EUR, GBP and JPY. The currency weights are adjusted each year in accordance with changes in bilateral foreign exchange rates. At 31 December 2015, SDR 1 was equal to NOK 12.22.

The composition of the SDR is evaluated every five years, and the evaluation conducted in 2015 resulted in the inclusion of the Chinese renminbi in the currency basket from 1 October 2016.

Norges Bank's potential credit exposure to the IMF is considerable. However, the risk associated with loans to the IMF is very low, among other reasons because of the conditionality in the IMF's adjustment and stabilisation programmes. In addition, IMF claims have precedence over claims from other creditors. The IMF has never realised a loss on loans under their general borrowing agreements. Since all claims are against the IMF, Norway has no credit exposure to third countries in connection with these loans.

The various rights, commitments, claims and liabilities are described below.

#### **Norway's IMF quota subscription**

The IMF is owned and directed by member countries and functions like a credit union in which each member country pays in a subscription, also called its quota. These subscriptions are the IMF's primary source of funding for loans. The amount of the subscription reflects the member country's relative size in the global economy. The quota determines a member country's voting power in IMF decisions, the member's financial contribution to the IMF, the amount of financing the member can access in the event of balance of payments problems and the amount of SDRs the member receives when SDRs are allocated. Norway's subscription at 31 December 2015 was SDR 1 883.7m, unchanged from 2014.

The 14th General Review of Quotas, approved in 2010 by IMF, comes into effect in January 2016. Subscriptions will then approximately double

and Norway's subscription will increase from SDR 1 883.7m to SDR 3 754.7m. When the subscription increase is paid, Norway's commitment to furnish funds for the NAB will be reduced from SDR 3 871m to SDR 1 967m.

#### **Holdings of Special Drawing Rights (SDRs)**

SDRs are periodically allocated to IMF member countries, most recently in 2009. *Equivalent value of SDR allocations* shows the amount of SDRs Norway has been allocated since the scheme was established. As at 31 December 2015, a total of SDR 1 563.1m had been allocated to Norway, from 2014. Norway's holdings of SDRs have been deposited with the IMF and amounted to SDR 1 506.2m in 2015, compared with SDR 1 481.8m in 2014.

Holdings of SDRs may be used to pay in quota increases, for other transactions with the IMF or for purchase or sale of SDR from or to other IMF members. However, SDRs cannot be used for direct purchases of goods and services.

#### **Norges Bank's loans to the IMF**

In addition to quota subscriptions, various lending programmes are important sources of IMF financing. Norges has signed two borrowing agreements with the IMF, as well as a separate programme for low-income countries.

#### **1) New Arrangements to Borrow (NAB)**

The New Arrangements to Borrow (NAB) programme is used for loans if the IMF has a need for funds in excess of subscriptions from member countries. Norges Bank's loans to the IMF under the NAB at 31 December 2015 totalled SDR 377.1m, or NOK 4 619m. Total loan resource commitments to the NAB are SDR 3 871m.

#### **2) Bilateral borrowing agreement**

IMF and Norges Bank have signed a bilateral borrowing agreement under which the IMF is provided with a borrowing facility in the form of a drawing arrangement of up to SDR 6bn. The agreement is part of a broader international effort to ensure the IMF sufficient resources to meet the borrowing requirements of member countries in times of crisis. At 31 December 2015, the IMF has not drawn on this facility.

### 3) Poverty Reduction and Growth Trust (PRGT)

Norway participates in the financing of the IMF's subsidised lending programme. Loans to the PRGT at 31 December 2015 totalled SDR 298m or NOK 3 656m. The corresponding amount for end-2014 was SDR 234m, or NOK 2 535m. Total loan resource commitments to the PRGT are SDR 300m.

### The IMF's deposits with Norges Bank

The IMF has deposited its entire NOK holdings with Norges Bank. In the balance sheet, this is referred to as the *Krone liability to the IMF*. However, the value of these deposits is adjusted to that the IMF bears no risk associated with exchange rate movements between NOK and the SDR. At 31 December 2015, krone deposits from the IMF totalled SDR 1 691,5m compared with SDR 1 613.2m in 2014.

## NET INTEREST INCOME ON CLAIMS ON/LIABILITIES TO THE IMF

Table 16.2 Net interest income, claims on/liabilities to the IMF

Amounts in NOK millions

	2015			
	Amount drawn on loan resource commitments	Subscription	SDRs	Total
Interest income, IMF	7	9	8	24
Interest expenses, IMF	-	-8	-9	-17
<b>Net interest income, claims on/liabilities to the IMF</b>	<b>7</b>	<b>1</b>	<b>-1</b>	<b>7</b>

Amounts in NOK millions

	2014			
	Amount drawn on loan resource commitments	Subscription	SDRs	Total
Interest income, IMF	10	14	12	36
Interest expenses, IMF	-	-12	-13	-25
<b>Net interest income, claims on/liabilities to the IMF</b>	<b>10</b>	<b>2</b>	<b>-1</b>	<b>11</b>

### Interest on Special Drawing Rights and Interest on equivalent value of SDR allocations

Norges Bank earns interest income from the IMF on its holdings of SDRs, and is charged for interest expenses by the IMF on the equivalent value of SDR allocations. Interest is calculated monthly and netted quarterly. The interest rate is updated weekly by the IMF.

### Interest on the IMF quota subscription and Interest on the krone liability to the IMF

Interest on the reserve tranche position (as defined in the footnote to Table 16.1) is calcu-

lated by the IMF. Interest is calculated net by the IMF, but presented gross in Norges Bank's financial statements as interest income and interest expenses associated with the quota subscription. Interest is calculated monthly and netted quarterly. The interest rate is updated weekly by the IMF.

### Interest on IMF lending programmes

Interest is calculated monthly and netted quarterly (NAB) and semi-annually (PRGT). The interest rate is updated weekly by the IMF.

## NOTE 17 BANK FOR INTERNATIONAL SETTLEMENTS (BIS)



### ACCOUNTING POLICY

The shares are carried at fair value under *Equities and units*. When the shares were issued, the Bank for International Settlements (BIS) required payment of only 25% of the share capital, with the remaining 75% committed capital not recognised in the balance sheet.

The BIS acts as a bank for central banks, and its mission is to serve central banks in their pursuit of monetary and financial stability by fostering international cooperation in those areas.

The BIS is a limited liability company owned by central banks. Norges Bank has 8 000 voting shares (with a face value of SDR 5 000) in the BIS. In addition, a further 564 non-voting shares (with a face value of SDR 5 000) were purchased in 2005, for a total of 8 564 shares.

Table 17.1 Shares in the BIS

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Shares in the BIS	200	200
Share capital in the BIS not paid, not recognised	441	348
Dividend received from the BIS	21	18

## NOTE 18 LENDING TO BANKS, DEPOSITS FROM BANKS AND DEPOSITS FROM THE TREASURY



### ACCOUNTING POLICY

At initial recognition, loans to banks are recognised in the balance sheet at fair value. There are no establishment fees or other directly attributable transaction costs. Subsequent measurement is at amortised cost, where the effective interest is recognised in profit or loss. If there is an indication that an impairment loss has been incurred, the amount of the loss is measured as the difference between the carrying amount and the present value of estimated future cash flows. The carrying amount of the engagement is reduced, and the amount of the loss for the period is recognised in profit or loss.

*Interest income* is recognised in profit or loss when the interest is earned. *Interest expense* is recognised in profit or loss as incurred.

Table 18.1 Lending to banks

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
D-loans to banks	716	1
<b>Total lending to banks</b>	<b>716</b>	<b>1</b>

See Note 7 *Risk* for a discussion of credit risk associated with lending.

Table 18.2 Deposits from banks etc.

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Sight deposits from banks	35 190	34 271
Fixed-rate deposits from banks	23 002	43 391
Other deposits	226	138
<b>Total deposits from banks etc.</b>	<b>58 418</b>	<b>77 800</b>

Table 18.3 Interest income from lending to banks

Amounts in NOK millions

	2015	2014
Interest income on D-loans to banks	-	-
Interest income on F-loans to banks	68	80
<b>Total interest income from lending to banks</b>	<b>68</b>	<b>80</b>

### INTEREST TERMS FOR LOANS TO BANKS

*Fixed-rate loans* (F-loans) are the instrument primarily used to supply liquidity to the banking system. They are issued at a fixed rate and specified maturity against collateral in the form of securities. The maturity on F-loans is determined by Norges Bank and varies depending on the projection of structural liquidity. Average maturity on F-loans to banks was 0.2 month both in 2015 and 2014.

The interest rates on F-loans are normally determined by multi-price auctions. In a multi-price auction banks submit bids for a desired amount

and interest rate. Norges Bank decides the aggregate amount of the allotment. The banks' interest rate bids are ranked in descending order. Banks that place bids within the aggregate amount will be awarded in the amount and at the interest rate submitted.

*Overnight loans* (D-loans) may be used by banks seeking to borrow from Norges Bank during the day or overnight. D-loans are issued against collateral in the form of securities at 1 percentage point above the key policy rate (sight deposit rate), with interest being charged if the loan is not repaid on the same day as it is extended.

Table 18.4 Interest expense on banks' and Treasury deposits

Amounts in NOK millions

	2015	2014
Interest expense on sight deposits from banks	-349	-511
Interest expense on F-deposits from banks	-232	-422
Interest expense on depots operated by banks	-11	-16
<b>Total interest expense on banks' and Treasury deposits</b>	<b>-592</b>	<b>-949</b>

#### INTEREST TERMS FOR DEPOSITS FROM BANKS

*Sight deposits:* Banks can deposit unlimited reserves in Norges Bank via the standing deposit facility. The interest rate on deposits less than or equal to a bank's quota is equal to the key policy rate (sight deposit rate). Sight deposits in excess of this quota are remunerated at a lower rate, the reserve rate. The reserve rate is 1 percentage point lower than the key policy rate.

*Fixed-rate deposits:* Norges Bank reduces the quantity of reserves in the banking system by providing banks with fixed-rate deposits (F-deposits). As in the case of F-loans, the interest rate is normally determined by multi-price auction. The maturity on F-deposits is determined by Norges Bank and varies depending on the projection of structural liquidity. Norges Bank can provide F-deposits at a floating rate,

i.e. the interest rate on the F-deposits depends on the benchmark rate in the money market. Average maturity on F-deposits from banks was 0.2 month in both 2015 and 2014.

#### INTEREST TERMS FOR DEPOSITS FROM THE TREASURY

Interest terms for deposits from the government are set in a special agreement between Norges Bank and the Ministry of Finance. The deposit rate is calculated on the basis of money market rates weighted between Norwegian and foreign rates in proportion to investments in Norges Bank's balance sheet (excluding *Investments*, *GPF* and *Deposits in krone account*, *GPF*).

Interest on Treasury deposits was paid at an annual rate of 0% during all of 2015 and 2014.

## NOTE 19 RELATED PARTIES



### ACCOUNTING POLICY

Norges Bank is owned by the Norwegian government and under IAS 24.25 is exempt from the disclosure requirements pertaining to related party transactions and outstanding balances, including commitments, with the Norwegian government. This includes transactions with other entities that are related parties because the Norwegian government has control of, joint control of, or significant influence over both Norges Bank and the other entities.

Norges Bank, including the GPFG, is a separate legal entity that is wholly owned by the government through the Ministry of Finance. See Note 1 *General information* for information regarding the relationship between the Ministry of Finance, Norges Bank and the GPFG. Norges Bank carries out all transactions in its own name and at market prices.

For information regarding transactions with governing bodies and senior executives of Norges Bank, see Note 11 *Personnel expenses*.

### MANAGEMENT OF THE GPFG

The Ministry of Finance places funds for asset management by the GPFG as a krone deposit in a special account with Norges Bank. GPFG assets are invested further in an investment portfolio comprising equities, fixed income instruments and real estate. See information regarding inflows during the period in Note 20 *GPFG Statement of changes in owner's capital*.

Norges Bank charges the Ministry of Finance a management fee relating to management of the GPFG, which amounted to NOK 3 933m in 2015 and NOK 3 202m in 2014. For further information, see Note 20.10 *Management costs*.

### TRANSACTIONS BETWEEN NORGES BANK AND THE GPFG

Internal trades in the form of money market lending or borrowing and reverse repurchase agreements between the GPFG and Norges Bank's long-term portfolio are presented in the balance sheet as a net balance between the two reporting entities, on the balance sheet lines *Other financial assets* and *Other financial liabilities*.

Associated income and expense items are presented gross in the respective income statement as either interest income or interest expense. All transactions are carried out at market prices.

### OTHER TRANSACTIONS WITH THE GOVERNMENT

Under agreements with the Ministry of Finance, Norges Bank performs tasks in connection with:

- Government debt management
- Administering the central government's group account
- Managing commemorative coins

The Ministry of Finance covers Norges Bank's costs related to these tasks, which amounted to NOK 37m for 2015 and NOK 37m for 2014.

Pursuant to point 5 of the guidelines for provisions and allocations of Norges Bank's profit or loss, "*In connection with the closing of the books each year, an amount equal to one third of the capital in the Transfer Fund shall be transferred to the Treasury.*" This transfer amounted to NOK 26.6bn for 2015 and NOK 10.4bn for 2014.

On the basis of the prepared financial statements, the transfer takes place in the following year, but the amount due is recognised as *Other liabilities*.

### OTHER RELATED PARTY TRANSACTIONS

Norges Bank has transactions with other government agencies and bodies. These transactions are primarily related to leasing of buildings, and amounted to NOK 25m in both 2015 and 2014.

## NOTE 20 GOVERNMENT PENSION FUND GLOBAL (GPFGL)

### INCOME STATEMENT

Amounts in NOK millions

	Note	2015	2014
<b>Profit/loss on the portfolio excluding foreign exchange gains and losses</b>			
Income/expense from:			
- Equities and units*	4	284 414	385 943
- Bonds*	4	36 160	158 006
- Unlisted real estate	6	14 537	7 160
- Financial derivatives	4	-1 984	-8 208
- Secured lending*	11	3 266	2 758
- Secured borrowing	11	50	-35
Tax expense	9	-2 628	-2 026
Interest income/expense		-18	39
Other expenses		-18	-3
<b>Profit/loss on the portfolio before foreign exchange gains and losses</b>		<b>333 779</b>	<b>543 634</b>
Foreign exchange gains and losses		668 138	702 259
<b>Profit/loss on the portfolio</b>		<b>1 001 917</b>	<b>1 245 893</b>
Management fee	10	-3 933	-3 202
<b>Profit/loss for the period and total comprehensive income</b>		<b>997 984</b>	<b>1 242 691</b>

\* *Secured lending* includes net income/expense from reverse repurchase agreements as well as income from agency securities lending. Income from agency securities lending has previously been presented within *Income/expense from: Equities and units and Bonds*. Comparatives for 2014 have been restated.

## BALANCE SHEET

Amounts in NOK millions

	Note	31 Dec. 2015	31 Dec. 2014*
<b>ASSETS</b>			
Deposits in banks		2 543	11 731
Secured lending	11,12	123 385	45 536
Cash collateral posted	12	2 231	1 289
Unsettled trades		18 404	1 376
Equities and units	5	4 287 606	3 790 853
Equities lent	5,11	312 662	166 842
Bonds	5	2 476 729	2 324 626
Bonds lent	5,11	241 518	25 163
Unlisted real estate	6	180 021	106 431
Financial derivatives	5,12	8 829	5 777
Other assets	13	2 265	3 847
<b>TOTAL ASSETS</b>	<b>7,8</b>	<b>7 656 193</b>	<b>6 483 471</b>
<b>LIABILITIES AND OWNER'S CAPITAL</b>			
<b>Liabilities</b>			
Secured borrowing	11,12	149 735	39 975
Cash collateral received	12	2 570	543
Unsettled trades		22 438	4 001
Financial derivatives	5,12	5 266	7 895
Other liabilities	13	1 031	318
Management fee payable	10	3 933	3 202
<b>Total liabilities</b>		<b>184 973</b>	<b>55 934</b>
Owner's capital		7 471 220	6 427 537
<b>TOTAL LIABILITIES AND OWNER'S CAPITAL</b>	<b>7,8</b>	<b>7 656 193</b>	<b>6 483 471</b>

\* *Cash collateral posted* is presented on a separate line in the balance sheet from 2015. This was previously included in *Other assets*. *Secured borrowing* includes cash collateral received under agency securities lending, previously presented as *Cash collateral received*. Comparatives for 2014 have been restated.



## ACCOUNTING POLICY

The statement of cash flows is prepared in accordance with the direct method. Major classes of cash receipts and cash payments are presented separately. Specific categories of cash flows, primarily arising from the purchase and sale of financial instruments, are shown on a net basis. All investment activities and the management fee to Norges Bank that is charged to the GPFG are defined as operating activities. Cash comprises *Deposits in banks*.

Cash transfers to the GPFG in the form of inflows from the Norwegian government are classified as financing activities. These transfers have been settled in the period (cash principle). Inflows in the *Statement of changes in owner's capital* are based on accrued inflows.

Management fee shown in the *Statement of cash flows* for a period is the settlement of the fee that was accrued and expensed in the previous year.

## STATEMENT OF CASH FLOWS

Amounts in NOK millions, received (+) / paid (-)

	2015	2014
<b>Operating activities</b>		
Dividends received from investments in equities and units	108 904	82 623
Interest received from investments in bonds	75 283	63 309
Interest and dividends received from unlisted real estate	3 532	1 966
Net interest and fees received from secured lending and borrowing	3 324	2 515
<i>Interest, dividends and fees received from holdings of equities and units, bonds and unlisted real estate</i>	<i>191 043</i>	<i>150 413</i>
Net cash flow arising from purchase and sale of equities and units	-89 916	-144 448
Net cash flow arising from purchase and sale of bonds	-140 103	-62 878
Net cash flow arising from purchase and sale of unlisted real estate	-44 946	-37 711
Net cash flow arising from financial derivatives	-3 165	-1 204
Net cash flow arising from cash collateral related to derivative transactions	730	-336
Net cash flow arising from interest received from deposits in banks and interest paid on bank overdraft	-6	-1 137
Net cash flow arising from secured lending and borrowing	33 708	-40 012
Net tax payments	-1 499	-2 740
Net cash flow related to other expenses, other assets and other liabilities	1 309	-2 625
Management fee paid to Norges Bank	-3 202	-2 889
<b>Net cash outflow from operating activities</b>	<b>-56 047</b>	<b>-145 567</b>
<b>Financing activities</b>		
Inflow from the Norwegian government	45 836	150 894
<b>Net cash inflow from financing activities</b>	<b>45 836</b>	<b>150 894</b>
<b>Net change in cash</b>		
Deposits in banks at 1 January	11 731	3 953
Net cash receipts/payments in the period	-10 211	5 327
Net foreign exchange gains and losses on cash	1 023	2 451
<b>Deposits in banks at end of period</b>	<b>2 543</b>	<b>11 731</b>



## ACCOUNTING POLICY

*Owner's capital* for the GPFG comprises contributed capital in the form of inflows from the Norwegian government and retained earnings in the form of total comprehensive income. *Total owner's capital* corresponds to the Ministry of Finance's krone account in Norges Bank.

## STATEMENT OF CHANGES IN OWNER'S CAPITAL

Amounts in NOK millions

	Inflows from owner	Retained earnings	Total owner's capital*
1 January 2014	3 298 941	1 735 905	5 034 846
Total comprehensive income	-	1 242 691	1 242 691
Inflows during the period*	150 000	-	150 000
<b>31 December 2014</b>	<b>3 448 941</b>	<b>2 978 596</b>	<b>6 427 537</b>
1 January 2015	3 448 941	2 978 596	6 427 537
Total comprehensive income	-	997 984	997 984
Inflows during the period*	45 700	-	45 700
<b>31 December 2015</b>	<b>3 494 640</b>	<b>3 976 580</b>	<b>7 471 220</b>

\* Of the total inflows to the krone account of the Government Pension Fund Global in 2015, NOK 3.2bn was used to pay the 2014 accrued management fee to Norges Bank and NOK 42.5bn was transferred into the investment portfolio. Comparative amounts for 2014 were NOK 2.9bn and NOK 147.1bn, respectively.

## GPFG NOTE 1 GENERAL INFORMATION

General information relating to the GPFG appears in Note 1 *General information*.

## GPFG NOTE 2 ACCOUNTING POLICIES

The accounting policies for the financial reporting of the GPFG appear in Note 2 *Accounting policies*.

## GPFG NOTE 3 RETURNS PER ASSET CLASS

Table 3.1 Returns per asset class

	2015	2014	2015 Q4	2015 Q3	2015 Q2	2015 Q1
<b>Returns in the fund's currency basket</b>						
Return on equity investments (percent)	3.83	7.90	5.84	-8.56	-0.23	7.53
Return on fixed income investments (percent)	0.33	6.88	0.07	0.90	-2.22	1.63
Return on real estate investments (percent)	10.00	10.42	1.61	2.97	1.96	3.10
Return on fund (percent)	2.74	7.58	3.56	-4.93	-0.87	5.28
Return on equity and fixed income investments (percent)	2.52	7.53	3.61	-5.15	-0.95	5.33
Return on benchmark equity and fixed income indices (percent)	2.07	8.30	3.51	-4.93	-1.33	5.13
Relative return on equity and fixed income investments (percentage points)	0.45	-0.77	0.11	-0.22	0.38	0.19
Relative return on equity investments (percentage points)	0.83	-0.82	0.12	-0.07	0.40	0.39
Relative return on fixed income investments (percentage points)	-0.24	-0.70	0.17	-0.64	0.34	-0.14
<b>Returns in Norwegian kroner (percent)</b>						
Return on equity investments	16.77	24.61	8.65	-2.29	-1.17	11.29
Return on fixed income investments	12.83	23.43	2.73	7.82	-3.14	5.17
Return on real estate investments	23.71	27.51	4.32	10.03	1.00	6.70
Return on fund	15.54	24.23	6.31	1.59	-1.81	8.95
Return on equity and fixed income investments	15.30	24.18	6.37	1.35	-1.89	9.00

Returns in Table 3.1 are a reproduction of return information in Table 1 in the annual report chapter *Results for 2015*. A time-weighted monthly rate of return methodology is applied in the return calculations. The fair value of holdings is determined at the time of cash flows into and out of the asset classes, and interim returns are geometrically linked. Returns are calculated net of non-reclaimable withholding taxes on divi-

dends, interest and capital gains. Performance is reported in the fund's currency basket, as well as in Norwegian kroner, where the currency basket is weighted based on the currency composition of the benchmark indices for equity and fixed income investments. Returns measured in the fund's currency basket are calculated as the geometrical difference between the fund's returns measured in Norwegian kroner and the

return of the currency basket. Returns on the benchmark indices for equity and fixed income investments are calculated by weighting the monthly returns of the benchmark portfolio for equities and fixed income respectively, with

actual ingoing market capitalisation weights at the beginning of the month. Return on real estate investments includes the return on investments in listed and unlisted real estate.

## GPFG NOTE 4 INCOME/EXPENSE FROM EQUITIES AND UNITS, BONDS AND FINANCIAL DERIVATIVES



### ACCOUNTING POLICY

The following accounting policies relate to the respective income and expense elements:

*Interest income* is recognised when the interest is earned. *Interest expense* is recognised as incurred.

*Dividends* are recognised as income when the dividends are formally approved by the shareholders' meeting or comparable responsible party.

*Realised gain/loss* represents amounts realised when assets or liabilities have been derecognised. Realised gain/loss includes transaction costs, which are expensed as incurred. Transaction costs are defined as all costs directly attributable to the completed transaction. For investments in *Equities and units* and *Bonds*, these normally include commission fees and stamp duties.

*Unrealised gain/loss* represents changes in fair value for the period for the related balance sheet line item, that are not attributable to the aforementioned categories.

Tables 4.1 to 4.3 specify the income and expense elements for *Equities and units*, *Bonds* and *Financial derivatives*, where the line *Income/*

*expense* shows the amount recognised in the respective income statement line.

Table 4.1 Specification Income/expense from equities and units

Amounts in NOK millions

	2015	2014
Dividends	107 383	87 962
Realised gain/loss	132 240	75 832
Unrealised gain/loss	44 791	222 149
<b>Income/expense from equities and units before foreign exchange gain/loss</b>	<b>284 414</b>	<b>385 943</b>

Table 4.2 Specification Income/expense from bonds

Amounts in NOK millions

	2015	2014
Interest	78 243	65 472
Realised gain/loss	21 098	14 831
Unrealised gain/loss	-63 181	77 703
<b>Income/expense from bonds before foreign exchange gain/loss</b>	<b>36 160</b>	<b>158 006</b>

Table 4.3 Specification Income/expense from financial derivatives

Amounts in NOK millions

	2015	2014
Dividends	21	-
Interest	-869	-285
Realised gain/loss	-2 422	-4 226
Unrealised gain/loss	1 286	-3 697
Income/expense from financial derivatives before foreign exchange gain/loss	-1 984	-8 208

## GPFG NOTE 5 HOLDINGS OF EQUITIES AND UNITS, BONDS AND FINANCIAL DERIVATIVES



### ACCOUNTING POLICY

Investments in equities, units and bonds are designated upon initial recognition as at *fair value through profit or loss* and are carried in the balance sheet at fair value. Earned and accrued dividends and interest are presented in the balance sheet on the same line as the respective financial asset and liability and are specified in tables 5.1 and 5.2 for *Equities and units* and *Bonds*. Lent equities, units and bonds are presented separately. For more information on lent securities, see Note 20.11 *Secured lending and borrowing*.

Financial derivatives are classified as *held for trading* and are carried in the balance sheet at fair value. Variation margin for exchange traded futures and equity swaps is considered to be settlement, and amounts are presented as *Deposits in banks*. Norges Bank does not engage in hedge accounting, and therefore none of the financial instruments are designated as hedging instruments for accounting purposes.

For further information on fair value measurement of *Equities and units*, *Bonds* and *Financial derivatives*, see Note 20.7 *Fair value measurement*. Changes in fair value for the period are recognised in the income statement and specified in Note 20.4 *Income/Expense from Equities and units, Bonds and Financial derivatives*.

Table 5.1 Equities and units

Amounts in NOK millions

	31 Dec. 2015		31 Dec. 2014	
	Fair value including dividends	Accrued dividends	Fair value including dividends	Accrued dividends
Equities and units	4 600 268	5 491	3 957 695	7 012
Total equities and units	4 600 268	5 491	3 957 695	7 012
<i>Of which equities lent</i>	312 662		166 842	

Table 5.2 Bonds

Amounts in NOK millions

	31 Dec. 2015			31 Dec. 2014		
	Nominal value*	Fair value including accrued interest	Accrued interest	Nominal value*	Fair value including accrued interest	Accrued interest
<b>Government bonds</b>						
Government bonds issued in the government's local currency	1 326 895	1 493 128	11 803	1 095 771	1 296 796	9 832
<b>Total government bonds</b>	<b>1 326 895</b>	<b>1 493 128</b>	<b>11 803</b>	<b>1 095 771</b>	<b>1 296 796</b>	<b>9 832</b>
<b>Government-related bonds</b>						
Sovereign bonds	21 935	23 045	385	19 094	20 867	359
Bonds issued by local authorities	89 363	96 508	743	71 470	82 793	721
Bonds issued by supranational bodies	66 665	72 351	737	59 365	64 904	680
Bonds issued by federal agencies	189 712	194 925	1 409	166 567	175 207	1 548
<b>Total government-related bonds</b>	<b>367 675</b>	<b>386 829</b>	<b>3 274</b>	<b>316 496</b>	<b>343 771</b>	<b>3 308</b>
<b>Inflation-linked bonds</b>						
Inflation-linked bonds issued by government authorities	103 152	120 275	522	52 788	63 715	222
<b>Total inflation-linked bonds</b>	<b>103 152</b>	<b>120 275</b>	<b>522</b>	<b>52 788</b>	<b>63 715</b>	<b>222</b>
<b>Corporate bonds</b>						
Bonds issued by utilities	40 639	42 951	545	32 421	35 994	443
Bonds issued by financial institutions	200 160	202 030	2 203	144 974	149 846	1 743
Bonds issued by industrial companies	298 979	302 901	3 386	252 622	268 718	2 747
<b>Total corporate bonds</b>	<b>539 778</b>	<b>547 882</b>	<b>6 134</b>	<b>430 017</b>	<b>454 559</b>	<b>4 933</b>
<b>Securitised bonds</b>						
Covered bonds	158 708	168 925	2 284	173 114	189 208	2 760
Commercial mortgage-backed securities	2 544	1 208	5	2 165	1 740	7
<b>Total securitised bonds</b>	<b>161 252</b>	<b>170 133</b>	<b>2 289</b>	<b>175 279</b>	<b>190 948</b>	<b>2 767</b>
<b>Total bonds</b>	<b>2 498 752</b>	<b>2 718 247</b>	<b>24 022</b>	<b>2 070 351</b>	<b>2 349 789</b>	<b>21 062</b>
<i>Of which bonds lent</i>		241 518			25 163	

\* Nominal value comprises the principal translated into NOK at the exchange rate on the balance sheet date.

Financial derivatives are used in asset management to adjust the exposure in various portfolios, as a cost efficient alternative to trading in

the underlying securities. This may be to adjust the exposure to equities or bonds and the fixed income market.

Table 5.3 gives a specification of financial derivative holdings. Notional amounts (the nominal values of the underlying) are the basis for the calculation of any cash flows and gains/losses for the contracts. Notional amounts are pre-

sented gross, being the sum of the long and short positions, which provides information about the extent to which different types of financial derivatives are used.

Table 5.3 Financial derivatives

Amounts in NOK millions

	31 Dec. 2015			31 Dec. 2014		
	Notional amount	Fair value		Notional amount	Fair value	
		Asset	Liability		Asset	Liability
Foreign exchange derivatives	351 186	4 352	1 521	204 179	5 275	3 141
Interest rate derivatives	37 123	553	3 745	37 194	112	4 754
Equity derivatives*	4 846	3 924	-	1 596	390	-
<b>Total financial derivatives</b>	<b>393 155</b>	<b>8 829</b>	<b>5 266</b>	<b>242 969</b>	<b>5 777</b>	<b>7 895</b>

\* *Equity derivatives* include rights and warrants (previously presented as options) and participatory certificates.

## OVER-THE-COUNTER (OTC) FINANCIAL DERIVATIVES

### *Foreign exchange contracts*

This item consists of foreign currency exchange contracts (forwards) which are agreements to buy or sell a specified quantity of foreign currency on an agreed future date.

### *Interest rate swaps*

Interest rate swaps are agreements between two parties to exchange interest payment streams based on different interest rate calculation methods. Typically, one party pays a floating rate of interest and the other pays a fixed rate.

### *Equity derivatives*

Equity derivatives are derivatives with exposure to an underlying equity. Equity derivatives include instruments with an option component such as warrants and rights. These instruments grant the owner the right to purchase an equity at an agreed price within a certain time frame. Equity derivatives also include participatory certificates which is an instrument that provides exposure to an underlying equity.

## EXCHANGE-TRADED FUTURES CONTRACTS

Futures contracts are listed contracts to buy or sell a specified asset (security, index, interest rate, etc.) at an agreed price at a future point in time. Settlement is normally made in cash, with initial and daily margin settlement of gains and losses.

## GPFG NOTE 6 UNLISTED REAL ESTATE



### ACCOUNTING POLICY

Real estate investments are made through subsidiaries which exclusively constitute investments as part of the management of the GPFG. These subsidiaries are not consolidated in the financial statements of the GPFG, because the GPFG is an investment entity. See Note 2 *Accounting policies* for more information. The investments in subsidiaries, comprising equity and long-term loan financing, are included in the balance sheet of the GPFG as *Unlisted real estate*. The subsidiaries are designated upon initial recognition as at *fair value through profit or loss*. Changes in fair value for the period are recognised in the income statement.

The following accounting policies apply to the respective income and expense elements:

*Dividends* are recognised as income when the dividends are formally approved by the shareholder's meeting, comparable responsible party or as a consequence of the company's articles of association.

*Interest income* is recognised when the interest is earned. *Interest expense* is recognised as incurred.

*Unrealised gain/loss* represents changes in fair value for the period for the related balance sheet item, that are not attributable to the aforementioned categories.

Table 6.1 provides a specification of the income statement line *Income/expense from unlisted real estate*, before foreign exchange gains and

losses. Table 6.2 shows the change for the period in the balance sheet line *Unlisted real estate*.

Table 6.1 Income/expense from unlisted real estate

Amounts in NOK millions

	2015	2014
Dividend	1 931	598
Interest income	1 601	1 368
Unrealised gain/loss	11 005	5 194
<b>Income/expense from unlisted real estate before foreign exchange gain/loss</b>	<b>14 537</b>	<b>7 160</b>

Table 6.2 Changes in carrying amounts unlisted real estate

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Unlisted real estate, opening balance for the period	106 431	51 032
Additions new investments	44 946	37 711
Unrealised gain/loss	11 005	5 194
Foreign currency translation effect	17 639	12 494
<b>Unlisted real estate, closing balance for the period</b>	<b>180 021</b>	<b>106 431</b>

#### UNDERLYING REAL ESTATE COMPANIES

Real estate subsidiaries have investments in other non-consolidated, unlisted companies. For a list of principal entities, see Note 20.15 *Interests in other entities*. These companies in turn invest in real estate assets, primarily properties. The fair value of real estate is considered to be the sum of all underlying assets, less liabilities at fair value, adjusted for the GPFG's ownership share. Assets and liabilities are presented in Table 6.4. For further information on fair value measurement of real estate assets and liabilities, see Note 20.7 *Fair value measurement*.

Specific accounting policies for the real estate subsidiaries, not mentioned before, are as follows:

*Rental income* is recognised as income on a straight-line basis over the lease term, taking into account any incentive schemes.

*Transaction costs* are incurred as a one-time cost when purchasing or selling properties. Transaction costs include stamp duty, registration fees, due diligence costs (fees to advisors, such as lawyers and valuation experts etc.) and insurance. Transaction costs are expensed as incurred.

Table 6.3 provides a specification of the GPFG's share of income generated in the underlying real estate companies. Income generated through rental income, after deduction of expenses, can be distributed to the GPFG in the form of interest and dividends as specified in Table 6.1. Unre-

alised gain/loss presented in Table 6.1 includes undistributed profits and will therefore not reconcile with fair value changes in Table 6.3, which solely comprise fair values changes of properties and debt.

Table 6.3 Income from underlying real estate companies

	Amounts in NOK millions	
	2015	2014
Net rental income*	6 921	3 747
Realised gain/loss	320	-
Fair value changes – properties	9 265	5 464
Fair value changes – debt	435	-395
Transaction costs	-320	-586
Interest expense external debt	-666	-354
Tax expense payable	-100	-81
Change in deferred tax	-452	-292
Fixed fees to property managers**	-308	-165
Variable fees to property managers**	-343	-16
Operating expenses within the limit from the Ministry of Finance***	-86	-83
Other expenses	-129	-79
<b>Net income real estate companies</b>	<b>14 537</b>	<b>7 160</b>

\* *Net rental income* mainly comprises received and earned rental income, less costs relating to the operation and maintenance of properties.

\*\* Fixed and variable fees to external property managers are directly related to the underlying properties and are primarily linked to the operation and development of properties and leases.

\*\*\* See Table 10.2 for specification of the operating expenses that are measured against the management fee limit from the Ministry of Finance.

Table 6.4 provides a specification of the GPFG's share of assets and liabilities included in the underlying real estate companies.

Table 6.4 Specification assets and liabilities real estate companies

	Amounts in NOK millions	
	31 Dec. 2015	31 Dec. 2014
Deposits in banks	2 491	1 170
Properties	197 549	118 515
External debt	-17 432	-11 985
Tax payable	-215	-98
Net deferred tax	-1 048	-520
Net other assets and liabilities	-1 324	-651
<b>Total assets and liabilities real estate companies</b>	<b>180 021</b>	<b>106 431</b>

In addition to the direct real estate investments presented in the line *Unlisted real estate*, listed real estate investments are included in the real estate asset class. Listed real estate invest-

ments are presented in the balance sheet as *Equities and units*, and amount to NOK 54 134m at year-end compared to NOK 33 238m at year-end 2014.

## GPFG NOTE 7 FAIR VALUE MEASUREMENT



### ACCOUNTING POLICY

All assets and liabilities presented as *Equities and units*, *Bonds*, *Unlisted real estate*, *Financial derivatives*, *Secured lending and borrowing*, *Deposits in banks* and *Cash collateral posted and received* are held at fair value in the balance sheet.

Fair value, as defined by IFRS 13 *Fair value measurement*, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

### 1. INTRODUCTION

The fair value of the vast majority of assets and liabilities is based on quoted market prices. If the market for a security or an asset is not active, fair value is established by using standard valuation techniques. Estimating fair value introduces valuation uncertainty, mostly due to the use of unobservable inputs used in valuation models. This valuation risk is addressed by the control environment in Norges Bank Investment Man-

agement, which governs fair value measurement, and is described in Section 6 of this note.

### 2. VALUATION UNCERTAINTY AND THE FAIR VALUE HIERARCHY

All balance sheet items measured at fair value are categorised in the three categories in the fair value hierarchy presented in Table 7.1. The level of valuation uncertainty determines the categorisation:

- Level 1 comprises assets that are valued on the basis of unadjusted quoted prices in active markets and are considered to have very limited valuation uncertainty.
- Assets and liabilities classified as Level 2 are valued using models with observable inputs. Inputs are considered observable if they can be directly observed from transactions in an active market, or if there is compelling external evidence demonstrating an executable exit price. Holdings classified as Level 2 have some valuation uncertainty.

- Assets classified as Level 3 are valued using models with considerable use of unobservable inputs, leading to a high degree of valuation uncertainty.

An overview of models and valuation techniques with their respective observable and unobservable inputs, categorised per type of instrument, is provided in Section 4 of this note.

#### ! SIGNIFICANT ESTIMATE

Level 3 investments consist of instruments held at fair value that are not traded or quoted in active markets. The fair values are therefore determined using valuation techniques that use models with unobservable inputs. The resulting values are particularly uncertain estimates, due to the significant use of unobservable inputs.

Table 7.1 classifies investments by level of valuation uncertainty into the fair value hierarchy and

includes all balance sheet items measured at fair value.

Table 7.1 Investments by level of valuation uncertainty

Amounts in NOK millions

	Level 1		Level 2		Level 3		Total	
	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014
<b>Equities and units</b>	<b>4 564 401</b>	<b>3 925 476</b>	<b>32 260</b>	<b>30 236</b>	<b>3 607</b>	<b>1 983</b>	<b>4 600 268</b>	<b>3 957 695</b>
Government bonds	1 380 928	1 141 268	112 200	155 528	-	-	1 493 128	1 296 796
Government-related bonds	331 310	308 397	54 477	27 424	1 042	7 950	386 829	343 771
Inflation-linked bonds	108 484	55 613	11 791	8 102	-	-	120 275	63 715
Corporate bonds	512 577	246 887	34 824	192 266	481	15 406	547 882	454 559
Securitised bonds	160 797	172 332	8 128	16 703	1 208	1 913	170 133	190 948
<b>Total bonds</b>	<b>2 494 096</b>	<b>1 924 497</b>	<b>221 420</b>	<b>400 023</b>	<b>2 731</b>	<b>25 269</b>	<b>2 718 247</b>	<b>2 349 789</b>
Financial derivatives (assets)	359	-	8 470	5 777	-	-	8 829	5 777
Financial derivatives (liabilities)	-	-	-5 266	-7 895	-	-	-5 266	-7 895
<b>Total financial derivatives</b>	<b>359</b>	<b>-</b>	<b>3 204</b>	<b>-2 118</b>	<b>-</b>	<b>-</b>	<b>3 563</b>	<b>-2 118</b>
Unlisted real estate	-	-	-	-	180 021	106 431	180 021	106 431
Other*	-	-	-26 946	18 942	-	-	-26 946	18 942
<b>Total</b>	<b>7 058 856</b>	<b>5 849 973</b>	<b>229 938</b>	<b>447 083</b>	<b>186 359</b>	<b>133 683</b>	<b>7 475 153</b>	<b>6 430 739</b>
<b>Total (percent)</b>	<b>94.4</b>	<b>91.0</b>	<b>3.1</b>	<b>6.9</b>	<b>2.5</b>	<b>2.1</b>	<b>100.0</b>	<b>100.0</b>

\* Other consists of non-investment assets and liabilities limited to money market instruments such as secured lending and borrowing positions, deposits in banks, unsettled trades, posted and received cash collateral and other assets and liabilities

The total valuation uncertainty for the GPFG at the end of 2015 is essentially unchanged compared to the end of 2014. The majority of the total portfolio has low valuation uncertainty and is classified as Level 1 or 2 (97.5% at year-end 2015 compared to 97.9% at year-end 2014).

#### *Equities and units*

The pricing uncertainty for equities and units has generally not changed throughout the year, and equities and units are valued almost exclusively (99.2%) on the basis of official closing prices from stock exchanges or last traded exchange prices. These are thus quoted market prices and are classified as Level 1. Equities classified as Level 2 amount to 0.7% of the total equity portfolio, and mainly comprise relatively illiquid holdings. The changes in Level 2 are described in more detail in Section 3 of this note. Equities classified as Level 3 comprise a small number of holdings for which the valuation is particularly uncertain due to a lack of market activity, suspended companies and unlisted equities of companies whose board of directors have stated an intention to make an initial public offering of shares. These securities amounted to 0.1% of the equity portfolio at year-end.

#### *Bonds*

Valuation uncertainty for bonds has decreased compared with the previous year-end. Movements between levels are described in more detail below. The majority (91.8%) of the holdings in bonds are valued using observable quoted prices from active markets and are classified as Level 1. This applies to all categories of bonds. In total, 8.1% of the bond portfolio was classified as Level 2, and 0.1% was classified as Level 3 at year-end 2015.

Some government bonds and a few government-related bonds, mainly issued in emerging markets, are classified as Level 2. No government bonds are classified as Level 3. Certain government-related bonds are classified as Level 3.

No inflation-linked bonds are classified as Level 3 and the minority that are classified as Level 2 originate from emerging markets. A small proportion of securitised bonds are classified as Level 2 and a few as Level 3. These have a low degree of observable market prices and some of these instruments are priced using models.

The majority of corporate bonds are considered liquid at year-end, with observable market prices and are therefore classified as Level 1. The remaining corporate bonds are mainly classified as Level 2. These bonds consist of less liquid bonds issued in USD with some degree of fair value uncertainty. Some corporate bonds are illiquid, with a price that is difficult to verify, and they are therefore classified as Level 3.

#### *Unlisted real estate*

All unlisted real estate investments are classified as Level 3, since models are used to value the underlying assets and liabilities with extensive use of non-observable market inputs. All unlisted real estate investments are measured at the value determined by external valuers, with the exception of newly acquired properties where the purchase price, excluding transaction costs, is considered to be the best estimate of fair value. Valuation uncertainty related to unlisted real estate investments is in general considered to be unchanged from last year-end.

#### *Financial derivatives*

Some equity derivatives (rights and warrants) that are actively traded on exchanges are classified as Level 1. Other derivatives have been classified as Level 2, as their valuation is based on standard models using observable market inputs. The majority of derivatives on the asset side of the balance sheet are OTC foreign exchange contracts with positive market values. On the liability side, foreign exchange contracts with negative market values account for slightly over one third of the total value, with interest rate swaps making up the remaining two thirds.

Other assets and liabilities are classified as Level 2.

### 3. MOVEMENTS BETWEEN LEVELS OF VALUATION UNCERTAINTY

#### *Reclassifications between Level 1 and Level 2*

There have not been significant changes between levels in the equity portfolio since last year-end. During the year there have been small movements between Level 1 and 2, particularly related to Russian and Chinese equities. For the former market, most equities have been reclassified from Level 2 to Level 1 in line with the stabilisation of the Russian market and due to the fact that equity prices could be based directly on observable quotes. Some Chinese equities, which have recently been suspended from trading have been reclassified from Level 1 to Level 2. In addition, the proportion of illiquid shares, received in the form of stock dividends, was slightly higher at the end of 2015. Holdings classified as Level 2 are therefore marginally higher compared to year-end 2014.

Valuation uncertainty has decreased for all categories of bonds, except for government-related bonds, and 10 percentage points of the bond portfolio has been reclassified. During the first quarter of 2015, a significant portion of bonds were reclassified from Level 2 to Level 1. The main reason for this reclassification was use of a broader data foundation, providing increased marked transparency and insight into liquidity through further access to detailed market information, including trading volumes in the market over a longer period. The reason for the increase in government-related bonds classified as Level 2 is that the fund acquired a significant investment in two illiquid bonds at the end of the year. These have been valued based on more liquid comparable bonds and have therefore somewhat higher valuation uncertainty.

Table 7.2 Specification of changes in Level 3 holdings

Amounts in NOK million

	1 Jan. 2015	Purchases	Sales	Settle-ments	Net gain/loss	Trans-ferred into Level 3	Trans-ferred out of Level 3	Foreign exchange gains and losses	31 Dec. 2015
Equities and units	1 983	418	-298	16	-397	3 021	-1 231	95	3 607
Bonds	25 269	2 859	-971	-243	-1 003	418	-24 188	589	2 731
Unlisted real estate	106 431	44 946	-	-	11 005	-	-	17 639	180 021
<b>Total</b>	<b>133 683</b>	<b>48 223</b>	<b>-1 269</b>	<b>-227</b>	<b>9 605</b>	<b>3 439</b>	<b>-25 419</b>	<b>18 323</b>	<b>186 359</b>

Amounts in NOK million

	1 Jan. 2014	Purchases	Sales	Settle-ments	Net gain/loss	Trans-ferred into Level 3	Trans-ferred out of Level 3	Foreign exchange gains and losses	31 Dec. 2014
Equities and units	1 753	180	-138	19	-548	417	-67	367	1 983
Bonds	1 571	9 247	-173	-230	68	10 455	-96	4 427	25 269
Unlisted real estate	51 032	37 711	-	-	5 194	-	-	12 494	106 431
<b>Total</b>	<b>54 356</b>	<b>47 138</b>	<b>-311</b>	<b>-211</b>	<b>4 714</b>	<b>10 872</b>	<b>-163</b>	<b>17 288</b>	<b>133 683</b>

The GPFG's total exposure that is considered particularly uncertain with respect to valuation (Level 3) increased by NOK 52 676m in 2015 to an exposure of NOK 186 359m at year-end.

Equity and bond holdings classified as Level 3 decreased by NOK 20 914m during 2015. At the end of 2015, this level amounted to NOK 6 338m, or 0.1% of the total equity and bond portfolio. Equity holdings with the largest degree of valuation uncertainty increased by NOK 1 624m, primarily due to Chinese equities that have been suspended from trading for a longer period. Holdings of bonds classified as Level 3 were reduced by NOK 22 538m during 2015. During the year, holdings in corporate bonds and government-related bonds have been reclassified to higher levels. This was mainly due to reclassifications in the first quarter. The reason for this reclassification is discussed above.

All unlisted real estate investments are classified as Level 3, and the increase of NOK 73 590m in 2015 is primarily due to new investments of NOK 44 946m, as well as increases in fair value and currency effects.

#### 4. VALUATION TECHNIQUES

Norges Bank Investment Management has defined hierarchies for which price sources to be used for valuation. Holdings that are included in the benchmark index are normally valued in accordance with the index providers' prices, while the remaining holdings of equities and bonds are valued almost exclusively using prices from other reputable external price providers. The next section sets out the main valuation techniques for those instruments included in Level 2 and Level 3 of the fair value hierarchy. Furthermore, it highlights the most significant observable and unobservable inputs to the valuation models and their interaction with sensitivity testing for instruments included in Level 3.

##### *Unlisted real estate (Level 3)*

The fair value of unlisted real estate is determined as the sum of the underlying assets and liabilities as presented in Note 20.6 *Unlisted real estate*. Assets and liabilities consist mainly of

properties and external debt. Properties are valued each reporting date by external independent valuation specialists using valuation models. Valuation of properties is inherently predisposed to significant forward-looking judgements. These include key assumptions and estimates with respect to each individual property type, location, future revenue streams and relevant discount rates. These assumptions represent mainly unobservable inputs and *Unlisted real estate* is therefore classified as Level 3 in the fair value hierarchy. Estimates used generally reflect recent comparable market transactions of properties with a similar location, condition and quality, and are based on local market conditions. Valuations reflect the best estimate of market value at the valuation date and are sensitive to fluctuations in the input factors. Changes in key assumptions can have a material effect on the valuation of the real estate portfolio.

Valuation of commercial real estate in the European and American markets is based on variations of discounted cash flow models.

Yields and assumptions regarding growth in future market rent levels used in the estimates of future cash flows are the most important variables that affect sensitivity in changes in fair value. There are also a range of other assumptions that impact sensitivity in the development of fair value. These assumptions include, but are not limited to:

- Expected inflation (market, consumer price index, costs, etc.)
- Factors that affect expected cash flows (for example renewal probabilities, expected vacant floor space and development costs)
- Expected vacancies and credit losses, either at a portfolio level or per individual tenant
- Changes in credit spreads and discount rates for commercial real estate loans.

The sensitivity analysis for unlisted real estate investments is limited to changes in yields and changes in growth assumptions for market rents. The sensitivity analysis is based on a statistically relevant sample, representative for the

real estate portfolio. An upside and downside scenario is used to reflect both favourable and unfavourable changes.

#### *Equities and units (Level 2 and 3)*

Equities and units that are valued based on models with observable inputs provided by vendors according to the pricing hierarchy, are classified as Level 2. These holdings are often illiquid securities that are not traded daily, or securities of suspended companies. The valuation models take into account various observable market inputs such as comparable equity quotes, last traded date, volumes and reasons for suspension.

Unlisted equities and units are valued based on discounted cash flow techniques with unobservable inputs including estimated future earnings and discount rates. Other Level 3 equities and units, such as illiquid holdings and securities suspended for a prolonged period, are mainly valued based on the last market price using regression analysis or based on comparable companies.

Fair value of equities classified as Level 3 is sensitive to whether trading is resumed and how markets have moved from the time the trading was suspended, as well as specific factors related to the individual company such as the financial situation and future income potential.

#### *Bonds (Level 2 and 3)*

Bonds that are valued based on indicative quotes, or liquid comparable issues with executable quotes for those that are less liquid, are classified as Level 2. These holdings usually consist of less liquid bonds than those actively traded on the market.

Bonds that are valued by external price vendors, based on models making use of significant unobservable inputs, such as probability of expected cash flows, outdated indirect quotes on comparable issues and spreads to reference curves, are classified as Level 3. These holdings include defaulted and highly illiquid bonds.

The fair value of bonds classified as Level 3 is sensitive to changes in risk premiums and liquidity discounts, as well as the future recovery, in the event of defaults. In some instances, sensitivity analyses are carried out on the underlying discount rate or spread against the discount curve.

#### *Financial derivatives (Level 2)*

Foreign exchange derivatives, consisting mainly of foreign exchange forward contracts, are valued using industry standard models with predominantly observable market data inputs such as forward rate yields.

Interest rate derivatives consist of interest rate swaps, and are valued using industry standard models with predominantly observable market data inputs such as interest from traded interest rate swaps.

Equity derivatives, such as rights and warrants, are mainly valued based on prices provided by vendors according to the pricing hierarchy. In some cases where an equity derivative is not traded, observable inputs such as conversion factors, subscription price and strike price are utilised to value the instruments. Participatory certificates are valued using the underlying price of the quoted equity, adjusted for observable inputs related to credit and liquidity risk.

## 5. SENSITIVITY ANALYSIS FOR LEVEL 3 HOLDINGS

Table 7.3 Additional specification Level 3 and sensitivities

Amounts in NOK millions

	Specification of Level 3 holdings 31 Dec. 2015	Sensitivities 31 Dec. 2015		Specification of Level 3 holdings 31 Dec. 2014	Sensitivities 31 Dec. 2014	
		Unfavourable changes	Favourable changes		Unfavourable changes	Favourable changes
Equities and units	3 607	-1 227	1 190	1 983	-843	587
Government-related bonds	1 042	-104	104	7 950	-781	780
Corporate bonds	481	-78	78	15 406	-1 884	1 640
Securitised bonds	1 208	-121	121	1 913	-191	287
<b>Total bonds</b>	<b>2 731</b>	<b>-304</b>	<b>304</b>	<b>25 269</b>	<b>-2 856</b>	<b>2 707</b>
Unlisted real estate	180 021	-7 801	8 637	106 431	-5 532	6 071
<b>Total</b>	<b>186 359</b>	<b>-9 332</b>	<b>10 131</b>	<b>133 683</b>	<b>-9 231</b>	<b>9 365</b>

There is uncertainty associated with the fair value of investments classified as Level 3 and the total sensitivity to unfavourable changes has increased by NOK 101m to NOK 9 332m at year-end 2015. The sensitivity to favourable changes has increased by NOK 766m to NOK 10 131m. The increases are mainly due to investments in real estate, partly offset by a reduction in the values of holdings in government-related and corporate bonds in Level 3.

Real estate values are particularly sensitive to changes in yields and assumptions influencing future revenues. In an unfavourable scenario, changing the discount rate by +0.2 percentage point, and future market rents by -2% will result in a decrease in value of the real estate portfolio of approximately 4.3% (5.2% in 2014) or NOK 7 801m. In a favourable scenario, a similar change in the discount rate of -0.2 percentage point and an increase in future market rents of 2% will increase the value of the real estate portfolio by 4.8% (5.7% in 2014) or NOK 8 637m. Sensitivity of fair values for unlisted real estate investments is mainly reduced compared to last year-end, but absolute values in Level 3 have increased as a result of new real estate investments. The reason for the decrease in sensitivity is compounded, but mainly attributable to changes in the actual portfolio composition, reflected in the sample that the sensitivity analysis is based on. The main cause is that logistics

properties are now included in the sample and these have relatively lower sensitivities to the main parameters yield and changes in growth assumptions for market rents. Furthermore, there are large changes in the composition of the American portfolio, which also results in lower sensitivity.

Sensitivity in absolute values for the equity and bond portfolios has decreased in line with the holdings classified as Level 3. The sensitivity in fair value for bonds is somewhat lower than for equities, particularly for bonds with shorter maturities.

## 6. CONTROL ENVIRONMENT

The control environment for fair value measurement of financial instruments and investments in unlisted real estate is organised around a formalised and documented accounting and valuation policy and guidelines, which are supported by work and control procedures. The policy document lays down valuation policies and outlines procedures for the Norges Bank Investment Management valuation committee.

The valuation environment has been adapted in accordance with market standards and established practices for valuation. This is implemented in practice through daily valuation of all holdings, except for unlisted real estate investments where valuations are performed on a

quarterly basis. These processes are scalable with regard to market changes and are based on internal and external data solutions.

All holdings and investments are generally valued by external, independent valuation providers. These have been selected on the basis of thorough analyses performed by the departments responsible for valuation.

Valuation providers are monitored on an ongoing basis through regular discussions, controls and price challenges for individual securities. For a large portion of holdings, prices from independent price providers are based on quoted market prices. For holdings that are not sufficiently liquid for valuation to be based on quoted prices, widely accepted models are used. Observable inputs are used where possible, but in some cases, owing to illiquid markets, unobservable inputs are used.

The valuation process is subject on a daily basis to numerous controls by the valuation departments. The controls are based on defined thresholds and sensitivities, which are moni-

tored and adjusted in accordance with prevailing market conditions. At each month-end for financial instruments and at the end of each quarter for unlisted real estate investments, more extensive controls are performed to ensure valuation is in accordance with fair value. As part of this review, particular attention is paid to illiquid financial instruments and unlisted real estate investments, i.e. investments deemed to pose valuation challenges. Illiquid instruments are identified using sector and currency classifications, credit rating indicators, bid/ask spreads, and activity in the market.

A valuation memo and report are prepared at each quarter-end, documenting the results of the controls performed and the most important sources of uncertainties in the valuations.

The valuation committee, which comprises Norges Bank Investment Management's leader group, meets every quarter prior to the publication of the financial reporting. The committee reviews the valuation documentation, discusses major pricing issues and approves the valuation.

## GPFPG NOTE 8 RISK

### INVESTMENT MANDATE FOR THE GPFPG

See Note 1 *General information* for a description of the framework for management of the GPFPG.

The GPFPG shall seek to obtain the highest possible return after expenses measured in the currency basket of the benchmark, within the set management limits. The strategic benchmark index set by the Ministry of Finance is divided into three asset classes with an allocation of 60% to equities, up to 5% to real estate and the remainder to bonds. The benchmark for equities is constructed based on market capitalisation for equities in the countries included in the benchmark. The benchmark for bonds specifies a defined allocation between government bonds and corporate bonds. The currency distribution is a result of these weighting principles. The GPFPG may not invest in securities issued by Norwegian entities or issued in Norwegian kroner. These securities are also excluded from the benchmark. The GPFPG can also not invest in real estate located in Norway.

### NORGES BANK'S GOVERNANCE STRUCTURE

The Executive Board of Norges Bank has delegated the responsibility for the management of the GPFPG to the Chief Executive Officer (CEO) of Norges Bank Investment Management.

The CEO of Norges Bank Investment Management is authorised through a job description and an investment mandate. The Executive Board has issued principles for risk management, responsible investment and compensation to Norges Bank Investment Management employees. The organisation must adhere to internationally recognised standards in the areas of valuation, performance measurement and management, measurement and control of risk. Reporting to the Executive Board is carried out monthly, and more extensively on a quarterly basis. The Governor of Norges Bank and the Executive Board are notified immediately in the event of special events or significant matters.

### GOVERNANCE STRUCTURE

Investment responsibilities within Norges Bank Investment Management are further delegated through investment mandates. Responsibility for processes and personnel is delegated through job descriptions, while process requirements are described in policies and guidelines. The composition of the leader group and the delegation of authority shall ensure segregation of duties between investment management, treasury and trading, operations, risk management and compliance. Real estate is structured as a separate unit with its own leader group, and the CEO for Real Estate reports to the CEO of Norges Bank Investment Management.

The investment risk committee complements the delegation of responsibility by advising on investment risk management, and the investment universe committee advises on the portfolio's investment universe.

Internal risk reporting requirements are set by Norges Bank Investment Management's CEO through job descriptions in the risk area. Reporting to the CEO is carried out on a daily, weekly and monthly basis. The CEO shall be notified immediately of any special events or serious breaches of the investment mandate. Equivalent reporting requirements are embedded in the real estate organisation.

### FRAMEWORK FOR INVESTMENT RISK

In the investment mandate for the GPFPG, there are a number of limits and restrictions within the combined equity and bond asset class, as well as within the individual asset classes. The investment mandate contains a separate management framework for real estate investments. The framework underpins how a diversified exposure to global real estate markets shall be established and managed.

Clear roles and responsibilities are a cornerstone of process design at Norges Bank Investment Management. Changes to existing investment mandates, the portfolio hierarchy or new counterparties are monitored and require approval by

the Chief Risk Officer (CRO), or a person authorised by the CRO.

The Executive Board's principles for risk management are further described through policies and guidelines. Responsibility for effective processes related to risk management is delegated to the CRO and Chief Compliance Officer (CCO). Risk management related to unlisted real estate investments is delegated to the CRO and CCO in Real Estate.

Risk management is defined as management of market risk, credit risk, counterparty risk, operational risk and risk related to environmental, social and governance factors. The first three items listed are defined as investment risk. Within Norges Bank Investment Management, the investment area is responsible for managing risk in the portfolio and in individual mandates, while the risk management areas independently measure, manage and report investment risk across the portfolio, asset classes and other levels within the portfolio that reflect the investment process. In Real Estate, independent risk analyses are required in advance of new unlisted investments.

#### *Investment risk – market risk*

Norges Bank Investment Management defines market risk as the risk of loss or a change in the market value of the portfolio, or parts of the portfolio, due to changes in financial market variables and real estate values. Market risk for the GPFG is measured along the dimensions concentration (absolute and relative to the benchmark), volatility and correlation risk, systematic factor risk and liquidity risk. For real estate, this involves measurement of the share of real estate under construction, vacancy and tenant concentration. Market risk is actively taken to generate investment returns in line with the objectives of the investment mandates.

#### *Investment risk – credit risk*

Norges Bank Investment Management defines credit risk as the risk of loss due to an issuer being unable to meet its payment obligations. Credit risk is measured both in relation to single issuers, where the probability of default and loss

given default are taken into account, and portfolio credit risk, where credit risk takes into account the correlation of credit losses between instruments and issuers. Credit risk is related to interest bonds and is actively taken to generate investment returns in line with the objectives of the investment mandates.

#### *Investment risk – counterparty risk*

Norges Bank Investment Management defines counterparty risk as the risk of loss due to counterparty bankruptcy or other events leading to counterparties defaulting. Counterparties are necessary to ensure effective liquidity management and effective trading and management of market and credit risk. Counterparty risk also arises in connection with securities lending and with the management of the equity and bond portfolios, as well as the real estate portfolio. Counterparty risk is controlled and limited to the greatest extent possible, given the investment strategy.

#### *Risk management process*

Norges Bank Investment Management employs several measurement methodologies, processes and systems to control investment risk. Robust and widely accepted risk management systems and processes are complemented by internally developed measurement methodologies and processes.

## **MARKET RISK**

Norges Bank Investment Management measures market risk in both absolute terms for the actual portfolio, and the relative market risk for holdings in the GPFG.

Continuous monitoring, measurement and assessment of market risk are performed along multiple risk dimensions, employing a number of methodologies and approaches. Combining different and complementary risk measures provides a better insight into the risk profile of the holdings in the GPFG.

#### *Asset class by country and currency*

The portfolio is invested across several asset classes, countries and currencies as shown in Table 8.1.

Table 8.1 Allocation by asset class, country and currency

Amounts in NOK millions

Asset class	Market	Market value in percent by country and currency*		Market value in percent by asset class		Assets minus liabilities excluding management fee		
		31 Dec. 2015	Market	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014
Aksjer	Developed	91.0	Developed	90.2				
	US	35.5	US	33.7				
	UK	11.3	UK	12.5				
	Japan	9.3	Japan	7.4				
	Germany	5.7	Germany	6.1				
	Switzerland	5.5	France	5.8				
	Total other	23.7	Total other	24.7				
	<b>Emerging</b>	<b>9.0</b>	<b>Emerging</b>	<b>9.8</b>				
	China	2.9	China	2.9				
	Taiwan	1.4	Taiwan	1.5				
	India	1.1	India	1.0				
	South Africa	0.5	Brazil	0.9				
	Brazil	0.5	South Africa	0.6				
	Total other	2.6	Total other	2.9				
<b>Total equities</b>					<b>61.2</b>	<b>61.3</b>	<b>4 571 807</b>	<b>3 939 923</b>
Fixed income	Developed	87.6	Developed	87.2				
	US dollar	42.0	US dollar	41.4				
	Euro	25.5	Euro	24.5				
	Japanese yen	6.5	Japanese yen	7.4				
	British pound	5.4	British pound	5.3				
	Canadian dollar	3.0	Canadian dollar	3.3				
	Total other	5.2	Total other	5.3				
	<b>Emerging</b>	<b>12.4</b>	<b>Emerging</b>	<b>12.8</b>				
	Mexican peso	1.9	Mexican peso	1.8				
	South Korean won	1.6	Brazilian real	1.5				
	Turkish lira	1.0	South Korean won	1.5				
	Indian rupee	1.0	Turkish lira	1.1				
	Chinese yuan	0.8	Indian rupee	1.0				
	Total other	6.1	Total other	5.9				
<b>Total fixed income</b>					<b>35.7</b>	<b>36.5</b>	<b>2 668 147</b>	<b>2 349 948</b>
Real estate	US	44.3	UK	30.9				
	UK	27.6	US	30.7				
	France	11.1	France	15.9				
	Germany	7.3	Germany	9.7				
	Switzerland	3.8	Switzerland	5.5				
	Total other	5.9	Total other	7.3				
<b>Total real estate**</b>					<b>3.1</b>	<b>2.2</b>	<b>235 199</b>	<b>140 868</b>

\* Market value per country and currency includes derivatives and cash.

\*\* Total real estate includes listed real estate investments. These are presented in the balance sheet as *Equities and units*.

#### Concentration risk

The GPFG has substantial investments in government-issued bonds. The portfolio also has investments in private companies that issue both bonds and equities.

Compared to year-end 2014, the share allocated to the fixed income asset class decreased somewhat, whilst the share allocated to equities was at the same level as the previous year. The share of the total market value in developed markets increased slightly for both equities and bonds. Within equities, there was a higher share in the US and Japan, while the UK had a lower share compared to year-end 2014. In the emerging markets, the allocation to Brazil and Russia was

lower at the end of 2015. This was mostly due to market returns and currency movements. In 2015, the market value of the real estate asset class increased from NOK 141bn to NOK 235bn. The increase was mainly attributable to purchases in the US and the UK. In addition to new purchases, the change in the portfolio composition was affected by value changes and currency effects.

Table 8.2 shows the largest holdings in bonds issued by governments, including government bonds issued in local currency, sovereign bonds and inflation-linked bonds issued in local currency.

Table 8.2 Largest holdings within the segment government bonds

Amounts in NOK millions		Amounts in NOK millions	
	Market value 31 Dec. 2015		Market value 31 Dec. 2014
US	532 806	US	422 200
Japan	203 895	Japan	186 044
Germany	163 019	Germany	84 021
UK	84 952	UK	76 341
Mexico	56 678	Italy	52 369
South Korea	50 318	Spain	46 731
Spain	45 175	Mexico	46 620
France	41 870	Brazil	43 505
Italy	41 018	South Korea	41 107
India	32 888	Netherlands	37 121

Table 8.3 shows the portfolio's largest holdings of non-government issuers, including both bond and equity holdings. Covered bonds issued by

financial institutions and debt issued by other underlying companies are included in the bonds column.

Table 8.3 Largest holdings excluding sovereigns, both bonds and equities

Amounts in NOK millions

	Sector	Bonds	31 Dec. 2015	
			Equities	Total
Nestlé SA	Consumer goods	737	51 056	51 793
Apple Inc	Technology	2 864	41 599	44 463
Roche Holding AG	Healthcare	2 322	34 980	37 302
Novartis AG	Healthcare	3 066	33 935	37 001
Lloyds Banking Group Plc	Finance	18 516	17 412	35 928
Bank of America Corp	Finance	21 151	12 358	33 509
HSBC Holdings Plc	Finance	5 973	27 242	33 215
Kreditanstalt für Wiederaufbau	Government-related	33 187	-	33 187
Microsoft Corp	Technology	2 532	30 448	32 980
JPMorgan Chase & Co	Finance	15 074	17 583	32 657

Amounts in NOK millions

	Sector	Bonds	31 Dec. 2014	
			Equities	Total
Nestlé SA	Consumer goods	669	47 924	48 593
Novartis AG	Healthcare	1 709	36 318	38 027
Apple Inc	Technology	2 482	35 509	37 991
Kreditanstalt für Wiederaufbau	Government-related	35 924	-	35 924
Royal Dutch Shell Plc	Olje og gass	1 991	32 501	34 492
BlackRock Inc	Finance	1 072	31 439	32 511
Bank of America Corp	Finance	20 743	10 814	31 558
Lloyds Banking Group Plc	Finance	17 953	12 395	30 348
HSBC Holdings Plc	Finance	5 260	24 737	29 997
Roche Holding AG	Healthcare	1 246	28 610	29 856

The value of the real estate portfolio was NOK 235bn at year-end. The real estate portfolio consists of listed and unlisted real estate investments. During 2015, the value of unlisted real estate investments increased to NOK 181bn (of which NOK 1bn is cash). The increase is mainly due to a high level of investments, particularly in

the US and the UK. In addition, the portfolio had a positive value increase as well as currency translation gains against the Norwegian krone. The value of listed real estate was NOK 54bn at the end of the year.

Table 8.4 Distribution of real estate investments per sector

Sector	Percent 31 Dec. 2015	Percent 31 Dec. 2014**
Office buildings	48.0	52.8
Retail	9.4	9.1
Logistics	18.8	13.3
Other	0.8	1.2
<b>Total unlisted real estate investments*</b>	<b>77.0</b>	<b>76.4</b>
Listed real estate investments*	23.0	23.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

\* Unlisted real estate investments are presented in the balance sheet as *Unlisted real estate*. Listed real estate investments are presented in the balance sheet as *Equities and units*.

\*\* Allocation between sectors and allocation between listed and unlisted is based on net asset values in 2015 compared to gross asset values in 2014. Comparable amounts for 2014 have been restated.

#### Volatility and correlation risk

Norges Bank Investment Management uses models to quantify the risk of value changes associated with all or parts of the portfolio. Volatility is a standard risk measurement based on the statistical concept of standard deviation, which takes into account the correlation between different investments in the portfolio. This risk measure provides an estimate of how much one can expect the portfolio value to change or fluctuate, based on market conditions over the past three years. In two of three years, the portfolio return is expected to be lower than the estimated volatility and higher than the negative value of the estimated volatility. Expected volatility can be expressed in terms of the portfolio's absolute risk or relative risk. The model weights weekly return data equally over the last

three years, uses a parametric calculation methodology, and is tailored to the long-term investment horizon of the GPF's investments. The same model is used for both portfolio risk and relative volatility. In addition to this model, other models are employed that capture the market dynamics of recent periods to a greater extent as well as the risk measure that measures so-called tail risk. Real estate investments are not included in the relative volatility calculations. This is consistent with the investment mandate issued by the Ministry of Finance and the Executive Board of Norges Bank, in addition to internal guidelines for investment and risk management.

Tables 8.5 and 8.6 present risk both in terms of the portfolio's absolute risk and the relative risk.

Table 8.5 Portfolio risk in terms of expected volatility, in percent

	Expected volatility, actual portfolio							
	31 Dec. 2015	Min 2015	Max 2015	Average 2015	31 Dec. 2014	Min 2014	Max 2014	Average 2014
Portfolio	10.4	8.1	10.4	9.5	8.2	7.9	9.3	8.7
Equities	12.9	10.9	12.9	12.0	11.1	11.0	14.4	13.0
Fixed income	10.1	7.9	10.2	9.4	7.9	7.5	8.9	8.3

Table 8.6 Relative risk, expected relative volatility, in basis points

	Expected relative volatility							
	31 Dec. 2015	Min 2015	Max 2015	Average 2015	31 Dec. 2014	Min 2014	Max 2014	Average 2014
Equity and fixed income portfolio	28	26	38	32	38	38	63	51
Equities	36	35	52	42	52	49	71	60
Fixed income	52	52	64	57	59	52	69	60

Expected volatility for the portfolio as a whole, as well as the asset classes comprising equities and bonds, increased somewhat in 2015. At year-end, the portfolio as a whole had a measured risk of 10.4%. This means that annual value fluctuations of approximately NOK 780bn can be expected for the portfolio. Correspondingly, measured risk at year-end 2014 was 8.2% and value fluctuations of approximately NOK 530bn could be expected. Since the model uses three years of historical data, the risk change can be explained by the fact that the more volatile period of autumn 2015 is included in the calculation period, compared to the period in 2012.

The mandate for the GPFG outlines that expected relative volatility for the aggregated equity and bond portfolio shall not exceed a limit of 100 basis points. Measurement of risk and follow-up of compliance with the limit is monitored based on the risk model described above. Expected relative volatility has been within the limit in 2015 and was 0.3 percentage point at year-end, which is a decrease from 0.4 percentage point at the end of 2014. This decline is mainly caused by reductions in deviations from the benchmark during 2015.

The economic situation was characterised by an improvement in growth and the economy in the US, while emerging markets, in particular China, were subject to greater uncertainty regarding future growth. There was a positive trend in the Japanese equity markets, as well as recovery in certain European countries. Currency markets displayed a trend for increased volatility and depreciation of currencies in emerging markets, including the severely weakened Brazilian real and the devalued Chinese yuan. The US dollar strengthened against most currencies in the currency basket. Commodity markets were

characterised by further declines in oil prices, which affected the economies of oil-producing countries. In fixed income markets, there was a slight increase in long-term government bond yields in developed markets, while there was a greater impact in emerging markets where Brazil and Turkey had a significant increase in long-term government bond yields.

#### *Strengths and weaknesses*

The strength of these types of risk models is that one can estimate the risk in a portfolio across different asset classes, markets, currencies, securities and derivatives and express this risk as a single numerical value, which takes into account the correlation between different asset classes, securities and risk factors.

The model-based risk estimates are based on historical relationships and will provide reliable forecasts in markets without significant changes in volatility. Estimates will be less reliable in periods marked by significant changes in volatility and correlation. Calculated volatility gives a point estimate of risk and provides little information on the total risk profile and any tail risk. Annualisation means that it is assumed that volatility and the composition of the portfolio are consistent over time. To compensate for these shortcomings, complementary models and methods are employed, such as stress tests and analyses of concentration risk and realised return.

#### **CREDIT RISK**

Credit risk is the risk of losses resulting from issuers of bonds defaulting on their payment obligations. Bonds in the portfolio's benchmark index are all rated investment grade by one of the major credit rating agencies. Investments in bonds are made based on internal assessments of expected return and risk profile.

Table 8.7 Bond portfolio specified by credit rating

Amounts in NOK millions

31 Dec. 2015						
	AAA	AA	A	BBB	Lower rating	Total
Government bonds	729 752	250 061	310 491	199 943	2 883	1 493 128
Government-related bonds	164 106	154 183	31 908	32 097	4 534	386 829
Inflation-linked bonds	86 119	6 897	3 095	24 164	-	120 275
Corporate bonds	3 216	43 196	208 613	281 665	11 193	547 882
Securitised bonds	134 834	21 973	6 626	6 566	134	170 133
<b>Total bonds</b>	<b>1 118 027</b>	<b>476 310</b>	<b>560 733</b>	<b>544 435</b>	<b>18 744</b>	<b>2 718 247</b>

Beløp i millioner kroner

31 Dec. 2014						
	AAA	AA	A	BBB	Lower rating	Total
Government bonds	606 852	186 044	277 444	223 334	3 122	1 296 796
Government-related bonds	142 390	142 134	23 671	32 777	2 799	343 771
Inflation-linked bonds	34 971	5 421	1 566	21 757	-	63 715
Corporate bonds	1 574	37 266	219 892	186 376	9 451	454 559
Securitised bonds	143 441	9 858	17 824	18 786	1 039	190 948
<b>Total bonds</b>	<b>929 228</b>	<b>380 723</b>	<b>540 397</b>	<b>483 030</b>	<b>16 411</b>	<b>2 349 789</b>

The economic growth in the Eurozone continued to be moderate in 2015. The European Central Bank lowered the interest rate on the main refinancing operations to around zero and the deposit facility interest rate to -0.3% and expanded the programme for quantitative easing. Economic development in the US continued in a positive direction, despite the growth being somewhat weaker in 2015 than the American central bank, the Federal Reserve, had expected at the beginning of the year. The US currency strengthened against most currencies and the long-awaited interest rate increase finally came in December. Economic growth in China slowed down in 2015. Overcapacity in the economy contributed to downwards pressure on costs. The Chinese central bank lowered interest rates five times during the year by 1.25 percentage points in total. The slowdown in demand from China contributed to a decline in exports and weaker economic growth for many other emerging economies. Additionally, the weakening of the Chinese yuan spread internationally through lower imported inflation for

China's trade partners. Commodity prices, including oil prices, fell significantly throughout the year. The fall in commodity prices may explain some of the slowdown in commodity-producing emerging economies, but these economies also had weaker growth. The Brazilian economy had weakened state funding and negative growth for the second consecutive year, which contributed to a significant drop in the exchange rate and the downgrading of government debt from credit rating agencies in 2015. Credit spreads on Brazilian government bonds increased to 495 basis points at the end of 2015, compared to 200 basis points at year-end 2014.

During 2015, the proportion of holdings in securitised bonds was reduced, while the share of European and US corporate bonds and inflation-linked bonds issued by the US government was increased. Investments in government bonds in emerging markets were reduced throughout the year, mainly as a result of the decrease in market value but also because the

investment level slowed somewhat. These holdings amounted to 12.7% of the bond portfolio, compared to 13.5% at year-end 2014. Holdings of government bonds issued by Germany, the US and France increased during 2015, however, which contributed to an increase in holdings of AAA and AA government bonds of 2.3 percentage points. At the same time, there was an overweight of downgrades from credit rating agencies of countries and companies in the bond portfolio throughout the year. This was due to weaker economic outlooks in a range of markets, as described above. Many companies in the A category were downgraded to the BBB category. All eight system-critical American holding companies in the banking sector were for example downgraded by S&P in the fourth quarter, of which three of these to the BBB category. This was due to reduced likelihood of government support in a default situation. Despite more downgrades than upgrades, the credit quality of the overall bond portfolio improved slightly during the year. This was a result of

adjustments to the portfolio and a general increase in market values in the AAA and AA categories compared to the A and BBB categories.

Holdings of AAA and AA bonds increased to 41.1% and 17.5% of the bond portfolio, respectively, at year-end 2015, compared to 39.5% and 16.2% at year-end 2014. A and BBB bonds were correspondingly reduced to 20.6% and 20.0% at year-end 2015, from 23.0% and 20.6% at year-end 2014. The share of bonds in the *Lower rating* category was stable at 0.7% of the bond portfolio at year-end 2015. Defaulted bonds had a market value of NOK 869m at year-end 2015, up from NOK 440m at year-end 2014. The nominal size of defaulted bonds was NOK 16.6bn at the end of 2015, compared to NOK 13.2bn at the end of 2014. Defaulted bonds are categorised under *Lower rating*. The increase in market and nominal value is, to a large extent, caused by currency changes.

Table 8.8 Bond portfolio by credit rating and currency in percent

Amounts in NOK millions

	AAA	AA	A	BBB	Lower rating	31 Dec. 2015 Total
US dollar	22.7	2.6	6.2	9.0	0.3	40.8
Euro	12.1	5.5	2.0	5.1	0.2	24.9
Japanese yen	-	-	7.8	0.0	-	7.8
British pound	0.5	4.0	0.5	0.7	-	5.7
Canadian dollar	1.5	1.1	0.3	0.3	-	3.1
Other currencies	4.4	4.4	3.9	5.0	0.1	17.8
<b>Total</b>	<b>41.1</b>	<b>17.5</b>	<b>20.6</b>	<b>20.0</b>	<b>0.7</b>	<b>100.0</b>

Amounts in NOK millions

	AAA	AA	A	BBB	Lower rating	31 Dec. 2014 Total
US dollar	21.8	2.8	7.9	7.2	0.2	39.9
Euro	11.2	4.4	2.5	6.3	0.3	24.7
Japanese yen	-	-	8.0	-	-	8.0
British pound	0.8	3.9	0.4	0.6	-	5.7
Canadian dollar	1.6	1.1	0.4	0.3	-	3.3
Other currencies	4.2	4.1	3.9	6.2	0.1	18.4
<b>Total</b>	<b>39.5</b>	<b>16.2</b>	<b>23.0</b>	<b>20.6</b>	<b>0.7</b>	<b>100.0</b>

At year-end 2015 there were no credit default swaps in the portfolio, see Note 20.5 *Holdings of Equities and units, Bonds and Financial derivatives*.

In addition to the credit ratings from credit rating agencies, measurement of credit risk is complemented with credit risk models, of which one is based on credit ratings and the other is based on observable credit premiums. Both these methods also take into account correlation and expected value of bonds in a bankruptcy situation. The models are used for risk measurement and monitoring of credit risk in the bond portfolio.

#### **COUNTERPARTY RISK**

Counterparties are required to ensure efficient liquidity management and efficient trading and management of market and credit risk. Exposure to counterparty risk is related to trading in OTC derivatives and currency contracts, repurchase and reverse repurchase agreements, securities lending, participatory certificates and securities posted as collateral in derivative trades. Unsecured deposits in banks are also defined as having counterparty risk. Such counterparty risk arises partly in connection with the daily cash management of the fund and in connection with purchases and sales of real estate. Furthermore, there is exposure to counterparty risk related to counterparties in the international settlement and custody systems where transactions settle. This can occur both for currency trades and for the purchase and sale of securities. Settlement risk and exposure from trades with long maturities are also defined as counterparty risk.

Various counterparties are used to reduce concentration risk and there are strict requirements for counterparty credit rating. Credit rating requirements are generally higher for counterparties to unsecured deposits in banks than in situations where collateral is received. Changes in counterparty credit ratings are monitored continuously.

Netting agreements are in place for trades in OTC derivatives, currency contracts and repurchase and reverse repurchase agreements, in

order to reduce counterparty risk. Further reduction of counterparty risk is achieved through requirements for collateral for counterparty net positions with a positive market value. For instruments where collateral is used, minimum requirements have been set, relating to the credit quality, time to maturity and concentration of the collateral. Netting and collateral agreements are entered into for all approved counterparties for these types of trades.

There are also requirements governing the way real estate transactions are conducted. Counterparty risk that arises is analysed in advance of the transaction and requires approval from the CRO. In 2015, 19 transactions were approved by the CRO through this process.

Counterparty risk is also reduced by setting exposure limits for individual counterparties. Exposure per counterparty is measured daily against limits set by the Executive Board and the CEO of Norges Bank Investment Management.

The methods used to calculate counterparty risk are in accordance with internationally recognised standards. In essence, it is the Basel regulations for banks that are used for measuring counterparty risk, with certain adjustments based on internal analyses. The risk models calculate the expected counterparty exposure in the event of a counterparty default. For OTC derivatives and currency contracts, the Current Exposure Method in the Basel regulations is applied. For each contract, the market value and an amount for potential future exposure is calculated. Netting agreements and collateral are taken into account in the calculation of net exposure. Norges Bank Investment Management started settlement of interest rate swaps with a central clearing counterparty during 2015.

For repurchase agreements, securities lending transactions executed through an external agent and securities posted as collateral in derivatives trades, a method is used that adds a premium to the market value to reflect the position's volatility. These positions are also adjusted for netting and actual collateral

received and posted when determining net exposure.

Exposure to counterparty risk is related to counterparties in the settlement and custody systems, both for currency trades and for the purchase and sale of securities. Settlement risk for most currency trades is low. Settlement risk is reduced using the currency settlement system CLS (Continuous Linked Settlement), or by trading directly with custodians. In a few currencies, Norges Bank is exposed to settlement risk when the sold currency is delivered to the counterparty before the receipt of currency is confirmed. This type of exposure is included on the line *OTC derivatives including foreign exchange contracts* in Table 8.9.

During the year, Norges Bank Investment Management started to invest in Saudi Arabian participatory certificates, which are instruments issued by registered foreign institutional investors to international investors. This instrument causes counterparty risk against the issuer of the note.

In Table 8.9, exposure is broken down by type of activity/instrument associated with counterparty risk.

Total counterparty risk measured in terms of gross and net exposure has increased in 2015. Gross risk exposure increased by NOK 34.4bn to NOK 80.9bn, whilst net exposure increased by NOK 44.2bn to NOK 71.8bn.

The increase in both net and gross risk exposure is mainly related to securities lending. At year-end 2014, securities lending transactions were relatively low due to the change of custodian and agent for securities lending. During 2015, there was an increase in securities lending activities, both for lending of equities and bonds. Gross exposure from securities lending transactions increased to NOK 51.6bn at year-end 2015, from NOK 16.5bn at year-end 2014. At the end of the third quarter of 2015, the lending agent's guarantee responsibilities were reduced, which led to a significant increase in the net risk exposure, see the column *Collateral and guarantees* for effects of the guarantee. Net risk exposure from securities lending increased to NOK 50.2bn at year-end 2015, from NOK 1.1bn at year-end 2014.

Net and gross risk exposure from OTC derivatives, including foreign exchange contracts and participatory certificates, increased during the year, whilst net and gross risk exposure from unsecured bank deposits were reduced compared to year-end 2014.

Table 8.9 Counterparty risk by type of position

Amounts in NOK millions

	31 Dec. 2015			
	Gross exposure	Effect of netting	Collateral and guarantees	Net exposure
Time deposits and unsecured bank deposits*	5 084	-	-	5 084
OTC derivatives including foreign exchange contracts	17 003	7 068	340	9 595
Cleared OTC and listed derivatives**	2 327	21	-1	2 307
Repurchase and reverse repurchase agreements	1 386	728	-444	1 102
Securities lending transactions	51 551	-	1 390	50 161
Settlement risk towards broker and long settlement transactions	60	-	-	60
Participatory certificates	3 475	-	-	3 475
<b>Total</b>	<b>80 886</b>	<b>7 817</b>	<b>1 285</b>	<b>71 784</b>

Amounts in NOK millions

	31 Dec. 2014			
	Gross exposure	Effect of netting	Collateral and guarantees	Net exposure
Time deposits and unsecured bank deposits*	13 268	-	-	13 268
OTC derivatives including foreign exchange contracts	10 162	5 254	-1 658	6 566
Cleared OTC and listed derivatives**	5 603	-	-	5 603
Repurchase and reverse repurchase agreements	989	-	-	989
Securities lending transactions	16 480	-	15 345	1 135
Settlement risk towards broker and long settlement transactions	15	-	-	15
Participatory certificates	-	-	-	-
<b>Total</b>	<b>46 517</b>	<b>5 254</b>	<b>13 687</b>	<b>27 576</b>

\* Includes bank deposits in non-consolidated real estate subsidiaries.

\*\* Relates to futures trades and interest rate swaps cleared by a central clearing counterparty.

The line *OTC derivatives including foreign exchange contracts* in the table comprises the net market value of foreign exchange derivatives (NOK 2 831m) and interest rate swaps (NOK -3 192m) (see Note 20.5 *Holdings of Equities and units, Bonds and Financial derivatives*). Counterparty risk for positions in derivatives is followed up on a net basis.

Norges Bank's counterparties have a credit rating from independent credit rating agencies. An internal credit evaluation can only be used as

the basis for counterparty approval in instances when the counterparty risk is considered low. Credit ratings for counterparties are monitored and complemented by alternative credit risk indicators.

Table 8.10 shows approved counterparties classified according to their credit rating category at year-end 2015. The table also includes brokers that are used when purchasing and selling securities.

Table 8.10 Counterparties by credit rating\*

	Norges Bank's counterparties (excluding brokers)		Brokers	
	31 Dec. 2015	31 Dec. 2014	31 Dec. 2015	31 Dec. 2014
AAA	-	-	-	-
AA	28	22	28	23
A	62	56	70	72
BBB	16	3	24	28
BB	-	-	5	3
B	-	-	15	13
<b>Total</b>	<b>106</b>	<b>81</b>	<b>142</b>	<b>139</b>

\* As counterparties are counted per legal entity, several counterparties may be included per corporate group.

The number of counterparties has increased during the year to 106, from 81 at year-end 2014. This is mainly due to counterparties for bank deposits in connection with real estate investments and counterparties in the securities lending programme.

#### VERIFICATION OF MODELS

Risk models used in estimating and controlling investment risk are continuously evaluated and verified for their ability to estimate risk. The special nature of the investment portfolio and the investment universe, as well as the GPF's long-term investment horizon are taken into account when evaluating the models.

#### LEVERAGE

Leverage may be used to ensure effective management of the investments, but not with the aim of increasing the economic exposure to risky assets. The use of leverage is regulated both in the management mandate issued by the Ministry of Finance and in the investment mandate issued by the Executive Board of Norges Bank to Norges Bank Investment Management. Leverage is the difference between total net exposure and market value of the portfolio. Net expo-

sure is determined by including the market value of securities, and positions in derivatives are converted to underlying exposure. When exposure is greater than market value, the portfolio is leveraged.

The GPF did not have any substantial leverage in 2015 and had a leverage of 0.1% at the end of 2015 for the aggregated equity and bond portfolio. For the real estate portfolio, there are set requirements in the investment mandate from the Executive Board in Norges Bank limiting the maximum leverage of the portfolio to 35%. The real estate portfolio had a leverage of 8.8% at the end of 2015.

#### SALE OF SECURITIES NORGES BANK DOES NOT OWN

Sale of securities not owned by Norges Bank (short sales) can only be carried out if there are established borrowing agreements to cover a negative position. Such transactions are very rarely undertaken, and no securities had been sold in this manner at year-end 2015.

## GPFG NOTE 9 TAX



### ACCOUNTING POLICY

Norges Bank is tax exempt from income tax on its operations in Norway, but is subject to taxes in a number of foreign jurisdictions. *Tax expense* included in the income statement represents income taxes that are not reimbursed through local tax laws or treaties, and consists of taxes on dividends, interest income and capital gains related to investments in *Equities and units* and *Bonds*. The majority of these taxes are collected at source.

Withholding taxes, net of deductions for refundable amounts, are recognised at the same time as the related dividend or interest income. See the accounting policy in Note 20.4 *Income/expense from Equities and units, Bonds and Financial derivatives*. Refundable withholding taxes are recognised in the balance sheet as withholding tax receivable within *Other assets*.

Other income tax, not collected at source, is recognised in the income statement in the period the related income or gains arise and is presented in the balance sheet as tax payable within *Other liabilities*, until the liability has been settled.

Current and deferred income taxes incurred within companies included in *Unlisted real estate* are recognised in the income statement as *Income/expense from unlisted real estate*, and are specified in Note 20.6 *Unlisted real estate*, Table 6.3. Tax payable and deferred tax balances are specified in Table 6.4 in the same note.

All uncertain tax positions, such as disputed refundable amounts for withholding taxes as well as tax payable positions in a limited number of jurisdictions, are assessed each reporting period. The best estimate of the probable amount for collection or payment is recognised in the balance sheet.

Table 9.1 shows tax expenses per type of investment and type of tax.

Table 9.1 Specification tax expense

Amounts in NOK millions

						2015
	Gross income before taxes	Income tax on dividend and interest	Capital gains tax	Other	Tax expense	Net income after taxes
<b>Income/expense from:</b>						
Equities and units	284 414	-2 543	-5	-	-2 548	281 866
Bonds	36 160	-62	-17	-	-79	36 081
Unlisted real estate*	14 537	-	-	-	-	14 537
Other	-	-	-	-1	-1	-
<b>Tax expense</b>		<b>-2 605</b>	<b>-22</b>	<b>-1</b>	<b>-2 628</b>	

Amounts in NOK millions

						2014
	Gross income before taxes	Income tax on dividend and interest	Capital gains tax	Other	Tax expense	Net income after taxes
<b>Income/expense from:</b>						
Equities and units	385 943	-1 931	-89	-	-2 020	383 923
Bonds	158 006	-45	-	-	-45	157 961
Unlisted real estate*	7 160	-	-	39	39	7 199
Other	-	-	-	-	-	-
<b>Tax expense</b>		<b>-1 976</b>	<b>- 89</b>	<b>39</b>	<b>-2 026</b>	

\* For tax incurred in companies included in the balance sheet line *Unlisted real estate*, see Note 20.6 *Unlisted real estate*. Other for *Unlisted real estate* in 2014 relates to the release of a provision recognised in 2013 relating to deferred tax.

## GPFG NOTE 10 MANAGEMENT COSTS



### ACCOUNTING POLICY

Management fee is recognised in the income statement of the GPFG as an expense. The management fee accrues during the financial year, but is cash-settled in the following year. Management fee payable is a financial liability classified as a loan and measured at amortised cost.

The GPFG is managed by Norges Bank. Costs relating to the management of the fund are mainly incurred in Norges Bank. Management costs are also incurred in real estate subsidiaries.

### MANAGEMENT COSTS IN NORGES BANK

The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the GPFG, in the form of a management fee. The management fee is equivalent to

the actual costs incurred by Norges Bank, including performance-based fees to external managers, and is expensed in the income state-

ment line *Management fee*. Costs included in the management fee are specified in Table 10.1.

Table 10.1 Management fee

Amounts in NOK millions

	2015		2014	
		Basis points		Basis points
Salary, social security and other personnel related costs	1 134		763	
Custody costs	394		457	
IT services, systems, data and information	638		488	
Research, consulting and legal fees	245		169	
Other costs	200		119	
Allocated common costs Norges Bank	129		112	
Base fees to external managers	615		445	
<b>Management fee excluding performance-based fees</b>	<b>3 355</b>	<b>4.8</b>	<b>2 553</b>	<b>4.7</b>
Performance-based fees to external managers	578		649	
<b>Total management fee</b>	<b>3 933</b>	<b>5.7</b>	<b>3 202</b>	<b>5.9</b>

#### MANAGEMENT COSTS IN REAL ESTATE SUBSIDIARIES

Management costs incurred in real estate subsidiaries consist of operating expenses

related to the management of the unlisted real estate portfolio. These costs are specified in Table 10.2.

Table 10.2 Management costs, real estate subsidiaries

Amounts in NOK millions

	2015	2014
Salary, social security and other personnel related costs	26	25
IT services, systems, data and information	31	21
Research, consulting and legal fees	25	22
Other costs	13	15
<b>Total management costs, real estate subsidiaries</b>	<b>95</b>	<b>83</b>
<i>Of which management costs non-consolidated subsidiaries</i>	86	83
<i>Of which management costs consolidated subsidiaries</i>	9	-

Management costs incurred in non-consolidated and consolidated real estate subsidiaries are presented in the income statement as *Income/expense from unlisted real estate* and *Other expenses*, respectively.

In addition to the costs presented in Table 10.2, operating expenses are also incurred in real estate subsidiaries related to the ongoing maintenance, operation and development of properties and leases. These costs are not defined as

management costs, since they are directly related to the underlying properties, and are not part of the management of the real estate portfolio. Other operating expenses are expensed directly in the portfolio result in the income statement line *Income/expense from unlisted real estate*. See Table 6.3 in Note 20.6 *Unlisted real estate* for further information.

#### **UPPER LIMIT FOR REIMBURSEMENT OF MANAGEMENT COSTS**

The Ministry of Finance has established an upper limit for the reimbursement of management costs. For 2015, the sum of total management costs incurred in Norges Bank and real estate subsidiaries, excluding performance-based fees to external managers, is limited to 9 basis points of average assets under management. Other operating expenses that are incurred in real estate subsidiaries, as well as

costs incurred in partly-owned real estate entities, are not included in the costs that are measured against this limit.

Total management costs that are measured against the limit amount to NOK 3 450m in 2015. This consists of management costs in Norges Bank, excluding performance-based fees to external managers, of NOK 3 355m, and management costs in real estate subsidiaries of NOK 95m. This corresponds to 5.0 basis points of assets under management on an annual basis.

Performance-based fees to external managers amount to NOK 578m in 2015, and total management costs including performance-based fees amount to NOK 4 028m. This corresponds to 5.8 basis points of assets under management on an annual basis.

## **GPFG NOTE 11 SECURED LENDING AND BORROWING**

The GPFG engages in (reverse-) repurchase agreements and equivalent transactions, as well as agency securities lending. These collateralised transactions are collectively known as *Secured lending and borrowing*.

#### **(REVERSE-) REPURCHASE AGREEMENTS**

Reverse repurchase agreements are entered into, in connection with liquidity placement. The counterparty transfers bonds or equities to the GPFG, and the GPFG posts cash collateral to the counterparty. Cash collateral obtained from agency securities lending is reinvested in reverse repurchase agreements with the purpose of realising a higher return and thus creating additional income.

The market for repurchase agreements is used to support financing activities. At any time, some of the holdings in bonds will be lent out through repurchase agreements, in exchange for received cash collateral. This borrowing is a form of financing for asset management.

#### **AGENCY SECURITIES LENDING**

An agreement is entered into with an external agent regarding securities lending, giving this agent the right to lend securities held by the GPFG to other market participants with securities borrowing requirements. Both equities and bonds are lent. The purpose of the lending activity is to generate additional returns from security holdings. A net income is earned from the securities lending programme.

The agent acts on behalf of, and in the interest of the GPFG. The GPFG is exposed to counterparty risk from securities lending. Collateral is used to mitigate losses in case of a borrower default. When a security is lent, the borrower transfers collateral to the agent in the form of cash or securities. The collateral includes a margin and is held on behalf of the lender. In the event of a borrower default, the borrower will not return the lent securities. The GPFG will be exposed to losses in the event a borrower defaults and the collateral received is insufficient to buy back the lent securities in the market.



## ACCOUNTING POLICY

### *Income and expense recognition of secured lending and borrowing transactions*

Net income from agency securities lending comprises the securities lending fee, expenses related to cash collateral received, reinvestment income and the deduction of the agent's fees relating to handling of the transaction. The net income is recognised on a straight-line basis over the term of the security loan and is presented in the income statement as *Income/expense from secured lending*.

Net income/expense from repurchase agreements and reverse repurchase agreements represents the change in fair value for the period of the balance sheet line items, which is mostly attributable to the interest income/expense of the agreement. Income/expense from repurchase agreements and reverse repurchase agreements are presented in the income statement as *Net income/expense from secured borrowing* and *Net income/expense from secured lending*, respectively.

Table 11.1 specifies income and expense for *Secured lending* and *Secured borrowing*.

Table 11.1 Income/expense from secured lending and borrowing

Amounts in NOK millions

	2015	2014
Income/expense from secured lending	3 266	2 758
Income/expense from secured borrowing	50	-35
Net income/expense from secured lending and borrowing	3 316	2 723



## ACCOUNTING POLICY

### *Transferred financial assets*

Securities lent to counterparties in connection with secured lending and borrowing are not derecognised when the agreement is entered into, as the derecognition criteria are not met. As the counterparty has the right to sell or pledge the security, the security is considered transferred. Lent securities are presented on separate lines in the balance sheet, as *Equities lent* and *Bonds lent*. During the lending period, the accounting for the underlying securities is in accordance with accounting policies for the relevant securities.

### *Secured lending*

Cash collateral posted to counterparties in secured lending transactions is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised as a financial asset, *Secured lending*. This asset is designated at initial recognition as a financial asset measured at *fair value through profit or loss*.

### *Secured borrowing*

Cash collateral received in connection with secured borrowing transactions is recognised as *Deposits in banks* together with a corresponding financial liability, *Secured borrowing*. This liability is designated at initial recognition as a financial liability measured at *fair value through profit or loss*.

### *Collateral received in the form of securities*

Collateral in the form of securities, received through *Secured lending and borrowing* transactions, where the GPF has the right to sell or pledge the security, is not recognised in the balance sheet, unless reinvested.

Table 11.2 presents *Secured lending* as well as associated collateral received in the form of securities.

Table 11.2 Secured lending

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Secured lending	123 385	45 536
Of which unsettled trades (liability)	-20 120	-
<b>Secured lending excluding unsettled trades</b>	<b>103 264</b>	<b>45 536</b>
<b>Associated collateral in the form of securities (off balance sheet)</b>		
Equities received as collateral	28 603	19 686
Bonds received as collateral	78 912	27 797
<b>Total security collateral received related to lending</b>	<b>107 516</b>	<b>47 483</b>

Table 11.3 presents securities transferred with the associated liability in the form of *Secured borrowing*, as well as collateral received in the form of securities.

Table 11.3 Transferred financial assets and secured borrowing

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
<b>Transferred financial assets</b>		
Equities lent	312 662	166 842
Bonds lent	241 518	25 163
<b>Total transferred financial assets</b>	<b>554 180</b>	<b>192 005</b>
<b>Associated cash collateral, recognised as liability</b>		
Secured borrowing	149 735	39 975
Of which unsettled trades (asset)	-15 520	-
<b>Secured borrowing excluding unsettled trades</b>	<b>134 215</b>	<b>39 975</b>
<b>Associated collateral in the form of securities (off balance sheet)</b>		
Equities received as collateral	290 529	137 567
Bonds received as collateral	146 803	27 408
<b>Total security collateral received related to transferred financial assets</b>	<b>437 332</b>	<b>164 975</b>

None of the collateral received in the form of securities has been reinvested per year-end 2015 or 2014. Therefore, these securities are not recognised in the balance sheet.

## GPFG NOTE 12 COLLATERAL AND OFFSETTING



### ACCOUNTING POLICY

#### *Cash collateral*

Cash collateral posted in connection with OTC derivative transactions is derecognised. A corresponding receivable reflecting the cash amount that will be returned is recognised as an asset as *Cash collateral posted*. Cash collateral received in connection with OTC derivative transactions is recognised as *Deposits in banks* together with a corresponding liability, *Cash collateral received*. Both *Cash collateral posted* and *Cash collateral received* are designated at initial recognition as financial assets/liabilities measured at *fair value through profit or loss*.

#### *Offsetting*

Financial assets and liabilities are only offset and presented net in the balance sheet if there is a legally enforceable right to set off the recognised amounts and the intention to settle on a net basis, or to realise the asset and settle the liability simultaneously, in accordance with IAS 32 *Financial instruments: Presentation*. The aforementioned criteria are not met for any financial assets and liabilities, hence no amounts are offset and presented net in the balance sheet. For this reason, Table 12.1 does not include a column for amounts offset/netted in the balance sheet.

### COLLATERAL

For various counterparties and transaction types, cash collateral will both be posted to and received from the same counterparty. Therefore, received cash collateral can be netted against posted cash collateral and vice-versa as shown in table 12.1. *Cash collateral posted* and *Cash collateral received* are related exclusively to OTC derivative transactions.

### OFFSETTING

Table 12.1 shows an overview of financial assets and liabilities, the effects of legally enforceable netting agreements and related collateral to reduce credit risk. The column *Assets/Liabilities in the balance sheet subject to netting* shows the carrying amounts of financial assets and liabilities that are subject to legally enforceable netting agreements. These amounts are adjusted for effects of potential netting with the same counterparty of recognised financial assets and liabilities, together with posted or

received cash collateral that results in a net exposure in the column *Assets/Liabilities after netting and collateral*.

Some netting agreements have been found not to be legally enforceable. Transactions under such contracts are shown together with unsettled trades in the column *Unsettled trades and assets/liabilities not subject to enforceable netting agreements*. Unsettled trades can be cancelled if the counterparty defaults before assets involved in the trade are transferred.

In the event of counterparty default, a collective settlement between Norges Bank and the bankruptcy estate could be performed for certain groups of instruments, irrespective of whether the instruments belong to the GPFG or Norges Bank's foreign exchange reserves. Such cross nettings will be settled between these portfolios and are therefore not adjusted for in the table.

Table 12.1 Assets and liabilities subject to netting agreements

Amounts in NOK millions

31 Dec. 2015							
Amounts subject to enforceable master netting agreements							
Description	Assets in the balance sheet subject to netting	Financial liabilities related to same counter-party	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral	Unsettled trades and assets not subject to enforceable netting agreements	Gross financial assets recognised in the balance sheet
<b>ASSETS</b>							
Secured lending	102 486	-	74 972	27 514	-	20 899	123 385
Cash collateral posted	2 231	2 227	-	-	4	-	2 231
Financial derivatives	5 535	2 918	2 528	-	89	3 294	8 829
<b>Total</b>	<b>110 252</b>	<b>5 145</b>	<b>77 500</b>	<b>27 514</b>	<b>93</b>	<b>24 193</b>	<b>134 445</b>

Amounts in NOK millions

31 Dec. 2015							
Amounts subject to enforceable master netting agreements							
Description	Liabilities in the balance sheet subject to netting	Financial assets related to same counter-party	Cash collateral posted (recognised as asset)	Security collateral posted (not derecognised)	Liabilities after netting and collateral	Unsettled trades and liabilities not subject to enforceable netting agreements	Gross financial liabilities recognised in the balance sheet
<b>LIABILITIES</b>							
Secured borrowing	131 499	-	74 972	56 450	77	18 236	149 735
Cash collateral received	2 570	2 528	-	-	42	-	2 570
Financial derivatives	5 400	2 918	2 229	-	253	-134	5 266
<b>Total</b>	<b>139 469</b>	<b>5 446</b>	<b>77 201</b>	<b>56 450</b>	<b>372</b>	<b>18 102</b>	<b>157 571</b>

Amounts in NOK millions

31 Dec. 2014							
Amounts subject to enforceable master netting agreements							
Description	Assets in the balance sheet subject to netting	Financial liabilities related to same counter-party	Cash collateral received (recognised as liability)	Security collateral received (not recognised)	Assets after netting and collateral	Unsettled trades and assets not subject to enforceable netting agreements	Gross financial assets recognised in the balance sheet
<b>ASSETS</b>							
Secured lending	45 536	-	22 093	23 428	15	-	45 536
Cash collateral posted	1 289	1 289	-	-	-	-	1 289
Financial derivatives	5 387	4 581	807	-	-	390	5 777
<b>Total</b>	<b>52 212</b>	<b>5 870</b>	<b>22 900</b>	<b>23 428</b>	<b>15</b>	<b>390</b>	<b>52 602</b>

Amounts in NOK millions

Description	Amounts subject to enforceable master netting agreements					Unsettled trades and liabilities not subject to enforceable netting agreements	Gross financial liabilities recognised in the balance sheet
	Liabilities in the balance sheet subject to netting	Financial assets related to same counter-party	Cash collateral posted (recognised as asset)	Security collateral posted (not derecognised)	Liabilities after netting and collateral		
<b>LIABILITIES</b>							
Secured borrowing	39 975	-	22 093	17 834	48	-	39 975
Cash collateral received	543	135	-	-	409	-	543
Financial derivatives	7 895	4 581	1 289	-	2 025	-	7 895
<b>Total</b>	<b>48 413</b>	<b>4 716</b>	<b>23 382</b>	<b>17 834</b>	<b>2 482</b>	<b>-</b>	<b>48 413</b>

## GPFG NOTE 13 OTHER ASSETS AND OTHER LIABILITIES

Table 13.1 Other assets

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Withholding tax receivable	1 546	2 744
Accrued income/expense from secured lending	235	176
Other	484	926
<b>Total other assets</b>	<b>2 265</b>	<b>3 847</b>

Table 13.2 Other liabilities

Amounts in NOK millions

	31 Dec. 2015	31 Dec. 2014
Liabilities to other portfolios under common management*	810	60
Tax payable	1	68
Other	220	190
<b>Total other liabilities</b>	<b>1 031</b>	<b>318</b>

\* *Liabilities to other portfolios under common management* comprises the net value of deposits and repurchase and reverse repurchase agreements against other portfolios managed by Norges Bank. These related party transactions were conducted at market terms.

## GPFG NOTE 14 RELATED PARTIES



### ACCOUNTING POLICY

Norges Bank is owned by the Norwegian government and under IAS 24.25 is exempt from the disclosure requirements pertaining to related party transactions and outstanding balances, including commitments, with the Norwegian government. This includes transactions with other entities that are related parties because the Norwegian government has control of, joint control of, or significant influence over both Norges Bank and the other entities.

Norges Bank, including the GPFG, is a separate legal entity that is wholly state-owned through the Ministry of Finance. See Note 1 *General information* for information regarding the relationship between the Ministry of Finance, Norges Bank and the GPFG. The GPFG conducts all transactions at market terms.

### INFLOWS FROM THE GOVERNMENT

Norges Bank receives inflows from the Ministry of Finance in the form of a krone deposit in an account in Norges Bank. The krone deposit is subsequently placed with Norges Bank Investment Management for investment. See additional information regarding the inflow for the period in the *Statement of changes in owner's capital*.

### TRANSACTIONS WITH NORGES BANK

Management fee for the GPFG is deducted from the Ministry of Finance's krone account in

Norges Bank. For further information on management costs, see Note 20.10 *Management costs*.

Internal trades in the form of money market lending or borrowing and repurchase agreements between the GPFG and Norges Bank's long-term reserves are presented in the balance sheet as a net balance between the two reporting entities as *Other assets* and *Other liabilities*. Associated income and expense items are presented net in the income statement as *Interest income/expense*.

### TRANSACTIONS WITH SUBSIDIARIES

Subsidiaries are financed through equity and long-term loans. Cash generated in subsidiaries is distributed in the form of dividends and interest. For more information regarding transactions with subsidiaries, see Note 20.6 *Unlisted real estate*.

## GPFG NOTE 15 INTERESTS IN OTHER ENTITIES

Investments in unlisted real estate are made through subsidiaries of Norges Bank, exclusively established as part of the management of the GPFG. These subsidiaries invest, through holding companies, in entities that invest in properties. These entities may be subsidiaries or joint ventures.

The overall objective of the ownership structure used for unlisted real estate investments is to safeguard the financial wealth under management and to ensure the highest possible net return after costs, in accordance with the

mandate from the Ministry of Finance. The key criteria when deciding the ownership structure are legal protection, governance and operational efficiency. Tax expense may represent a significant cost for the unlisted real estate investments. The expected tax costs for the fund are therefore among the factors considered when determining the ownership structure.

The legal structures do not impose significant restrictions on distributions in the form of dividends or interest to the GPFG.

Table 15.1 shows the principal companies that own and manage the properties as well as the consolidated companies.

Table 15.1 Real estate companies

Company	Business address	Property address	Ownership share and voting right in percent	Recognised from
<b>Non-consolidated companies</b>				
<b>United Kingdom</b>				
NBIM George Partners LP	London	London	100.00	2011
MSC Property Intermediate Holdings Limited	London	Sheffield	50.00	2012
NBIM Charlotte Partners LP	London	London	57.75	2014
NBIM Edward BT	London	London	100.00	2014
NBIM Caroline Partners LP	London	London	100.00	2015
NBIM James Partners LP	London	London	100.00	2015
<b>Luxembourg</b>				
NBIM S.à r.l.	Luxembourg	N/A	100.00	2011
NBIM Monte S.à r.l.	Luxembourg	N/A	100.00	2013
<b>France</b>				
NBIM Louis SAS	Paris	Paris	100.00	2011
SCI 16 Matignon	Paris	Paris	50.00	2011
Champs Elysées Rond-Point SCI	Paris	Paris	50.00	2011
SCI PB 12	Paris	Paris	50.00	2011
SCI Malesherbes	Paris	Paris	50.00	2012
SCI 15 Scribe	Paris	Paris	50.00	2012
SAS 100 CE	Paris	Paris	50.00	2012
SCI Daumesnil	Paris	Paris	50.00	2012
SCI 9 Messine	Paris	Paris	50.00	2012
SCI Pasquier	Paris	Paris	50.00	2013
NBIM Marcel SPPICAV	Paris	Paris	100.00	2014
<b>Germany</b>				
Die Welle 1 Frankfurt Immobilien GmbH & Co. KG	Cologne	Frankfurt	50.00	2012
Die Welle 3 Frankfurt Immobilien GmbH & Co. KG	Cologne	Frankfurt	50.00	2012
NKE Neues Kranzler Eck Berlin Immobilien GmbH & Co. KG	Cologne	Berlin	50.00	2012
Tower SZ Munich GmbH & Co. KG	Hamburg	Munich	50.00	2013
STEG LBG 2 S.C.S	Luxembourg	Munich	94.90	2014
STEG LBG 3 S.C.S	Luxembourg	Munich	94.90	2014
<b>Switzerland</b>				
NBIM Antoine CHF S.à r.l.	Luxembourg	Zürich	100.00	2012
<b>Europe</b>				
Prologis European Logistics Partners S.à r.l.	Luxembourg	Multiple European cities	50.00	2013

Company	Business address	Property address	Ownership share and voting right in percent	Recognised from
<b>USA</b>				
T-C 1101 Pennsylvania Venture LLC	Wilmington, DE	Washington	49.90	2013
T-C Franklin Square Venture LLC	Wilmington, DE	Washington	49.90	2013
T-C 33 Arch Street Venture LLC	Wilmington, DE	Boston	49.90	2013
T-C 470 Park Avenue South Venture LLC	Wilmington, DE	New York	49.90	2013
T-C 475 Fifth Avenue Venture LLC	Wilmington, DE	New York	49.90	2013
No. 1 Times Square Development LLC	Wilmington, DE	New York	45.00	2013
OFC Boston LLC	Wilmington, DE	Boston	47.50	2013
425 MKT LLC	Wilmington, DE	San Francisco	47.50	2013
555 12th LLC	Wilmington, DE	Washington	47.50	2013
Prologis U.S. Logistics Venture LLC	Wilmington, DE	Multiple American cities	46.30	2014
OBS Boston LLC	Wilmington, DE	Boston	47.50	2014
100 Federal JV LLC	Wilmington, DE	Boston	45.00	2014
Atlantic Wharf JV LLC	Wilmington, DE	Boston	45.00	2014
BP/CGCenter MM LLC	Wilmington, DE	New York	45.00	2014
T-C 2 Herald Square Venture LLC	Wilmington, DE	New York	49.90	2014
T-C 800 17th Street Venture NW LLC	Wilmington, DE	Washington	49.90	2014
T-C Foundry Sq II Venture LLC	Wilmington, DE	San Francisco	49.90	2014
T-C Hall of States Venture LLC	Wilmington, DE	Washington	49.90	2014
SJP TS JV, LLC	Wilmington, DE	New York	45.00	2015
T-C Republic Square Venture LLC	Wilmington, DE	Washington	49.90	2015
T-C 888 Brannan Venture LLC	Wilmington, DE	San Francisco	49.90	2015
Hudson Square Properties, LLC	Wilmington, DE	New York	44.00	2015
<b>Consolidated companies</b>				
<b>Singapore</b>				
NBRE Management Singapore Pte. Ltd.	Singapore	N/A	100.00	2015
<b>Japan</b>				
NBRE Management Japan Advisors K.K.	Tokyo	N/A	100.00	2015

The activity in the consolidated companies consists of providing investment-related services to the GPF. The activity is presented in the income statement as *Other expenses* and within the balance sheet lines *Other assets* and *Other liabilities*.

In addition to the companies shown in Table 15.1, Norges Bank has wholly-owned holding companies as part of *Unlisted real estate*. These holding companies do not engage in any operations and do not own any properties directly. The holding companies have their business address in the same country as the properties, or in relation to NBIM S.à r.l. in Luxembourg.

# INDEPENDENT AUDITOR'S REPORT

To the Supervisory Council of Norges Bank

## REPORT ON THE FINANCIAL STATEMENTS

We have audited the accompanying financial statements of Norges Bank, which comprise the balance sheet as at 31 December 2015, the income statement, the statement of comprehensive income, the statement of changes in equity, the statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

### THE EXECUTIVE BOARD'S AND THE GOVERNOR'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

The Executive Board and the governor are responsible for the preparation and fair presentation of these financial statements in accordance with the Accounting Act and the Regulation concerning annual financial reporting for Norges Bank. The regulation requires Norges Bank financial statements to be prepared in accordance with International Financial Reporting Standards as endorsed by the EU, but sets certain specific presentation requirements for the investment portfolio of the Government Pension Fund Global, including investments in subsidiaries being part of the investment portfolio. The Executive Board and the governor are also responsible for such internal control as necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### AUDITOR'S RESPONSIBILITY

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

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

### OPINION

In our opinion, the financial statements have been prepared in accordance with the law and regulations and give a true and fair view of the financial position of Norges Bank as at 31 December 2015 and of its financial performance and its cash flows for the year then ended in accordance with the Accounting Act and the Regulation concerning annual financial reporting for Norges Bank. The regulation requires Norges Bank financial statements to be prepared in accordance with International Financial Reporting Standards as endorsed by the EU, but sets certain specific presentation requirements for the investment portfolio of the Government Pension Fund Global, including investments in subsidiaries being part of the investment portfolio.

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

### OPINION ON THE EXECUTIVE BOARD'S REPORT AND THE STATEMENT ON CORPORATE SOCIAL RESPONSIBILITY

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Executive Board's report concerning the financial statements, the statement on corporate social responsibility and the allocation of the comprehensive income is consistent with the financial statements and complies with the law and regulations.

### OPINION ON REGISTRATION AND DOCUMENTATION

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

Oslo, 10 February 2016  
Deloitte AS



Aase Aa. Lundgaard  
State Authorised Public Accountant (Norway)

# RESOLUTION OF THE SUPERVISORY COUNCIL ON THE FINANCIAL STATEMENTS FOR 2015

The Supervisory Council adopted the following decision at its meeting on 3 March 2016:

- The Supervisory Council takes note of the Annual Report of the Executive Board for 2015.
- The Supervisory Council takes note of the auditor's report for Norges Bank for 2015 and

adopts Norges Bank's financial statements for 2015.

- In accordance with the guidelines, the net profit of NOK 66.5bn is to be transferred as follows: NOK 7.6bn to the Adjustment Fund and NOK 58.9bn to the Transfer Fund. From the Transfer Fund, one-third, or NOK 26.6bn, will be transferred to the Treasury.

## THE SUPERVISORY COUNCIL'S STATEMENT ON THE MINUTES OF THE MEETINGS OF THE EXECUTIVE BOARD AND ITS SUPERVISION OF THE BANK

Under the Norges Bank Act, the Supervisory Council submits a separate report to the Storting concerning its supervision of the Bank. The report for 2015 will be adopted by the Supervisory Council on 17 March 2016 and published upon submission to the Storting.





# NORGES BANK'S ACTIVITIES



## CHAPTER 1

# MONETARY POLICY

Norges Bank has executive and advisory responsibilities in the area of monetary policy. The implementation of monetary policy is oriented towards low and stable inflation, with an operational target of annual consumer price inflation of close to 2.5% over time. Monetary policy also has the objective of smoothing fluctuations in output and employment (see box on monetary policy in Norway).

The consumer price index (CPI) rose by 2.1% between 2014 and 2015, while consumer prices adjusted for tax changes and excluding energy products (CPI-ATE) rose by 2.7% in the same period. The effects of the fall in oil prices and the decline in oil investment on the Norwegian economy gradually became evident in 2015.

Growth slowed and became weaker than in previous years. Unemployment increased somewhat in 2015, primarily in regions closely linked to the petroleum sector. The fall in oil prices contributed to a considerable depreciation of the krone. The depreciation of the krone was underpinned by monetary policy. The interest rate forecast was revised down in March, September and December. In June, the interest rate forecast for the short term was revised down, but by the end of the forecast period, the forecast was slightly higher than in March. The key policy rate was lowered by 0.25 percentage point to 1.0% at the June monetary policy meeting and to 0.75% in September.

### **GROWTH AS EXPECTED, ALTHOUGH SOMEWHAT WEAKER OUTLOOK IN THE PERIOD TO THE MARCH MONETARY POLICY MEETING**

The outlook for the Norwegian economy weakened through autumn 2014. Oil prices fell markedly and it appeared that activity in the petroleum sector would be lower than previously assumed. At the same time, a weaker krone contributed to underpinning inflation and curbing the effects of lower oil prices on the Norwegian economy. At the December 2014 monetary policy meeting, particular weight was

given to reducing the risk of a pronounced downturn in the Norwegian economy. The key policy rate was therefore reduced by 0.25 percentage point to 1.25%. The analysis in the December 2014 *Monetary Policy Report* implied a key policy rate at this level or somewhat lower towards the end of 2016.

At the monetary policy meeting in March 2015, growth among Norway's trading partners was moderate and broadly in line with projections in the December 2014 *Report*. Growth had slowed in emerging economies but many advanced economies showed signs of gradual improve-

ment. Consumer price inflation was close to zero for many of Norway's trading partners. Core inflation was somewhat higher, but particularly in the euro area and Sweden, underlying inflation was also low.

Market expectations concerning policy rates abroad were lower than in December. Several central banks had implemented further monetary policy easing. In Sweden, the Riksbank had lowered its policy rate to negative 0.1% and at the same time announced purchases of government bonds. The European Central Bank (ECB) had expanded its asset purchase programme. In Denmark, Danmarks Nationalbank had reduced the interest rate on certificates of deposit to negative 0.75%.

In January 2015, oil prices fell to their lowest level since 2008, but picked up to around USD 55 per barrel by March, USD 15 lower than assumed in December 2014. Futures prices had also fallen.

Winter 2015 was characterised by considerable volatility in foreign exchange markets. Negative interest rates and government bond purchases had weakened the euro and the Swedish krona. In the US and the UK, prospects for an increase in interest rates had led to a marked appreciation of the US dollar and sterling. The krone had depreciated and was approximately 3% weaker than assumed in December 2014.

In the period to the March monetary policy meeting, developments in the Norwegian economy had been broadly in line with the December 2014 projections. Unemployment was stable and slightly lower than expected. At the same time, the outlook was weaker than previously assumed. Activity in the petroleum sector appeared to have declined more than projected as a result of the continued fall in oil prices, and Norges Bank's regional network contacts reported that output growth expectations had fallen in most sectors. Mainland capacity utilisation was assessed to be lower than normal, and Norges Bank expected it to decline further.

Wage growth in 2014 had been slightly lower than assumed in December, and consumer prices had risen somewhat less than projected. The year-on-year increase in the CPI adjusted for tax changes and excluding energy products (CPI-ATE) was 2.4% in February (Chart 1.1).

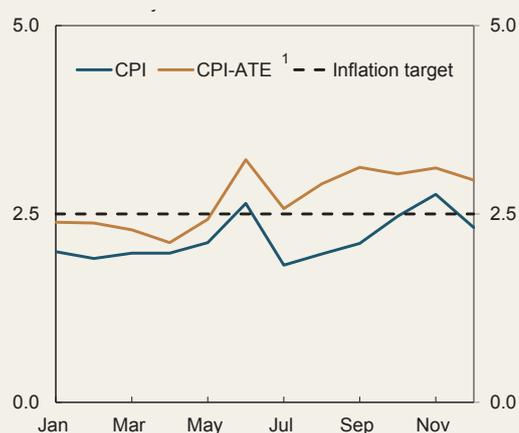
At the monetary policy meeting in March, weight was given to the reduction in the key policy rate in December that had been undertaken to mitigate the risk that lower oil prices would lead to a pronounced downturn in the Norwegian economy. So far, the effects on the real economy had been relatively small. At the same time, house prices had continued to rise sharply. Strongly rising real estate prices could lead to an increase in debt growth. Based on an overall assessment, Norges Bank decided to keep the key policy rate unchanged at 1.25%. If economic developments ahead proved to be broadly in line with projections, there were prospects for a further key policy rate reduction in the first half of 2015.

The analysis in the March 2015 *Report* implied that capacity utilisation in the Norwegian economy would be lower ahead. There were also prospects that unemployment could rise somewhat. The depreciation of the krone since autumn 2014 was expected to contribute to underpinning inflation in the near term, but inflation was expected to slow further out. The analyses showed a key policy rate of about 1% in the years ahead, followed by a gradual increase. The forecast for the key policy rate was lower than in December 2014 throughout the projection period (Chart 1.2).

## DEVELOPMENTS BROADLY IN LINE WITH PROJECTIONS IN THE PERIOD TO THE MAY MONETARY POLICY MEETING

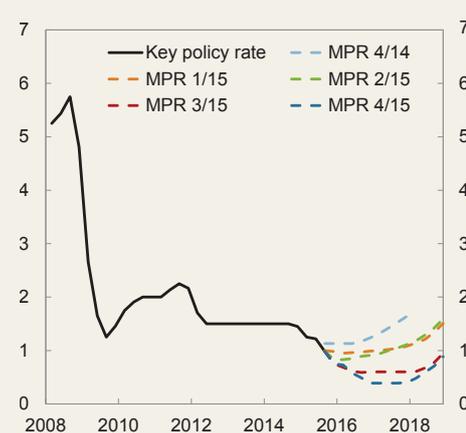
In the period to the monetary policy meeting in May, economic developments among Norway's trading partners had been slightly weaker than projected in the March 2015 *Monetary Policy Report*, but prospects were little changed. Market expectations concerning policy rates abroad in the near term had declined somewhat.

CHART 1.1 Consumer prices. Twelve-month change. Percent. January – December 2015



<sup>1</sup> CPI adjusted for tax changes and excluding energy products.  
Source: Statistics Norway

CHART 1.2 Projections for the key policy rate in various monetary policy reports. Percent. 2008 Q1 – 2018 Q4



Source: Norges Bank

At the same time, oil prices had risen more than expected to USD 65 per barrel. The krone exchange rate had been close to the March projection.

Growth in the Norwegian economy appeared to be broadly in line with expectations. Developments in registered unemployment had been in line with projections, while Labour Force Survey (LFS) unemployment had increased more. The results of the wage settlement indicated that wage growth in 2015 would be lower than estimated in the March Report. House prices had continued to rise and household debt had increased more than expected. Consumer price inflation had been broadly in line with projections.

At the monetary policy meeting in May, the Executive Board gave weight to the fact that developments in the Norwegian economy had been broadly in line with expectations. Consumer price inflation was close to 2.5%, but lower wage growth was weakening the forces driving inflation further ahead. On the other hand, household demand remained buoyant and oil prices had risen. Further developments in house price inflation and debt growth remained uncertain. The

Board decided to keep the key policy rate unchanged at 1.25%. At the same time, there were still prospects for a reduction in June.

### WEAKER GROWTH OUTLOOK IN THE PERIOD TO THE JUNE MONETARY POLICY MEETING

Developments in the global economy were weaker than expected through spring, but there were still prospects that growth would pick up ahead. Market expectations concerning policy rates abroad in the near term were little changed. Global long-term interest rates had fluctuated considerably through spring. On the whole, these rates had risen somewhat since March, but were still low.

In June, oil prices varied between USD 60 and USD 65 per barrel, which was somewhat higher than had been anticipated in March. There were signs that growth in the supply of oil would slow. At the same time, oil inventories remained at historically high levels. Futures prices reflected expectations of some increase in oil prices. On average, the krone exchange rate in 2015 Q2 had on average been broadly in line with projections,

but weakened in the weeks preceding the monetary policy meeting.

New information about the Norwegian economy indicated that growth had been slightly weaker than expected, and prospects had also weakened somewhat. Consumption had remained firm, but business investment had declined. In May, contacts in Norges Bank's regional network reported declining output growth. Enterprises still expected weak growth ahead, and prospects were weaker than in January. The effects of lower oil prices and lower petroleum sector demand appeared to be somewhat more pronounced than previously assumed. On the other hand, it appeared that petroleum investment would fall less in 2016 and 2017 than projected in March. Overall, capacity utilisation was expected to decline further compared with the March projections.

Unemployment had increased somewhat as expected and in May, registered unemployment was 2.9%. While registered unemployment had risen in line with March projections, LFS unemployment had risen more than expected. There were signs that the inflow of foreign labour had slowed in pace with slackening growth in the Norwegian economy. It was assumed that unemployment would continue to increase somewhat and slightly more than projected in March.

Consumer price inflation had varied between 2% and 2.5% in recent months. Prices for domestically produced goods and services had risen less than expected, while prices for imported consumer goods had risen more than previously assumed. It was noted that the depreciation of the krone would likely push up prices further. At the same time, it was assumed that the decrease in wage growth would dampen inflation further ahead and that the effects of a weaker krone would gradually fade.

Banks had reduced their lending rates since the beginning of the year slightly more than had been expected in March. Norwegian money market premiums had increased since March and been somewhat higher than expected. House price inflation had been lower in recent

months, but there were wide regional differences. Household debt had continued to rise faster than income.

At the monetary policy meeting in June, weight was given to the fact that growth prospects and the forces driving inflation further ahead had weakened. Both the objective of keeping inflation close to target and the aim of sustaining capacity utilisation in the years ahead implied a lower key policy rate. On the other hand, lower interest rates would entail a risk of fuelling house price inflation and household debt. Based on an overall assessment, the Board decided to reduce the key policy rate by 0.25 percentage point to 1.0%. Norges Bank's assessment of the outlook for the Norwegian economy in June suggested that the key policy rate could be reduced further in the course of autumn.

The analyses in the June 2015 *Monetary Policy Report* suggested that the key policy rate would remain slightly above  $\frac{3}{4}$ % for the next year, followed by a gradual increase. The projected path for the key policy rate in the June *Report* was somewhat lower up to mid-2017 than in the March *Report*. Towards the end of the projection period, the path was slightly higher than in March.

## FALL IN OIL PRICES AND WEAKER GROWTH OUTLOOK IN THE PERIOD TO THE SEPTEMBER MONETARY POLICY MEETING

Oil prices fell through summer and were somewhat below NOK 50 per barrel in September. The fall in oil prices was a response to larger oil inventories and persistent oil supply surpluses. Futures prices reflected expectations of some increase in oil prices, albeit to a lower level than indicated by prices in June.

Growth in the global economy was still moderate, but the growth outlook for Norway's trading partners was somewhat weaker than in June. With falling commodity prices, there were prospects that inflation abroad would remain low for longer than previously assumed. Market pricing indicated that the expected interest rate rise

among trading partners would occur later and more gradually than previously expected.

The krone had depreciated markedly since June and was weaker than projected in the June 2015 *Monetary Policy Report*. The depreciation was regarded as a reflection of the fall in oil prices and lower interest rate differentials against other countries.

The three-month premium in the Norwegian money market was about 0.3 percentage point and had shown little change since the March *Report*. Risk premiums on covered bonds and senior bonds issued by Norwegian banks had increased since June.

Growth in the Norwegian economy had been broadly in line with the June projections, but the growth outlook had weakened. Oil investment was projected to fall more than had been assumed. Contacts in Norges Bank's regional network reported in August that they still expected growth to remain weak ahead, and the outlook was assessed as slightly weaker than in May. Unemployment had risen somewhat, as expected. While registered unemployment had increased in line with the June projections, LFS unemployment had risen more than expected. It was assumed that unemployment would remain slightly higher and that capacity utilisation would decline further for a period compared with the June projections.

Following the reduction in the key policy rate in June, banks had lowered their lending rates slightly more than had been assumed. House price inflation had shown wide variations through summer, but was on the whole slightly higher than projected. Household debt had continued to rise faster than income.

Consumer price inflation had been higher than projected in the June *Report*. The year-on-year rise in the CPI-ATE was 2.9% in August. Prices for domestically produced goods and services and for imported consumer goods had both risen more than had been assumed in June. The degree of exchange rate pass-through appeared to have been larger than had been previously assumed.

At the September meeting, weight was given to the dampening impact the fall in oil prices would have on the Norwegian economy. A weaker krone would lift inflation in the short term. There were prospects of lower inflation further ahead and, combined with the aim of sustaining capacity utilisation, this implied a lower key policy rate. On the other hand, an even lower policy rate involved the risk of fuelling real estate price inflation and debt growth. Based on an overall assessment of the outlook and the balance of risks, the Board decided to reduce the key policy rate by 0.25 percentage point to 0.75%. The Executive Board's assessment of the outlook for the Norwegian economy suggested that the key policy rate could be reduced further in the year ahead.

The projections implied a key policy rate that decreased to just above ½% in 2016. The forecast for the key policy rate was lower than in the June 2015 *Report* to the end of the projection period.

### SLIGHTLY WEAKER-THAN-EXPECTED DEVELOPMENTS AND WEAKER KRONE IN THE PERIOD TO THE NOVEMBER MEETING

At the time of the November monetary policy meeting, growth for Norway's trading partners was approximately in line with expectations. At the same time, inflation abroad had been lower than anticipated. As a result, expected policy rates abroad had on the whole edged down. Since the September *Monetary Policy Report*, the Swedish central bank, the Riksbank, had decided to expand its government bond purchasing program and the ECB had signalled that further monetary measures would be implemented.

Oil prices were somewhat below USD 50 per barrel, in line with assumptions in September. Futures prices had shown little change and still reflected expectations of some increase in oil prices. The krone exchange rate had nonetheless been weaker than projected in the September *Report*.

Norwegian money market premiums had increased and been slightly higher than

expected. Risk premiums on bonds issued by banks had also risen somewhat. The reduction in the key policy rate in September appeared to have passed through to bank lending rates.

Developments in the Norwegian economy appeared to be slightly weaker than assumed in September. Household goods consumption had been lower than expected and manufacturing output had continued to fall. House price inflation in September was somewhat lower than anticipated, although there were still wide regional differences. Inflation had been in line with the projections in the *September Report*.

The draft central government budget for 2016 included an increase in the structural non-oil deficit from 2015 to 2016 that was higher than had been assumed in September.

At the November monetary policy meeting, the Executive Board gave weight to weaker-than-expected developments in the Norwegian economy and the continued fall in expected policy rates abroad. On the other hand, the krone exchange rate had been weaker than anticipated and a more expansionary fiscal policy was expected to support demand for goods and services. On the basis of an overall assessment of new information, the key policy rate was kept unchanged at 0.75%.

## **FURTHER FALL IN OIL PRICES AND SOMEWHAT WEAKER GROWTH OUTLOOK IN THE PERIOD TO THE DECEMBER MEETING**

Oil prices fell after the November monetary policy meeting and were just below USD 40 per barrel in December. Oil futures had also fallen. With the fall in oil prices, the krone was weaker than assumed in the *September Monetary Policy Report*.

There were prospects that growth for Norway's trading partners would pick up somewhat ahead, approximately at the same pace as assumed in September. The further decline in energy prices had contributed to lower-

than-projected inflation in most advanced economies, and expected policy rates had fallen for trading partners as a whole.

Norwegian money market premiums had increased and been slightly higher than expected. Risk premiums on bank bonds had also risen somewhat, but average bank funding costs had so far shown little change.

Growth in the Norwegian economy had until December been in line with the September projections. Overall, contacts in Norges Bank's regional network reported that output growth had edged down. There were signs that the fall in oil prices and the decline in oil investment were having an impact on sectors that until then had shown sustained growth. Consumer confidence had continued to fall, and there were prospects of slightly weaker growth in private consumption. In addition, lower oil prices could contribute to a somewhat deeper fall in oil investment in the years ahead than previously assumed. On the other hand, a weaker krone contributed to improved profitability for export firms and import-competing industries. Higher-than-expected growth in public consumption and investment, partly as a result of the many asylum-seekers that had arrived in Norway through autumn, would also support overall activity. Overall, it nonetheless appeared that growth ahead would be slightly lower than previously expected.

House price inflation had been approximately in line with expectations in September. Household credit growth had been slightly lower than anticipated, but was still rising faster than household income. It appeared that the September reduction in the key policy rate had passed through fully to bank lending rates. At the same time, banks in Norges Bank's lending survey reported somewhat tighter credit standards. Consumer price inflation had been in line with the September projections. The year-on-year rise in the CPI-ATE was 3.1% in November.

At the December monetary policy meeting, the Executive Board gave weight to the fact that developments in the Norwegian economy had so far been approximately in line with expecta-



tions in September. There were prospects that growth ahead would be slightly weaker than expected and that unemployment would rise somewhat more than previously assumed. In isolation, this implied a lower key policy rate. At the same time, the Board gave weight to uncertainty regarding the effects of the current monetary policy, which indicated a cautious approach to interest rate setting. Monetary policy was expansionary. The krone had depreciated and inflation had picked up. A lower key policy rate could increase the risk of fuelling house price inflation and debt growth. On the basis of an overall assessment of the outlook and the balance of risks, the key policy rate was kept unchanged at 0.75% at the December meeting. Norges Bank's assessment of the outlook suggested that the key policy rate could be lowered in the first half of 2016.

The analyses in the December 2015 *Monetary Policy Report* implied a decrease in the key policy rate to somewhat below  $\frac{1}{2}\%$  in 2016. The key policy rate was projected to increase to just below 1% towards the end of the projection period, which was lower than projected in September.



## MONETARY POLICY IN NORWAY

Monetary policy in Norway is conducted by Norges Bank. The Bank's operations are regulated by the Norges Bank Act of 1985. Pursuant to Sections 19 and 20 of the Act, Norges Bank sets the interest rates on banks' deposits with and loans from Norges Bank.

The monetary policy mandate was laid down by the government in 2001 in the Regulation on Monetary Policy. Section 1 of the Regulation reads:

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

*Norges Bank is responsible for the implementation of monetary policy.*

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

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

The monetary policy instrument is the key policy rate, which is the interest rate on banks' normal overnight deposits in Norges Bank. The key policy rate has an impact on the shortest money market rates, and the level of longer-term market rates depends on expectations regarding the future path of the key policy rate.

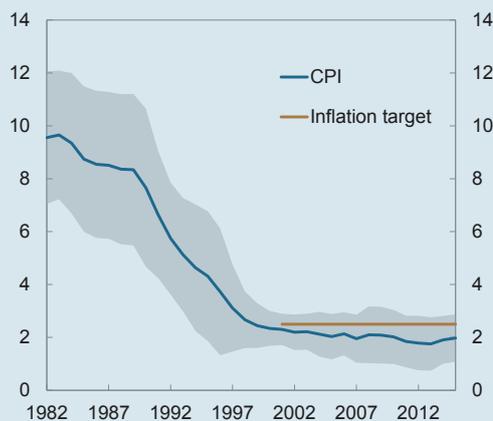
Market rates have an impact on the krone exchange rate, securities prices, house prices, credit demand, consumption and investment. Norges Bank's key policy rate can also influence expectations with regard to future inflation and economic developments. The key policy rate operates through all these channels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

Decisions on the key policy rate are usually taken at the Executive Board's scheduled monetary policy meetings. There were six monetary policy meetings in 2015. The *Monetary Policy Report with financial stability assessment* was published four times on the same date as the interest rate decisions were announced. The Executive Board received the *Report* and discussed the monetary policy stance at a meeting about two weeks before publication. On the basis of the analyses in the *Report* and their discussion, the Executive Board assessed the consequences for interest rate developments. Projections for the key policy rate for the coming years were also published in the *Report* (see also the boxes on the criteria for an appropriate interest rate path and on changes in the interest rate forecast through 2015).

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

The stabilising effect of monetary policy on developments in output and employment is dependent on confidence that the inflation target will be achieved. Inflation will not be at target at all times, but if there is

CHART 1.3 Inflation. 10-year moving average<sup>1</sup> and variation<sup>2</sup> in CPI. Percent. 1982 - 2015



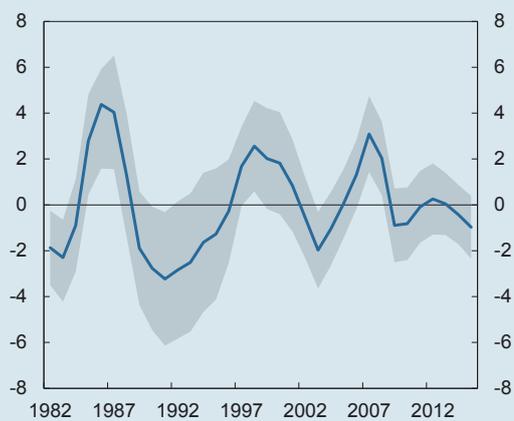
- 1 The moving average is calculated 10 years back.
- 2 The band around the CPI is the variation in the CPI in the average period, measured by +/- one standard deviation.

Sources: Statistics Norway and Norges Bank

confidence in monetary policy, expected inflation will be close to the inflation target over time, which in itself helps to stabilise inflation.

Experience of flexible inflation targeting in Norway has been favourable. Chart 1.3 shows the 10-year moving average for annual consumer price inflation (CPI). Over the past 15 years, inflation has averaged somewhat below, but close to, 2.5% (see blue line). The deviation from the inflation target may reflect a number of the supply-side characteristics of the 2000s, such as solid productivity growth, high labour immigration and a low rise in prices for imported consumer goods. The grey band in the chart shows the variability in annual inflation. Over a longer time horizon, variability has narrowed.

CHART 1.4 Estimated output gap<sup>1</sup>. Level and variation<sup>2</sup>. Percent. 1982 - 2015



- 1 The output gap measures the percentage difference between mainland GDP and projected potential mainland GDP.
- 2 The band shows the variation in the output gap measured by +/- one standard deviation. The standard deviation is calculated over a 10-year period.

Source: Norges Bank

Under a flexible inflation targeting regime, monetary policy also aims at stabilising developments in output and employment. Chart 1.4 shows the movements in the output gap since 1982, where the output gap is measured as the difference between the actual level and the estimated normal level of mainland GDP. By this measure, fluctuations in the economy have been reduced over time. In the wake of the financial crisis, growth in the Norwegian economy slowed, but then held at close to a normal level before slowing again in 2015 as a result of the fall in oil prices and oil investment. Unemployment has remained low over the past decade, but increased somewhat in 2015.

## CRITERIA FOR AN APPROPRIATE INTEREST RATE PATH

Norges Bank seeks to maintain inflation close to 2.5% over time. In its conduct of monetary policy, Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment when setting the key policy rate. The following criteria can serve as a guideline for an appropriate interest rate path:

1. **The inflation target is achieved:**  
The interest rate path should stabilise inflation at target or bring inflation back to target after a deviation has occurred.
2. **The inflation targeting regime is flexible:**  
The interest rate path should provide a reasonable balance between the path for inflation and the path for overall capacity utilisation in the economy.

In weighing considerations against each other, account is taken of the uncertainty surrounding the effects of the monetary policy strategy. This normally suggests a cautious approach to interest rate setting. In addition, the following criterium is given weight:

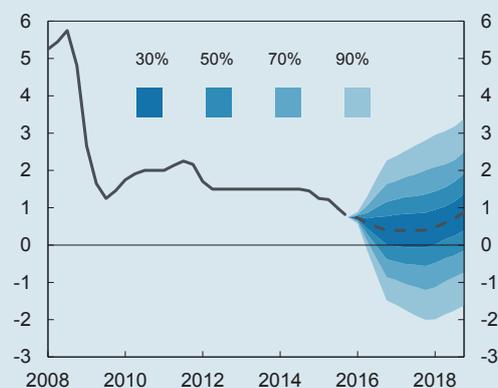
3. **Monetary policy is robust:**  
Conditions that imply an increased risk of particularly adverse outcomes for the economy should be taken into account when setting the key policy rate. Monetary policy should therefore contribute to counteracting the build-up of financial imbal-

ances. In the event of substantial and abrupt changes in the balance of risks, the consideration of robustness may also imply a more active monetary policy than normal.

The considerations expressed in the criteria above must be weighed against each other. The consideration of robustness is not an objective in itself, but is included because it may provide an improved path for inflation, output and employment over time. The trade-off between the criteria is difficult to quantify. A qualitative account of the reasoning behind the Executive Board's judgement is provided in "The Executive Board's assessment" in the *Monetary Policy Report*.

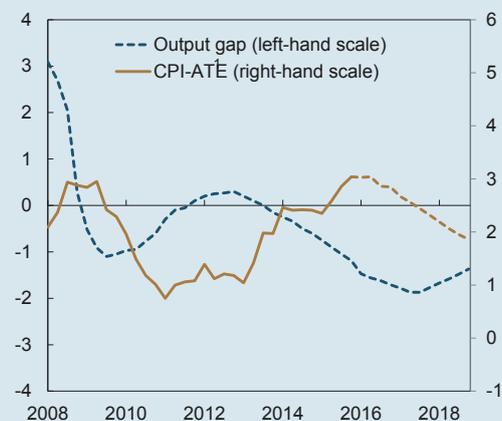
As the forecast for the interest rate and other economic variables is based on incomplete information about the economic situation and how the economy functions, economic developments are uncertain. Monetary policy can respond to unexpected developments in the economy or if the relationships between the interest rate level, inflation and the real economy differ from those previously assumed. The interest rate path is forecast based on causal factors. In the *Monetary Policy Report*, the Bank explains whether the interest rate forecast has changed and, if so, which factors contributed to the change. The Bank's *Annual Report* provides a summary of the changes in the interest rate forecast through the year.

CHART 1.5 Projected key policy rate in the baseline scenario in Monetary Policy Report 4/15 with fan chart. Percent. 2008 Q1 - 2018 Q4<sup>1</sup>



1 Projections for 2015 Q4 - 2018 Q4 (broken line).  
Source: Norges Bank

CHART 1.6 Inflation and output gap in the baseline scenario in Monetary Policy Report 4/15. Percent. 2008 Q1 - 2018 Q4



1 CPI adjusted for tax changes and excluding energy products.  
Sources: Statistics Norway and Norges Bank

## CHANGES IN THE INTEREST RATE FORECAST THROUGH 2015

The interest rate forecast for the years ahead was revised down through 2015 (Chart 1.2). Chart 1.7 shows the changes in the key policy rate forecast from the end of 2014 (*Monetary Policy Report (MPR) 4/14*) to the end of 2015 (*MPR 4/15*). The overall change in the interest rate forecast is shown by the black line, while the bars provide a technical illustration of how the various factors in isolation contributed to changes in the forecast.

In MPR 4/15, the projections for the key policy rate were  $\frac{3}{4}$  percentage point lower for 2016 and 1 percentage point lower for 2017 than in MPR 4/14. Weaker domestic growth and lower wage growth were the factors that contributed most to the downward revision of the interest rate forecast, while the depreciation of the krone contributed most in the opposite direction.

A number of central banks implemented further monetary policy easing through 2015. Policy rates in many countries were negative. In addition, a number of central banks used other instruments to mitigate the risk of deflation and stimulate activity. Expected policy rates among Norway's trading partners fell in 2015. In isolation, this strengthens the krone, thereby contributing to lower domestic inflation and activity. Lower

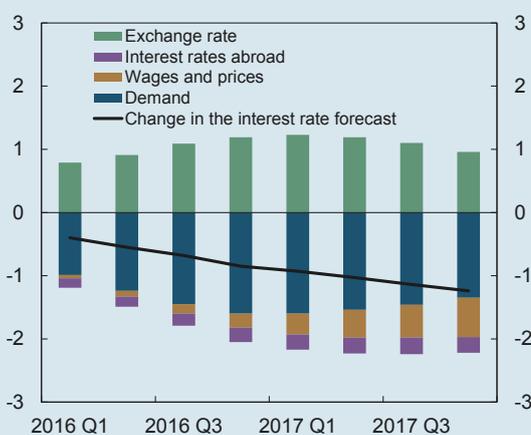
policy rates abroad therefore implied that the key policy rate in Norway should also be kept low for a longer period (purple bars).

Oil prices fell markedly through 2015 and the decline in oil investment was more pronounced than expected, with spillover effects to the mainland economy. Consumer confidence continued to decline, with prospects of weaker growth in private consumption. Demand in the Norwegian economy was supported by growth in public sector demand. Overall, weaker prospects for demand, and thereby for output and employment in the Norwegian economy, contributed to a downward revision of the interest rate forecast through 2015 (blue bars).

Falling oil prices in 2015 contributed to a considerably more pronounced depreciation of the krone than previously assumed. As a weaker krone contributes in isolation to higher inflation and increased activity in the Norwegian economy, the depreciation of the krone pointed towards a higher key policy rate (green bars).

Wage increases in the 2015 wage settlement were more moderate than expected, and estimates of wage growth ahead were revised down. Lower wage growth contributes to lower cost inflation and thereby reduced price inflation. The orange bars show the downward revision of the interest rate forecast as a result of lower wage and price inflation.

CHART 1.7 Factors behind changes in the interest rate forecast between MPR 4/14 and MPR 4/15. Percentage points. 2016 Q1 – 2017 Q4



Source: Norges Bank



## CHAPTER 2

# FINANCIAL STABILITY

Financial stability is one of Norges Bank's primary objectives in its work on promoting economic stability. Norges Bank has a particular responsibility for fostering robust and efficient financial markets and payment systems. A stable financial system is also important for ensuring funding and the distribution of risk in the economy.

In 2015, profitability in the Norwegian banking sector was solid and loan losses were low. All large Norwegian banks satisfied the Common Equity Tier 1 (CET1) capital requirement by an ample margin. On the basis of advice from Norges Bank, the Ministry of Finance decided to increase the countercyclical capital buffer rate for banks to 1.5% of risk-weighted assets, effective from 30 June 2016. After falling in recent years, long-term wholesale funding spreads increased in 2015. Banks had ample access to wholesale funding. The Ministry of Finance issued rules relating to liquidity coverage ratio requirements for banks in 2015. More capital and liquidity will improve Norwegian banks' resilience.

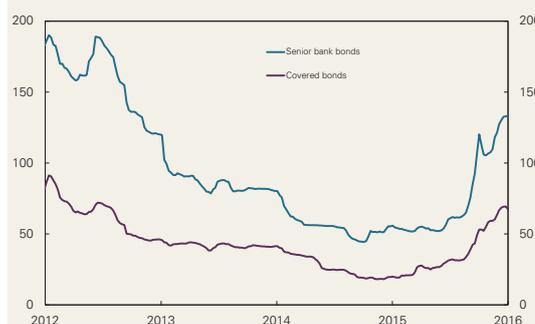
### SOUND PROFITABILITY AND INCREASE IN CAPITAL RATIOS

In 2015, banks' wholesale funding spreads increased both in Norway and abroad (Chart 2.1). Risk premiums increased globally in spring 2015 due in part to uncertainty concerning the debt situation in Greece. Weaker global growth prospects, uncertainty about economic developments in China and the decline in commodity prices also contributed to the rise in risk premiums in 2015. Risk premiums for banks in the Norwegian market were below international levels for a long period, but rose substantially through autumn.

Banks generated solid earnings and equity returns in 2015.  
Loan losses were low. Banks reduced lending and deposit rates in 2015.

The spread between lending rates and money market rates narrowed somewhat.

**CHART 2.1** Risk premiums Norwegian banks and mortgage companies. Spread to Nibor. Five-year maturity. Basis points. 23 December 2011 - 1 January 2016



Source: Nordic Bond Pricing

## NORGES BANK'S ROLE IN MAINTAINING FINANCIAL STABILITY

One of Norges Bank's main objectives is maintaining financial stability, as laid down in the Norges Bank Act. Section 1 of the Act states that the Bank "shall issue banknotes and coins, promote an efficient payment system, domestically as well as vis-à-vis other countries, and monitor developments in the money, credit and foreign exchange markets". Section 3 states that the Bank "shall 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" and "inform the public about the monetary, credit and foreign exchange situation". Four other sections in the Act are also relevant: Section 13 gives Norges Bank the sole right to issue Norwegian banknotes and coins. Section 17 requires Norges Bank to carry out banking transactions for the government. Under Section 19, Norges Bank may extend credit to and make deposits with commercial and savings banks, while Section 20 states that Norges

Bank accepts deposits from these banks. It follows from the Act that Norges Bank has a particular responsibility for ensuring that the banking system functions as it should. Under the Payment Systems Act, Norges Bank is the licensing and supervisory authority for interbank clearing and settlement systems.

Under the regulation on the countercyclical capital buffer, Norges Bank is required to draw up a decision basis and provide advice to the Ministry of Finance regarding the level of the countercyclical capital buffer for banks on a quarterly basis.

Norges Bank manages banking sector liquidity on a daily basis by supplying credit and accepting deposits. This gives Norges Bank a particular responsibility for monitoring liquidity risk in the banking system. As lender of last resort, Norges Bank has a key role in managing crises in the financial system.

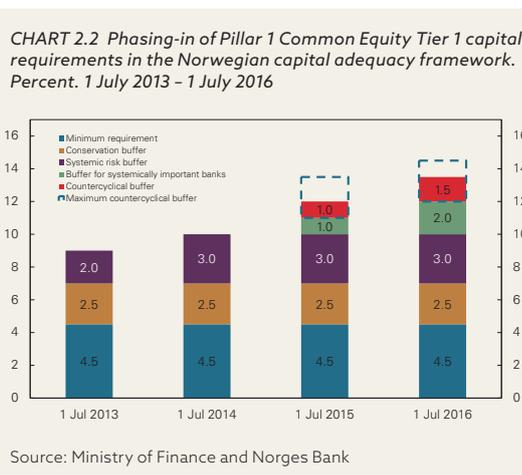
Retained profits and equity issuances have increased banks' capital ratios. All large Norwegian banks satisfied the required CET1 capital ratio by an ample margin. Banks' CET1 capital as a percentage of total assets is higher in Norway than in many other countries, albeit not higher than at the end of the 1990s.

The EU bank capital framework (CRD IV/CRR) entered into force on 1 January 2014. The capital and buffer requirements entered into force in Norway on 1 July 2013 (see the timetable for the phasing-in of Pillar 1 requirements in Chart 2.2). On 18 June 2015, the Ministry of Finance decided to raise the countercyclical capital buffer rate from 1.0% to 1.5% of risk-weighted assets with effect from 30 June 2016. Systemically important financial institutions are subject to a 1% CET1 capital surcharge, which will increase to 2.0% on 1 July 2016. In Norway, DNB ASA, Nordea Bank Norge ASA and Kommunalbanken AS have been designated as systemically important.

Pillar 2 requirements come in addition to the Pillar 1 capital requirements and are intended to cover risks not captured, or only partly captured,

under Pillar 1 requirements. Pillar 2 requirements are set on an individual bank basis and depend on Finanstilsynet's (Financial Supervisory Authority of Norway) assessment of the risks of the relevant bank<sup>1</sup>. Several banks must continue to build capital to meet announced CET1 capital targets of 14-15% by the end of 2016.

<sup>1</sup> See Finanstilsynet (2015), "Finanstilsynet's methodologies for assessing risk and capital needs", Circular 9/2015.



In its *Financial Stability Report*, Norges Bank proposed that a leverage ratio requirement could replace the transitional rule (Basel I floor) and that the leverage ratio requirement should consist of minimum requirements and buffer requirements corresponding to the risk-weighted capital requirements. The total requirement must be high enough to ensure that banks at minimum maintain their current leverage ratio level of about 6%.

The 2015 *Financial Stability Report* included a stress test of the largest Norwegian banks. The test showed that Norwegian banks could face high loan losses in the event of a pronounced downturn in the Norwegian economy. An analysis of credit risk in commercial real estate and construction showed that developments in these sectors would have a considerable impact on bank solvency in the event of a downturn.

Banks' overall exposure to oil producers is limited. For some banks, however, oil-related industries represent a large share of their corporate lending portfolio. Banks' loans are largely classified as low- or medium-risk. The fall in oil prices and the decline in oil investment may contribute to higher bank losses on loans to oil-related industries ahead.

The Ministry of Finance has laid down a Regulation on requirements for residential mortgage loans, which applies in the period between 1 July 2015 and December 2016.<sup>2</sup> Norges Bank participated in the consultation on these requirements.<sup>3</sup>

## NEW LIQUIDITY REQUIREMENTS

One of banks' most important functions is to convert short-term deposits into long-term loans. Maturity transformation exposes banks to liquidity risk. Banks must replace deposits that are withdrawn, or roll over funding that matures, before loans are repaid. One bank's refinancing

problems can spread to other banks and lead to turbulence in the financial system, as became clear in 2008. Banks have improved their funding structures and reduced liquidity risk since the financial crisis.

In 2015, the Ministry of Finance laid down rules implementing liquidity coverage ratio (LCR) requirements for banks. At a minimum, liquid assets must be equivalent to expected net cash outflows over a 30-day liquidity stress scenario. The requirement will be phased in gradually and will be in place at the end of 2017. Systemically important financial institutions had to comply with the LCR requirement in full as from 31 December 2015. Finanstilsynet has been asked to draw up LCR requirements in significant currencies, including NOK, by the end of August 2016.

The proposed net stable funding ratio (NSFR) requires illiquid assets to be backed by stable funding. Loans to customers and encumbered assets are examples of illiquid assets. Stable funding will include regulatory capital, bonds with a long residual maturity, and various types of customer deposits. The European Commission will submit a legislative proposal to introduce the NSFR in 2016. As measured by the NSFR, Norwegian banks have reduced their liquidity risk in recent years.

## ADVICE ON THE COUNTERCYCLICAL CAPITAL BUFFER

In line with the regulation of 4 October 2013, Norges Bank draws up a decision basis and provides advice to the Ministry of Finance regarding the level of the countercyclical capital buffer for banks on a quarterly basis. The decision basis for the advice is presented in the *Monetary Policy Report with financial stability assessment*. The countercyclical capital buffer rate has been set at 1% and will be increased to 1.5% from 30 June 2016.

Norges Bank's assessment is based on the premise that banks should build and hold a countercyclical capital buffer when imbalances are building up or have built up over a period. In

<sup>2</sup> See regulatory processes for the Regulations on requirements for residential mortgage loans on page 157.

<sup>3</sup> See Norges Bank's consultation response of 4 May 2015 regarding the proposal to implement residential mortgage lending requirements.

the event of an economic downturn and large bank losses, the buffer rate can be reduced to mitigate the procyclical effects of tighter bank lending. The buffer rate should not be reduced automatically even if there are signs that financial imbalances are receding.

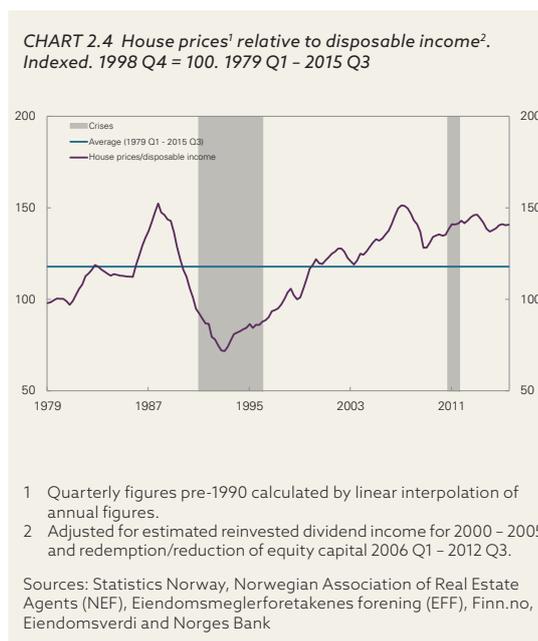
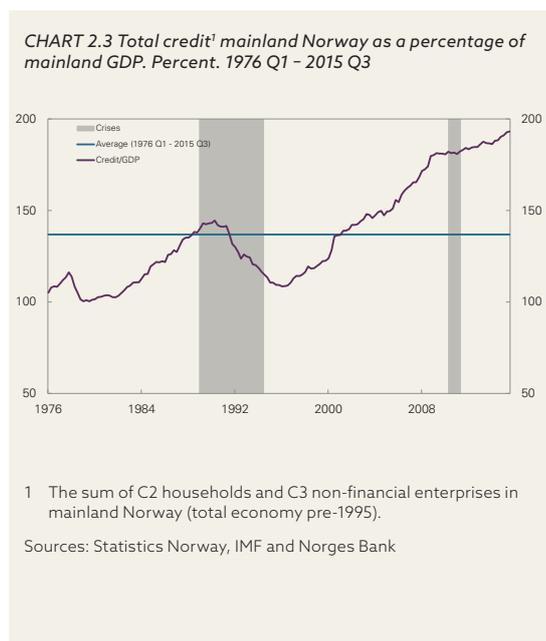
Norges Bank's assessment of financial imbalances is based on the deviation of the credit-to-GDP ratio from its long-term trend. In addition, developments in house prices, commercial real estate prices and banks' wholesale funding ratios are analysed. These four indicators rose sharply in the years prior to the financial crisis.

From the mid-1990s to 2008, total household and corporate credit in the mainland economy increased markedly faster than GDP (Chart 2.3). The credit indicator continued to rise in the years following the financial crisis, albeit at a slower pace. Household debt still rose faster than household income in 2015, although debt growth slowed slightly towards the end of the year. The new regulation on residential mortgages may have curbed credit growth somewhat. Through autumn, the banks in Norges Bank's lending survey announced tighter credit

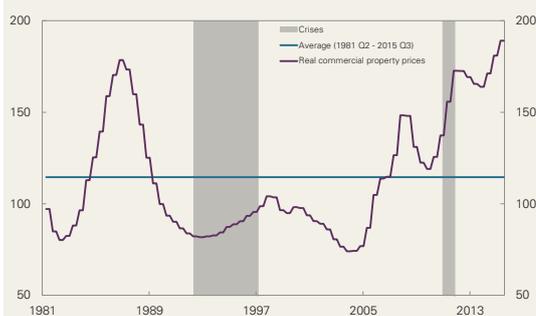
standards for households and enterprises. Growth in corporate bank debt picked up in 2015, particularly in the commercial real estate and construction sectors. Growth in corporate bond debt continued to slow in 2015, with growth near zero at the end of the year. Oil-related enterprises with low credit ratings found it difficult to access bond funding.

Following strong growth in autumn 2014, house price inflation slowed through 2015. Between December 2014 and December 2015, overall house prices in Norway rose at approximately the same pace as household disposable income (Chart 2.4), although with wide regional differences. The commercial real estate price indicator has risen markedly in recent years (Chart 2.5). Banks' wholesale funding ratios have remained fairly stable (Chart 2.6).

In June 2015, Norges Bank advised the Ministry to increase the buffer rate to 1.5% with effect from summer 2016. In its assessment, the Executive Board concluded that the persistent increase in household debt ratios and high real estate price inflation in recent years were signs that financial imbalances had continued to build up. The Minis-



**CHART 2.5 Real commercial property prices<sup>1</sup>.**  
Indexed. 1998 = 100. 1981 Q2 – 2015 Q3



1 Estimated market prices for office premises in Oslo deflated by the GDP deflator for mainland Norway.

Sources: Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

**CHART 2.6 Banks<sup>1</sup> wholesale funding as a percentage of total assets.<sup>2</sup> Percent. 1976 Q1 – 2015 Q3**



1 All banks and mortgage companies excluding branches and subsidiaries of foreign banks in Norway.  
2 Quarterly figures pre-1989 are calculated by linear interpolation of annual figures.

Source: Norges Bank

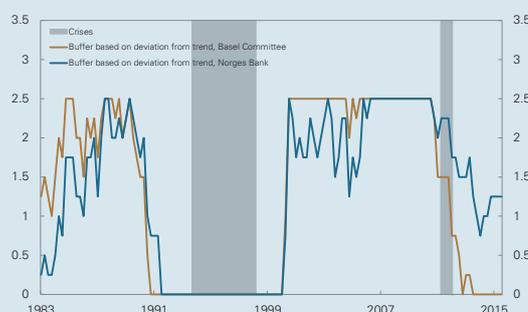
try of Finance decided to set the buffer rate based on Norges Bank's advice with effect from 30 June 2016. The assessment of financial imbalances changed little in the second half of 2015 and,

in line with Norges Bank's advice, the Ministry of Finance decided to keep the buffer rate unchanged in 2015 Q3 and 2015 Q4.

## CALCULATION OF REFERENCE RATE FOR THE COUNTERCYCLICAL BUFFER

The European Systemic Risk Board (ESRB) recommends the calculation of a technical reference rate for the countercyclical capital buffer. The Basel Committee has suggested a simple rule for the calculation of a reference rate based on the credit-to-GDP ratio. The long-term trend indicator can be calculated in different ways.<sup>1</sup> Applying the method of trend calculation proposed by the Basel Committee, the reference rate was 0% in 2015 Q3. An alternative calculation method, which has been shown to provide a better leading indicator of crises, yielded a reference rate for the buffer of 1¼% (Chart 2.7). The ESRB emphasises that the relationship between the benchmark buffer rate and the level of the buffer should not be mechanical, but that the buffer rate decision should be based on a broader range of information.

**CHART 2.7 Reference rates for the countercyclical capital buffer under alternative trend estimates. Percent. 1983 Q1 – 2015 Q3**



Source: Norges Bank

1 For a more detailed description of trend calculation, see *Staff Memo 13/2013*, Norges Bank.

## IMF ASSESSMENT OF THE NORWEGIAN FINANCIAL SYSTEM

In early September, the International Monetary Fund (IMF) presented a detailed assessment of the Norwegian financial system. Under its Financial Sector Assessment Program (FSAP), the IMF regularly conducts such assessments of member countries. The aim is to identify vulnerabilities and strengths and to recommend measures to enhance the resilience of the financial system nationally and internationally. The previous FSAP report on Norway was published in 2005.

The report's main conclusion is that the Norwegian financial system coped well with the global financial crisis in 2008-2009 and that buffers have been built up further in the post-crisis period. At the same time, the IMF is of the opinion that financial imbalances have built up, referring in particular to high household debt, overvalued house prices and banks' increased reliance on wholesale funding.

### The IMF's key recommendations are:

- Requirements for banks' new **residential** mortgage loans should be tightened even further to restrain household debt growth. The tax incentives for home ownership should be reduced, and measures should be implemented to stimulate the housing supply.
- Risks related to **banks' substantial wholesale funding** should be reduced. One possibility is to set limits on the proportion of short-term funding from abroad and limits on the maturity mismatch between foreign currency funding and the currency swaps banks enter into to convert foreign currency debt into NOK.
- Finanstilsynet (Financial Supervisory Authority of Norway) should continue to limit dividend payouts by weakly capitalised **insurance companies**. The stress test framework for the insurance sector should be enhanced and particular emphasis should be given to assessing liability-side risks.
- Decision-making processes in the area of **macro-prudential policy** could be standardised and made more transparent. Greater delegation of decision-making powers over macroprudential instruments to Norges Bank or Finanstilsynet should be considered; alternatively, a formal committee structure could be established. The authorities should also prepare an annual overview of the purpose and impact of the use of macroprudential instruments.
- Regarding the **financial market infrastructure**, Norges Bank and Finanstilsynet should strengthen regulatory cooperation even more to address potential risks related to the outsourcing of critical services. Norges Bank should also draw on Finanstilsynet's IT expertise in its oversight of operational risk in Norges Bank's settlement system (NBO). The IMF is of the opinion that the financial infrastructure in Norway is modern and stable, but points out that backup solutions, risk management framework and governance structure for the Norwegian Interbank Clearing System (NICS) could be improved.
- Banks should consider introducing more conservative assumptions in their **stress tests**. The IMF's stress tests show a far more pronounced decline in capital ratios than banks' own stress tests. More extensive stress testing of banking sector liquidity risk should be performed. Finanstilsynet and Norges Bank should cooperate more closely on stress testing of banks.
- **Finanstilsynet's formal independence** should be strengthened. Finanstilsynet should be given more resources to improve the supervision of smaller banks and to support the work to detect money laundering and combat terrorist financing.

## REGULATORY REFORM

Regulatory area	Institutions and regulations	Progress
Tools for banking crisis resolution	Financial Stability Board (FSB) – banking crisis resolution	On 9 November 2015, the FSB published standards on Total Loss-Absorbing Capacity (TLAC) for global systemically important banks (G-SIBs). G-SIBs are required to have a TLAC amounting to 16% of risk-weighted assets and 6% of unweighted risk exposure by 1 January 2019. From 1 January 2022, the requirements will increase to 18% and 6.75%, respectively.
	EU – Bank Recovery and Resolution Directive (BRRD)	The BRRD has applied since 1 January 2015. Bail-in (debt written down or converted into equity) as a crisis resolution tool entered into force on 1 January 2016. The Banking Law Commission is working to transpose the BRRD into Norwegian law.
	EU – Directive on deposit guarantee schemes	The EU has adopted a deposit guarantee of EUR 100 000 per depositor. The Norwegian deposit guarantee is currently at NOK 2 million. The Banking Law Commission is drawing up new deposit guarantee legislation for Norway.
Requirements relating to banks' capital adequacy, risk management and liquidity	Basel Committee – new standardised approach and capital floor for internal ratings-based (IRB) banks.	The Basel Committee has proposed revisions to the standardised approach for credit risk and capital floors for IRB banks related to the revised standardised approaches. On 27 March 2015, Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank submitted a joint consultative statement on these proposals. Based on the responses received, the Basel Committee has revised and recirculated the proposal for comment with a deadline of 11 March 2016.
	The EU CRD IV/CRR framework in Norway	CRD IV/CRR has largely been transposed into Norwegian law, effective from 1 July 2013. The rules entail stricter requirements for the quality of regulatory capital and the introduction of capital buffers. Supplementary regulations have been issued.
	Leverage ratio	On the basis of the advice of the European Banking Authority (EBA), the European Commission will prepare a report to the Council and the Parliament by the end of 2016 including a legislative proposal to introduce a binding leverage ratio requirement or different leverage ratio requirements for different business models, to be apply from 1 January 2018. The report will also consider adjustments to the calibration of the ratio. In the first half of 2017, the Basel Committee will propose a minimum leverage ratio requirement under Pillar 1.
	Risk weights for residential mortgages	The minimum Loss Given Default (LGD) in IRB banks' residential mortgage models was set at 20% in 2014. Finanstilsynet also issued new requirements for the calibration of IRB banks' residential mortgage models effective from 2015. The recalibration entails an increase in the minimum Probability of Default (PD) for individual loans to 0.2% and an increase in the level of long-term average PD.
	Systemically important banks	The Ministry of Finance has issued regulations on the identification of systemically important institutions and has designated DNB ASA, Nordea Bank Norge ASA and Kommunalbanken AS as systemically important. This will be reassessed on an annual basis. Institutions with total assets of at least 10% of mainland GDP or a market share of at least 5% of the Norwegian retail lending market will as a rule be designated as systemically important.
	Countercyclical capital buffer	The Ministry of Finance sets the countercyclical capital buffer on the basis of advice from Norges Bank. On 12 December 2013, the Ministry of Finance set the buffer at 1% effective from 30 June 2015. On 18 June 2015, the Ministry of Finance decided to increase the buffer to 1.5% effective from 30 June 2016.
	Quantitative liquidity standards	In 2015, the Ministry of Finance issued rules concerning the Liquidity Coverage Ratio (LCR) requirement, which will be progressively implemented through to the end of 2017. Systemically important financial institutions were required to meet a 100% LCR requirement by 31 December 2015. By August 2016, Finanstilsynet will assess whether to require LCRs in significant currencies, including NOK. The Basel Committee published a proposal for the Net Stable Funding Ratio (NSFR) in October 2014. The European Commission will submit draft legislation for the NSFR by the end of 2016 with a view to introducing the NSFR as a requirement by 2018.
	Residential mortgage loans	The Ministry of Finance has laid down a regulation on requirements for residential mortgage loans, which applies in the period between 1 July 2015 and 31 December 2016. The regulation is based on guidelines previously issued by Finanstilsynet. The regulation caps the loan-to-value ratio on residential mortgage loans at 85 percent, the borrower must have the capacity to service debt in the event of a 5 percentage point increase in interest rates, and annual principal repayments of at least 2.5% are required for loans granted with a loan-to-value ratio above 70%. A maximum of 10% of the value of approved loans can be loans that do not comply with one or more of these requirements.
Supervisory structure	New EU supervisory structure	New supervisory structure for the EU financial sector as from 2011. On 14 October 2014, the EU and EFTA/EEA states reached an agreement on a solution for the incorporation of the EU Regulation establishing the European Supervisory Authorities into the EEA Agreement. The solution must be approved by the Storting.
	EU banking union	The regulation on the Single Supervisory Mechanism (SSM), which transfers much of the supervisory responsibility in the euro area to the ECB, entered into force in November 2014. A Single Resolution Mechanism (SRM) and a Single Resolution Fund were adopted in 2014. Crisis resolution under the SRM is subject to the principles and rules set out in the BRRD.

## CHAPTER 3

# MARKETS AND INVESTMENT MANAGEMENT

Norges Bank is responsible for ensuring that monetary policy decisions are transmitted to the market as effectively as possible. Norges Bank does this by managing bank reserves by means of various forms of market operations in order to keep short-term money market rates close to the key policy rate. Norges Bank is also responsible for account management and payment settlement for the banking sector.

Norges Bank gains insight into capital markets through its management of the foreign exchange reserves. The reserves are to be available for use in the conduct of monetary policy and to fulfil Norges Bank's international commitments to the IMF. Norges Bank is also responsible for the Government Pension Fund Global (GPF), but the GPF's management is described in greater detail in GPF reports.

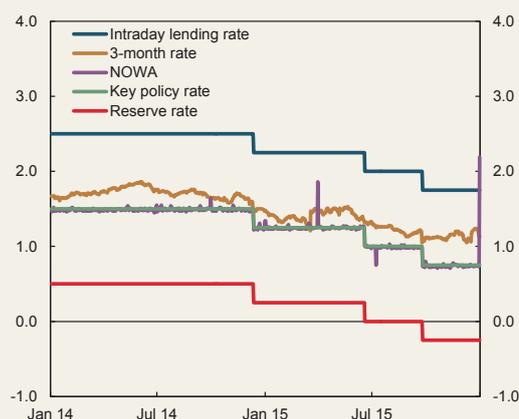
Norges Bank was mandated to manage the government's domestic borrowing on behalf of the Ministry of Finance from 1 January 2015. Norges Bank also provides account management services to the government.

### MANAGEMENT OF BANKING SYSTEM LIQUIDITY

In its conduct of monetary policy, Norges Bank manages bank reserves, i.e. banks' sight deposits with the central bank, to ensure that short-term money market rates are close to the key policy rate set by the Executive Board. To achieve this, various forms of market operations are performed whereby reserves are either supplied to or drained from the banking system by the central bank. Chart 3.1 shows developments in Norges Bank's interest rates, the overnight rate (NOWA) and the three-month money market rate.

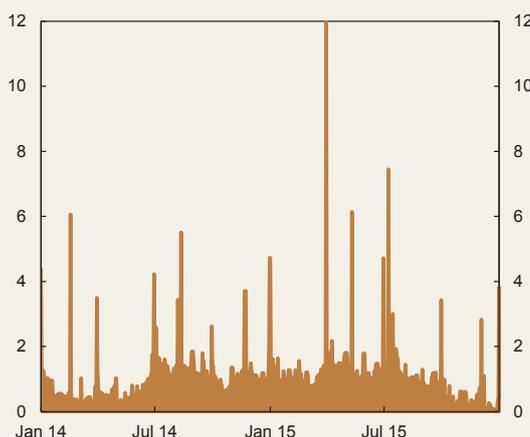
In order to steer reserves towards the desired level, Norges Bank prepares forecasts of structural liquidity in the banking system. Structural liquidity refers to total deposits in the banking system on account at Norges Bank before the supply or withdrawal of reserves through market operations. Structural liquidity is influenced by current incoming and outgoing payments over the government's account in Norges Bank, government borrowing transactions, Norges Bank's transactions in the foreign exchange and government securities markets and changes in the volume of notes and coins in circulation. Norges Bank conducts market operations to ensure that

CHART 3.1 Norges Bank's interest rates and short-term money market rates (1-day and 3-month money market rates). Nominal rates. Percent. 1 January 2014 - 31 December 2015



Source: Norges Bank and Bloomberg

CHART 3.2 Reserve deposits in Norges Bank. In billions of NOK. 1 January 2014 - 31 December 2015



Source: Norges Bank

total reserves in the banking system remain stable at the desired level.

In 2015, Norges Bank sought to maintain bank reserves at an average of NOK 35bn with a target range of  $\pm 5$ bn around this level. When structural liquidity rises above the target range, Norges Bank offers banks F-deposits to reduce reserves to the desired level. Similarly, when structural liquidity falls below the target range, banks are offered F-loans (against collateral in the form of approved securities). F-loans and F-deposits are loans and deposits that cannot be repaid or drawn on prior to maturity and are extended to banks established in Norway. The interest rate is usually determined by multi-price auction. Maturities vary from one day to several weeks and depend on structural liquidity.

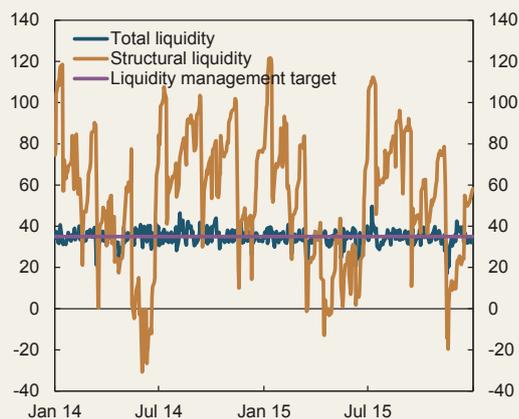
Individual banks' reserves are subject to quotas restricting their remuneration at the key policy rate. The total quota for bank reserves in 2015 was NOK 45bn. Individual quotas are calculated on the basis of banks' total assets. The banks are divided into three groups with all the banks in a group allocated the same quota, with the exception of settlement banks, which have a

larger quota. The quotas are reviewed twice a year, and Norges Bank made only minor adjustments to individual quota levels in 2015. The interest rate on deposits in excess of the quota is called the reserve rate, which is one percentage point lower than the key policy rate.

The reserve rate limits banks' demand for reserves and stimulates redistribution of reserves in the interbank market. Norges Bank conducts market operations to ensure that total reserves in the banking system do not exceed the sum of banks' quotas. Thus, a bank with reserves in excess of the quota will always be able to deposit reserves with a bank with room on its quota. No bank needs to hold reserve deposits.

When Norges Bank lowered the key policy rate from 1% to 0.75% at the monetary policy meeting in September, the reserve rate was also reduced from 0% to -0.25%. In principle, there is no reason for banks to change their behaviour when the reserve rate is negative. The cost of holding reserve deposits rather than lending them to other banks is the same as when the reserve rate was positive. Nevertheless, reserve deposits have been markedly lower since the reserve rate

CHART 3.3 Structural liquidity and total market liquidity. In billions of NOK. 1 January 2014 - 31 December 2015



Source: Norges Bank

CHART 3.4 Spread between money market rates and expected key policy rate. Percentage points. 5-day moving average. 1 January 2014 - 31 December 2015



Source: Norges Bank

became negative. In the period between 25 September 2015 and 31 December 2015, reserve deposits averaged NOK 0.39bn a day. The average for the period between 1 January and 24 September 2015 was NOK 1.27bn (Chart 3.2).

Some banks report that they are now making more effort to avoid holding deposits at the reserve rate. The cost of holding reserve deposits is perceived by these banks as higher when the reserve rate is negative. Instead of holding reserve deposits, some banks have purchased short-term government paper, lent reserves to other banks or deposited reserves as F-deposits with Norges Bank.<sup>1</sup>

### BANKS' KRONE LIQUIDITY AND NORGES BANK'S MARKET OPERATIONS IN 2015

In 2015, structural liquidity averaged NOK 51bn and varied between negative NOK 20bn and positive NOK 122bn (Chart 3.3). A total of 32 F-loan auctions and 59 F-deposit auctions were held. Total liquidity, i.e. structural liquidity plus

Norges Bank's market operations, averaged NOK 34bn in 2015.

### MONEY MARKET PREMIUMS

Premiums<sup>2</sup> on the Norwegian three-month money market rate (Nibor) averaged just above 30 basis points in 2015 (Chart 3.4).<sup>3</sup> This is somewhat higher than in 2014. The increase is likely the result of a combination of domestic and external factors.

Nibor panel banks base their daily Nibor quoting on a USD interest rate intended to reflect the banks' cost of borrowing USD in the unsecured interbank market. The USD interest rate is adjusted for the forward premium between USD and NOK. With this construction of Nibor as a currency swap rate, external factors can have a contagion effect on Norwegian money market rates.<sup>4</sup>

1 For more information on the reserve rate and Norges Bank's liquidity management, see Special Feature "The reserve rate in Norway" in the September 2015 *Monetary Policy Report*.

2 Money market rates minus expected key policy rate over the same horizon.  
 3 Premiums are unobservable based directly on market prices due to a lack of instruments in the Norwegian money market and must therefore be regarded as estimates.  
 4 Nibor is derived from a USD interest rate close to Klem and the forward points between USD and NOK. The construction of Nibor and the effects on Norwegian money market rates of various domestic and international factors are further described in *Economic Commentaries 3/15*. See also Special Feature "What explains the increase in the money market premium?" in *Monetary Policy Report 2/15*.

In 2015, the European Central Bank (ECB) decided to increase its securities purchases. This increased the supply of EUR relative to USD and raised the cost of swapping EUR for USD in the FX forward market. This indicates a higher premium in the Klieim USD interest rate, on which Nibor is based.

The forward premium between USD and NOK is influenced by the relative supply of USD and NOK. Low structural liquidity may make banks more uncertain of their own NOK liquidity situation. Periodically low structural liquidity, particularly towards the end of the year, is therefore likely to have contributed somewhat to the increase in premiums in 2015.

Norges Bank estimates and publishes the overnight rate, NOWA<sup>5</sup>. NOWA is defined as a weighted average of interest rates set in agreements concluded by banks for unsecured loans in NOK, where the loan is paid out on the same day and repayment occurs on the following banking day. On average, NOWA and Norges Bank's key policy rate were equal in 2015. The average daily reported volume of transactions for overnight interbank loans was NOK 15bn in 2015.

## COLLATERAL FOR LOANS FROM NORGES BANK

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

At end-2015, banks had a total stock of securities as collateral for loans from Norges Bank of NOK 246bn after haircuts, compared with NOK 218bn in 2014. The number of different securities approved as collateral at Norges Bank was NOK 482 at end-2015, compared with

CHART 3.5 Collateral for loans from Norges Bank 2014 - 2015. In billions of NOK



Source: Norges Bank

NOK 455 in 2014. Chart 3.5 shows banks' collateral for loans from Norges Bank in recent years.

The total loan value of collateral after haircuts was on average NOK 17bn higher in 2015 than in 2014. Haircuts, i.e. the difference between the market value and the loan value of the collateral, averaged 6.2% of the market value, about 0.7 percentage point lower than in 2014.

Norges Bank accepts collateral registered in the Central Securities Depository (VPS) and the following central securities depositories abroad: Euroclear, Clearstream, Euroclear Sweden and VP Securities in Denmark. The option of registering collateral in the two depositories in Sweden and Denmark is no longer available and the relevant agreements are being phased out.

In addition to ordinary borrowing facilities, the central banks of Denmark, Sweden and Norway allow banks to pledge deposits in one central bank as collateral for loans from one of the other central banks. This arrangement, called the Scandinavian Cash Pool (SCP), may only be used for intraday credit and allows the five participating banks to manage their liquidity more effectively across national borders. Intraday credit

<sup>5</sup> Norwegian Overnight Weighted Average

from Norges Bank through the SCP came to approximately NOK 3bn in 2015, the same level as in previous years. Collateral pledged with Norges Bank was only occasionally used for loans from another Scandinavian central bank. These intraday loans also averaged approximately NOK 3bn.

In 2014, Norges Bank entered an agreement with Vermeg, a Tunisian supplier, for a new ICT solution for calculating and managing the loan value of banks' collateral for loans. Work to prepare the new system for operation took place through 2015 and the system became operational in January 2016. The new system will involve more automated processes and be more standardised than the previous system.

In connection with the introduction of the new ICT system, Norges Bank will make minor changes to the regulations regarding collateral for loans in order to reduce risk and to make the rules clearer and more straightforward. The new rules were circulated for comment in autumn 2015.

## INVESTMENT MANAGEMENT

At the end of 2015, Norges Bank managed assets amounting to NOK 7 943bn in international capital markets. The assets primarily comprise the GPFG, which is managed on behalf of the Ministry of Finance. The Bank also manages its own foreign exchange reserves. Performance reports are published on Norges Bank's website.

## FOREIGN EXCHANGE RESERVES

Norges Bank's foreign exchange reserves are to be available for use in the conduct of monetary policy, to promote financial stability and to fulfil Norges Bank's international commitments to the IMF or individual countries. Norges Bank's Executive Board issues principles for the management of the foreign exchange reserves and has delegated responsibility for issuing supplementary guidelines to the governor of Norges Bank. The reserves are divided into a long-term portfolio, a money market portfolio and a petro-

leum buffer portfolio. The long-term portfolio is managed by Norges Bank Investment Management, while the money market portfolio and the petroleum buffer portfolio are managed by Norges Bank Markets and Banking Services.

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

The petroleum buffer portfolio accepts the government's cash flow from petroleum activities in foreign currency and any transfers from the GPFG. The portfolio's purpose is to ensure that the government's foreign currency and NOK conversion needs are handled appropriately. The petroleum buffer portfolio is invested in short-term fixed income instruments. No benchmark index has been set for the petroleum buffer portfolio.

The market value of the foreign exchange reserves was NOK 468.2bn at the end of 2015. Equities and long-term fixed income investments totalled NOK 411.1bn, while money market investments came to NOK 50.3bn and the petroleum buffer portfolio to NOK 6.8bn. The value of the foreign exchange reserves increased by NOK 19.6bn through the year, primarily as the result of returns and the depreciation of the krone. The return in foreign currency increased the value of the reserves by NOK 12.8bn and the depreciation of the krone increased the value by NOK 53.7bn. In 2015, the foreign exchange reserves had a net outflow of NOK 47.1bn.

The petroleum buffer portfolio is not part of the foreign exchange reserves, which are held for crisis management purposes. Transfers to the GPFG have been smaller than expected for a period and the petroleum buffer portfolio has therefore become larger than necessary. In 2015, Norges Bank gradually reduced the size of the portfolio by selling foreign exchange in the market. Norges Bank seeks to maintain the petroleum buffer portfolio at NOK 5bn-10bn at the end of every year. Through 2015, the portfolio had a net outflow of approximately NOK 48bn, primarily resulting from foreign exchange sales to the market. The foreign exchange reserves are held for crisis management purposes.

Changes in value in NOK terms are thus of secondary importance. Movements in the krone exchange rate will primarily affect Norges Bank's equity and will not affect the Bank's ability to meet foreign currency commitments. Returns are therefore measured in foreign currency in the sections below, unless otherwise specified. The petroleum buffer portfolio, which is not held for crisis management purposes, is excluded from the measurement of return.

The overall return on the foreign exchange reserves was 1.67% in 2015. The return on equity investments was 3.46% and the return on long-term fixed income investments was 0.78%. The return on money market investments was 0.06%.

Equity investments outperformed the benchmark index by 0.03 percentage point, while the return on fixed income investments was 0.15 percentage point lower than the benchmark return for the period. Money market investments outperformed the benchmark by 0.02 percentage point in the period.

Over the past 10 years, the annualised return on the foreign exchange reserves has been 5.27%.

## CLAIMS ON THE IMF

The IMF requires contributions from member countries according to the member country's relative size in the global economy. The contribution is also called a quota. The quota deter-

mines a member's voting power in the IMF, the member's share in allocations of SDRs and the amount of financing the member can obtain from the IMF. Up to 25 percent must be paid in SDRs or widely accepted currencies, while the rest is paid in the member's own currency. Norway's quota at 31 December 2015 was NOK 23 072m (SDR 1 884m).

SDRs<sup>6</sup> have been allocated to member countries based on the size of their IMF quotas on several occasions, most recently in 2009. Member countries can change their SDR holdings through transactions with the IMF or by buying from or selling to member countries willing to be counterparties in SDR transactions. Norges Bank has volunteered to be such a counterparty up to a limited amount. In addition, members with a strong external position can be designated by the IMF to buy SDRs from members with weak external positions, although the IMF has never made use of this mechanism. Norges Bank's SDR holdings amounted to NOK 18 449m (SDR 1 506m) at 31 December 2015, which is lower than Norway's allocation (SDR 1 563m).

Norges Bank has provided funds to the IMF or to trusts managed by the IMF through the following facilities:

- loans under the New Arrangements to Borrow (NAB)
- bilateral loans to the IMF
- loans to the Poverty Reduction and Growth Trust (PRGT)

The primary source of funding for the IMF's loans to countries experiencing payment problems is member countries' quotas. In addition, the IMF finances its lending by borrowing from wealthy member countries through the NAB. A total of 38 countries, including Norway, participate in the NAB. Norges Bank's loans to the IMF through the NAB totalled NOK 4 619m (SDR 377m)

<sup>6</sup> Special Drawing Rights - SDR - is an international reserve asset, created by the IMF in 1969. Its value is based on a basket of four key international currencies, the US dollar, euro, pound sterling and Japanese yen. The weights of the currencies in the SDR basket are reviewed every five years.

at 31 December 2015. Norges Bank has pledged a total of SDR 3 871 to the NAB, equivalent to NOK 47 411m at 31 December 2015.

In December 2011, the EU member states committed to providing up to EUR 200bn in the form of bilateral loans to the IMF and urged other countries to make a similar contribution. Norway's contribution is a drawing arrangement of up to SDR 6bn, equivalent to NOK 73bn at 31 December 2015. The arrangement enables the IMF to finance loans with a maturity of up to 10 years. The IMF can draw on these loan resources if quota resources and the NAB fall below a given threshold. As at 31 December 2015, the IMF had not drawn funds under this arrangement.

The Ministry of Finance and the IMF signed an agreement in June 2010 under which Norway has pledged loans of up to SDR 300m to the Poverty Reduction and Growth Trust (PRGT), which is managed by the IMF. The PRGT is used for lending to low-income countries. Norges Bank acts as agent for Norway's loans to the PRGT and fulfils Norway's obligations pursuant to Section 25 of the Norges Bank Act. At 31 December 2015, the IMF had drawn a total of NOK 3 656m (SDR 298m) under this agreement.

## GOVERNMENT PENSION FUND GLOBAL

Norges Bank is responsible for the operational management of the Government Pension Fund Global (GPF) on behalf of the Ministry of Finance. At end-2015, the market value of the GPF was NOK 7 475bn before deduction of Norges Bank's management fee for 2015. The Ministry of Finance transferred net NOK 42bn to the GPF in 2015.

Investment management is conducted pursuant to the regulation "Mandate for the management of the Government Pension Fund Global". The Ministry of Finance has established a strategic benchmark index with a 60% allocation to equities and 40% to fixed income instruments, less the portion of the investment portfolio invested in real estate. The benchmark index reflects the

Ministry's investment strategy for the GPF and is an important basis for managing the risk associated with the operational management of the GPF and for evaluating Norges Bank's management performance. The Ministry of Finance has set limits on the extent to which the actual portfolio may deviate from the benchmark portfolio.

In 2015, the GPF posted a return of 2.7%, measured in terms of the benchmark portfolio's currency basket. This measure of return gives the best indication of the GPF's international purchasing power. Measured in foreign currency, the equity portfolio returned 3.8%, while the fixed income portfolio returned 0.3%. The return on real estate investment was 10.0%.

The return in 2015 was 0.5 percentage point higher than the return on the benchmark indices. The equity portfolio achieved an excess return of 0.8 percentage point, while the fixed income portfolio underperformed the benchmark by 0.2 percentage point.

Since 1998 the annual nominal return has been 5.6%, measured in foreign currency. Net of management costs and adjusted for inflation, the annual real return has been 3.7%.

For a more detailed presentation of investment management in 2015, see the *Government Pension Fund Global Annual Report* for 2015.

## TASKS PERFORMED ON BEHALF OF THE GOVERNMENT

### GOVERNMENT DEBT IN 2015

Under an agreement between the Ministry of Finance and Norges Bank, the Bank has for many years provided services as adviser, facilitator and payment agent in connection with raising and managing domestic government loans. This system was changed with effect from 2015. The Bank's tasks relating to government debt management were expanded.

On 2 October 2014, the Ministry of Finance laid down a new mandate for the management of

government debt. Under the mandate, Norges Bank shall issue government debt and enter into financial contracts in the area of government debt management in the name of the Ministry of Finance. The objective of government debt management is to meet the government's borrowing requirement at the lowest possible cost. The Bank shall take into account the government's interest rate risk and seek to maintain a liquid yield curve for government securities with a maturity of up to 10 years. Each year, the Ministry shall set an upper limit for gross borrowing volume and a minimum time to refixing. Within this framework, the Bank shall issue an annual borrowing programme divided into bills and bonds and containing a calendar for debt issues. The Bank shall lay down principles for measuring and managing counterparty exposure and operational risk. Norges Bank shall regularly prepare analyses of profitability and risk associated with government debt management and performance assessments for submission to the Ministry. Both the analyses and the evaluation shall be published. The Ministry of Finance pays for the services provided by Norges Bank to the Ministry in connection with the management of government debt. The mandate entered into force on 1 January 2015.

The government's schedule for the issue of short- and long-term securities in 2015 was published in December 2014. A total of 15 auctions of government bonds and 12 auctions of short-term government paper (Treasury bills) were held in 2015. The total volume issued, excluding the government's own purchases in the primary market, amounted to NOK46bn in government bonds and NOK 65bn in Treasury bills.

The strategy for long-term government borrowing is based on maintaining a yield curve for government bonds with maturities of up to approximately 10 years. A new 10-year bond was issued in March 2015. A bond with an outstanding volume of NOK 59.9bn matured in May 2015.

According to the issue program for short-term government securities, new Treasury bills are issued on the third Wednesday of March, June,

September and December (IMM dates) with maturity on the IMM date one year later. The securities are reopened at subsequent auctions.

Government securities auctions are held using the Oslo Børs trading system. The bid-to-cover ratio, which is the volume of bids in relation to the volume allocated in the auction, averaged 2.6 for government bonds and 2.5 for Treasury bills, approximately the same as in previous years.

Norges Bank enters into agreements with primary dealers, which are under an obligation to furnish binding bid and offer prices for agreed minimum amounts in government bonds and Treasury bills on Oslo Børs. In 2015, Norges Bank entered into nine agreements with primary dealers – four for government bonds and five for Treasury bills. In March 2015, a primary dealer withdrew from the agreement for Treasury bills. In return for furnishing these binding bid and offer prices, primary dealers may borrow government securities from the government's own stock for a limited period. The lending limit for bonds and Treasury bills was NOK 8bn for each loan, equally divided between primary dealers. In addition, primary dealers have the exclusive right, but also the obligation, to participate in auctions of government securities.

The government has used interest rate swaps in its domestic debt management since June 2005. An interest rate swap is an agreement between two parties to exchange future interest payments associated with a given principal. Use of interest rate swaps gives the government the flexibility to change the average time to refixing of the debt portfolio without changing its borrowing strategy. The Ministry of Finance has entered into framework agreements with several counterparties. Norges Bank enters into interest rate swaps on behalf of the Ministry of Finance. At end-2015, the average time to refixing for government debt (including the government's own stock) was 4.2 years. If existing interest rate swaps are taken into account, the time to refixing was 3.6 years. One reason for entering into interest rate swaps has been the expectation that borrowing costs are lower in

the short-term than in the long-term. The evaluation of market conditions in 2015 indicated that expected savings from reducing refinancing of government debt was limited. For this reason, no new interest rate swaps were entered into in 2015.

Total government domestic debt securities registered in the Central Securities Depository (VPS) at end-2015 amounted to NOK 423.7bn calculated at face value (including the government's own stock). Foreign investors hold approximately 52%, while life insurance companies and private pension funds hold approximately 8% of total government debt securities. For government bonds, the proportion of holdings is 63% for foreign investors and 5% for life insurance companies and private pension funds.

Norges Bank informs the Ministry of Finance about government debt management at quarterly meetings. Quarterly reports are published in connection with the meetings. Strategy and borrowing programmes for 2016 were published in December.

## ACCOUNT MANAGEMENT FOR THE GOVERNMENT

Norges Bank's tasks relating to the management of the central government's liquid assets and debt in NOK are performed pursuant to the Norges Bank Act and are regulated by means of agreements between Norges Bank and the Ministry of Finance.

Government liquidity accumulates daily in the government's sight deposit account. At end-2015, government agencies had a total of 949 accounts with Norges Bank. The sum of the amounts in these accounts constitutes the balance of the government's sight deposit account. The government receives interest on these funds. In addition, the Ministry of Finance also sets internal interest rates for certain government-owned funds and deposits. The government represented by the Ministry of Finance pays an annual fee to cover the costs of the services performed for the government by Norges Bank.

Norges Bank has contracted with EVRY Norge AS to provide ICT services for the account system. Following a public tender process in 2014, Norges Bank entered into a new contract with EVRY Norge AS in 2015 for the provision of services for the account system from 2016.

Account management services for the government at Norges Bank continued to be stable in 2015.

Actual payment services for the government are performed by banks by agreement with the Norwegian Government Agency for Financial Management (DFØ) on payment and account services for the government. DNB Bank ASA, Nordea Bank Norge ASA and SpareBank 1 Alliance have such agreements. Norges Bank has agreements with these banks specifying how government funds are to be transferred daily between the banks and Norges Bank.

## TRANSFERS TO THE GPFG

Transfers to the Government Pension Fund Global (GPFG) are conducted by Norges Bank on behalf of the government. The transfers are conducted on a monthly basis in foreign currency and are primarily covered by revenues in foreign currency from the State's Direct Financial Interest (SDFI). Any additional foreign exchange required to cover the monthly transfers is purchased in the foreign exchange market. Norges Bank did not make foreign exchange purchases in the market in 2015. If foreign exchange from the SDFI exceeds the transfers to the GPFG, Norges Bank sells the surplus amount in the market. Norges Bank started selling foreign exchange in the market in October 2014. The daily foreign exchange sales/purchases are fixed for a month at a time and are announced on the final working day of the previous month. Norges Bank's foreign exchange sales/purchases may vary somewhat from month to month.

In the period from January to December 2015, Norges Bank's foreign exchange sales in the market totalled NOK 162.2bn. Transfers from the SDFI amounted to the equivalent of NOK 157.0bn.

## CHAPTER 4

# PAYMENT SYSTEMS, BANKNOTES AND COINS

Norges Bank settles interbank payments in banks' accounts at Norges Bank and supplies society with banknotes and coins in a manner that promotes payment system efficiency. Norges Bank also oversees the payment systems and securities settlement systems, which together constitute the financial infrastructure. The aim is to strengthen financial stability by promoting the robustness and efficiency of payment and settlement systems.

The Norwegian payment system and other financial infrastructure functioned effectively in 2015. Except for a brief disruption towards the end of the year, Norges Bank's settlement system remained stable in 2015. An average of NOK 219bn per day was settled in the settlement system. Since November 2015, Norges Bank has had access to an enhanced contingency solution for the settlement system in addition to the operational and back-up solutions already in use. Work to develop the new series of banknotes continues according to schedule. In 2015, activity was mainly focused on finalising and transforming the designs to be suitable for use on banknotes.

### OVERSIGHT OF FINANCIAL INFRASTRUCTURE

Two interbank systems are licensed by Norges Bank under the Payment Systems Act: the Norwegian Interbank Clearing System (NICS) and the interbank system operated by the private settlement bank DNB Bank ASA. The system operated by the private settlement bank SpareBank 1 SMN is exempt from the licensing requirement.

Clearings from NICS are settled in Norges Bank for banks with settlement at the central bank. Once settlement has been carried out at Norges

Bank, DNB Bank ASA and SpareBank 1 SMN perform settlement with their participant banks. The basis for Norges Bank's supervision of licensed interbank systems includes reporting requirements and supervisory meetings.

Norges Bank also oversees the securities settlement system. In this context, the Bank cooperates with Finanstilsynet (Financial Supervisory Authority of Norway), which supervises Verdipapirsentralen ASA (the Norwegian central securities depository). As there are no longer any central counterparties (CCPs) headquartered in Norway, Norwegian authorities no longer have primary responsibility for supervision and over-

sight of any CCPs. Norwegian market participants can still be vulnerable to CCP failures abroad. Norges Bank therefore emphasises participation in colleges of authorities that monitor and supervise CCPs operating across multiple countries.

Norges Bank is also a member of the oversight group for CLS Bank, an international bank specialised in the settlement of foreign exchange transactions. The group is chaired by the US Federal Reserve.

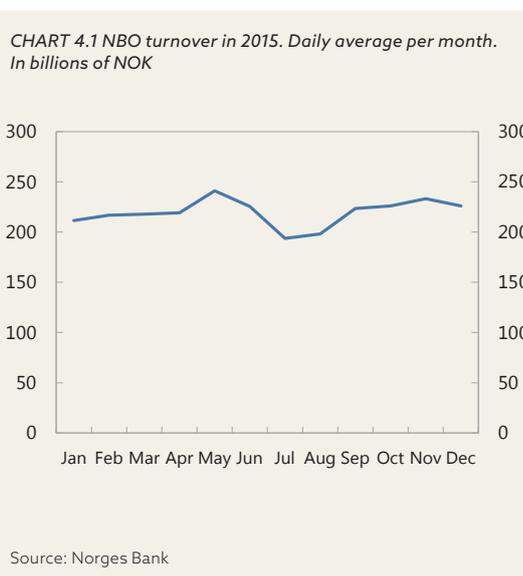
In Norges Bank's assessment, the financial infrastructure in Norway is on the whole robust and efficient. There were few disruptions in interbank systems and securities settlement systems in 2015. In the 2015 Financial Infrastructure Report, Norges Bank evaluated each Norwegian system against new international principles from the Committee on Payments and Market Infrastructures (CPMI) in the Bank for International Settlements (BIS) and the International Organization of Securities Commissions (IOSCO). The evaluations were based on owners' self-assessments. The evaluation of the securities settlement systems was conducted by Norges Bank in collaboration with Finanstilsynet. In Norges Bank's view, the Norwegian payment and settlement systems are in line with most of the principles from CPMI-IOSCO. There were some deficiencies, including with regard to the principles concerning governance, operational risk and indirect participation. Owners' measures to correct these deficiencies are followed up by Norges Bank.

In the 2015 *Financial Infrastructure Report*, Norges Bank also discusses developments in the financial infrastructure and the Bank's oversight of individual systems. The Bank highlights issues such as challenges related to contingency arrangements, outsourcing, management of risks associated with CCPs, the efficiency of the retail payment system, and new payment methods. An article in the Norges Bank Papers series, "Developments in retail payment services", contains statistical data on developments in this area.

## NORGES BANK'S SETTLEMENT SYSTEM

Norges Bank is the ultimate settlement bank for interbank payments in Norway. This task is related to Norges Bank's responsibility under the Norges Bank Act to promote an efficient payment system in Norway and vis-à-vis other countries, and to banks' right to hold accounts and raise loans at Norges Bank. Because the central bank issues money, central bank deposits do not involve credit or liquidity risk for banks. The interest rate on central bank deposits therefore provides a basis for interest rate formation throughout the economy.

All banks in Norway are entitled to have an account with Norges Bank. At the end of 2015, 129 banks had such an account, compared with 131 in 2014. Of these, 23 banks participated directly in payment settlement in Norges Bank's settlement system (NBO). The other banks used their account for payments primarily related to loans and deposits at Norges Bank. CLS Bank has an account that is used for daily settlement of the krone leg of foreign exchange trades within the international system for settlement of such trades. The Swiss company SIX x-clear AG is a CCP in trades in financial instruments and has an account with NBO for daily settlement of



interbank positions. Two central banks and the Bank for International Settlements (BIS) also have accounts with NBO. Two banks and the Norwegian Banks' Guarantee Fund have agreements for contingency accounts that can be activated by Norges Bank should the account holder so request.

In 2015, an average of NOK 219bn per day was settled in Norges Bank's settlement system. Chart 4.1 shows turnover in Norges Bank's settlement system throughout 2015.

At the end of 2015, banks had sight deposits and reserve deposits totalling NOK 35.2bn. Banks' overnight loans in Norges Bank (D-loans) totalled NOK 0.7bn.

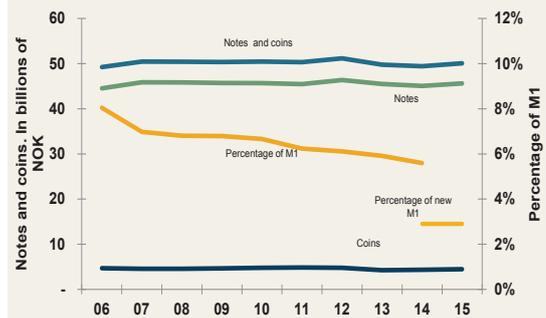
ICT operating services for the settlement system are provided by EVRY Norge AS, and software is provided by the Italian company SIA S.p.A. Apart from a brief disruption towards the end of the year, operation of the settlement system remained stable in 2015.

Banks pay for the settlement services provided by Norges Bank, and prices are set to cover the relevant costs of providing the services. There was no change in prices between 2014 and 2015, and revenues came to around NOK 54m in 2015. For 2016, Norges Bank has set new prices, where some specific services are no longer priced separately but are now incorporated into the standard account maintenance rate.

In 2015, Norges Bank contracted with SWIFT SCRL on access to an enhanced contingency solution for settlement system operation. This solution supplements the operating and back-up solutions already in use.

Along with the central banks of Denmark, Iceland and Sweden, Norges Bank participates in a Nordic forum for the exchange of experience concerning settlement systems and solutions for banks' collateral for loans from central banks. As from 2015, the Bank of England also participates in this collaboration. Norges Bank also participates in an international collaboration with a number of central banks and other key

CHART 4.2 Cash in circulation 2005 - 2014



Source: Norges Bank

participants to promote robust contingency solutions in systemically important payment and settlement systems.

## BANKNOTES AND COINS

The value of banknotes and coins in circulation has remained at the same level for a long period. The annual average for 2015 was about NOK 50.1bn (see Chart 4.2), which is NOK 0.7bn higher than in 2014. The value of notes and coins in circulation relative to the total value of means of payment used by the public (M1) continues to slowly decline.

The value of notes in circulation averaged NOK 45.6bn in 2015, an increase of NOK 0.6bn on the previous year. The value of coins in circulation averaged NOK 4.5bn in 2015, a slight increase since 2014.

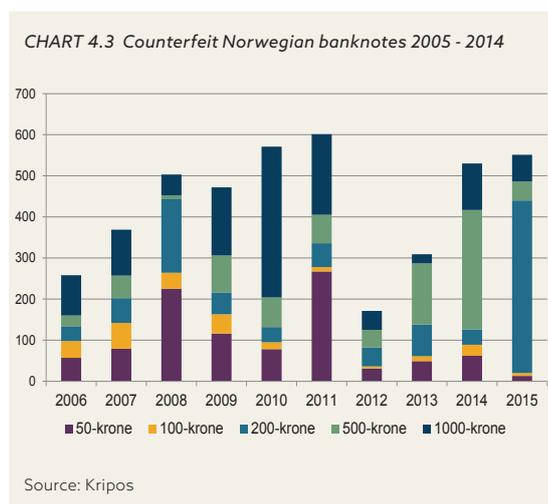
Statistics Norway published new monetary statistics in 2015; pre- and post-April 2015 figures are therefore not comparable. The statistics now adhere to the ECB definition of monetary aggregates.

## COUNTERFEIT NORWEGIAN BANKNOTES

The number of counterfeit banknotes seized in Norway is low (see Chart 4.3). In 2015, 551 notes

were seized, corresponding to approximately 4 counterfeit notes per million notes in circulation. This figure is very low compared with other countries. The corresponding figure for euro area countries is around 50.<sup>1</sup> The quality of most counterfeits is poor, making them easy to recognise using the security elements designed for the general public.

1 Source: ECB press release published on 22 January 2016.

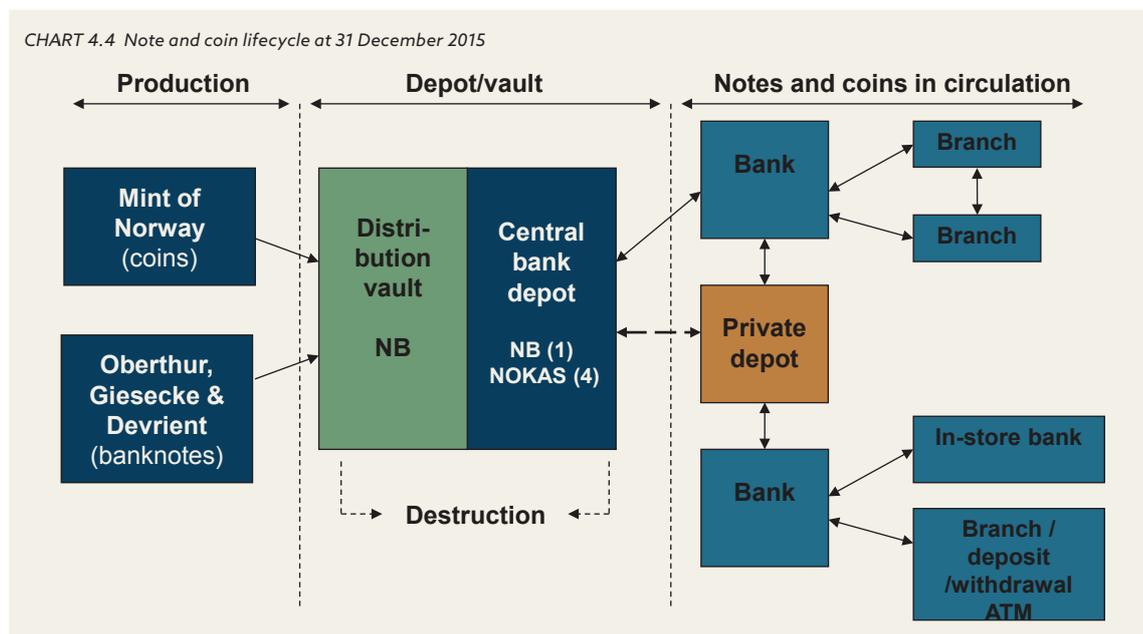


## ORGANISATION OF CASH DISTRIBUTION

Under the Norges Bank Act, Norges Bank is responsible for issuing banknotes and coins. This involves both ensuring the production of sufficient volumes to meet the general public's cash requirements and making these means of payment available. Norges Bank supplies banks with cash from five central bank depots and the banks are responsible for further distribution to the general public. The central bank is also responsible for the quality of banknotes and coins in circulation and facilitates the withdrawal and destruction of worn and damaged notes and coins.

One of the objectives of Norges Bank's cash handling activities is to promote the efficiency of cash distribution and of the payment system as a whole. Various measures have been implemented over time to ensure the optimal division of responsibilities and duties between participants and a clearer distinction between different types of services.

The Norges Bank Act grants Norges Bank the exclusive right to issue banknotes and coins. Norges Bank must function as debtor for these



means of payment. Although production, destruction and distribution may be performed by others, Norges Bank must ensure that these operations are carried out in accordance with its requirements. To facilitate interbank distribution of notes and coins, an arrangement has been introduced whereby, on certain conditions, banks receive interest compensation for cash holdings in private depots. At the end of 2015, there were a total of 13 private depots in Norway. The depots are operated by NOKAS Kontanthåndtering AS (NOKAS) and Loomis Norge AS. Thus, Norges Bank now has a wholesaler role and banks are responsible for the interbank distribution of cash.

Norges Bank has outsourced a number of cash handling operations (see Chart 4.4). Banknotes and coins are produced by external suppliers. The operation of Norges Bank's central bank depots in Stavanger, Bergen, Trondheim and Tromsø has been outsourced to NOKAS, which also destroys worn-out notes on behalf of Norges Bank. Many banks have also outsourced some of their cash handling activities and meet their obligations to customers through in-store banking instead of traditional branches.

Norges Bank is responsible for the operation of the central bank depot in Oslo. The Bank also organises destruction and other control functions relating to the receipt and despatch of banknotes and coins.

#### COMMEMORATIVE COIN ISSUES

Norges Bank issues commemorative coins in gold and silver pursuant to Section 16 of the Norges Bank Act and special edition circulation coins pursuant to Section 13 of the Norges Bank Act, which is the general legal basis for issuing coins. The Norges Bank Act confers the power to issue coins upon the Council of State under Section 16 of the Act. Decisions in each case

*The anniversary motif was designed by painter and graphic artist Christopher Rådlund. It depicts one of the pair of lions flanking the main steps to the Supreme Court lobby. Lars Utne (1862–1922) sculpted the original lions which were cast in brass. The lion motif is a recurring theme throughout the Supreme Court building.*

*The obverse is the royal portrait of Harald V, as used on many special edition circulation coins in recent years. It was created by designer Ingrid Austlid Rise at Mint of Norway.*





have now been delegated through the Ministry of Finance to Norges Bank.

In 2015, Norges Bank issued a special edition 20-krone circulation coin to commemorate the bicentenary of the founding of the Supreme Court of Norway.

The year 2017 marks the 100-year anniversary of the first Sami National Assembly held in Trondheim. To mark the occasion, Norges Bank will issue a special edition 20-krone circulation coin.

### NEW BANKNOTE SERIES

Norges Bank began work to develop a new banknote series in early 2013, prompted by the need to enhance the security of Norwegian banknotes to maintain counterfeit resilience. This will be done by incorporating new security elements, both for visual authentication by the public and automated authentication by vending machines, etc.

Norges Bank will release the new banknote series into circulation in three stages. The 100-krone and 200-krone notes will be launched first. These two denominations will be put into circulation at the earliest in 2017 Q2. The 50-krone and 500-krone notes will follow at the

earliest one year later. The 1000-krone note will be issued last and is scheduled to be in circulation by the end of 2019. This issuance schedule is still highly tentative and release dates may be revised.

As new values enter circulation, old notes will remain legal tender for a limited time period. Thus the old and the new banknotes will circulate in parallel during a transitional phase.

The winning motifs in the design competition for the new banknote series were announced in October 2014. In 2015, the focus was on transforming the designs into keyline drawings and integrating and designing the security elements. These specialist processes are what make banknotes such an advanced and unique product.

A successful test print of the new 100-krone note was conducted in autumn 2015 and this denomination is scheduled to be put into production before summer 2016. Completion of the work to transform the design of the 200-krone banknote is progressing according to plan, and production is scheduled for autumn 2016. To ensure that the new banknotes work in vending machines and ATMs, they must be available for testing well before the formal launch.

## CHAPTER 5

# INTERNATIONAL COOPERATION

Norges Bank participates in international cooperation through several channels, such as the Bank's active participation in financing schemes and agreements with the International Monetary Fund (IMF), which promotes global economic and financial stability by monitoring and providing advice about economic policy and by providing financing in emergencies. Norges Bank also holds shares in the Bank for International Settlements (BIS). The Bank has extensive contact with central banks in other countries and with international organisations.

### INCREASED QUOTAS AND CREDIT AGREEMENTS WITH THE IMF

The main source of funding for the IMF's lending activities is quota subscriptions paid by member countries. The IMF can also, as needed, supplement its quota resources by borrowing from member countries. The IMF has standing borrowing arrangements known as "New Arrangements to Borrow" (NAB), which has 38 participant countries, including Norway. In the event of further funding needs, the IMF can also enter into supplementary bilateral loan agreements with individual member countries.

Following the financial crisis the IMF has substantially strengthened its lending capacity. In 2010, member countries agreed to double the IMF's quota resources. The increase in quotas was subject to ratification by member countries and the majority required to implement the change could not be reached without ratification by the US. The US informed the IMF that it had ratified the increased quota in January this year. Norway's quota increased from SDR<sup>1</sup> 1 884m to SDR 3 755m.

The NAB was expanded tenfold in the aftermath of the financial crisis. When the quota increase became effective, the volume of the arrangement was reduced by an amount approximately corresponding to the increase in quotas. In Norway's case, participation in the NAB was reduced from SDR 3 871m to SDR 1 967m. As of year-end 2015, the IMF had drawn SDR 377m. The Ministry of Finance acts as Norway's contracting party in the NAB, while Norges Bank administers Norway's participation and provides foreign exchange reserves under Section 25 of the Norges Bank Act.

The IMF also has provisional drawing arrangements with several member countries, including Norway. In October 2012, Norges Bank granted the IMF a drawing arrangement of SDR 6bn, or just over NOK 73bn (exchange rate at 31 December 2015). Initially, the loan had a drawing period of two years, but has twice been extended by one year and will continue until November 2016. At 31 December 2015, the IMF had not drawn on this loan. The loan is to be drawn only if resources from the quotas and the NAB fall below a given threshold.

In June 2010, the Ministry of Finance entered into an agreement with the IMF to pledge up to

<sup>1</sup> 1 SDR was equivalent to NOK 12.21 at 31 December 2015.

SDR 300m in loan resources to the IMF's borrowing facilities for low-income countries. Pursuant to Section 25 of the Norges Bank Act, the Ministry of Finance requested that Norges Bank meet Norway's commitments under the agreement by making funds available through transfers of foreign exchange reserves. As at 31 December 2015, the IMF had drawn SDR 298m under the agreement. In November 2015, the IMF urged Norway to increase lending to these arrangements by SDR 300-500m. The matter is under consideration by the Ministry of Finance.

Norway's total commitments to the IMF at 31 December 2015 were SDR 12bn (around NOK 147bn). In SDR terms, these commitments were largely unchanged from the previous year, but the lower krone exchange rate resulted in a substantial increase in NOK terms.

The risk associated with loans to the IMF is very low, among other reasons because of the conditionality in the IMF's adjustment and stabilisation programmes. In addition, IMF claims have precedence over claims from other creditors. The IMF has never realised a loss on loans under its general lending programmes. Since all claims are against the IMF, Norway has no credit exposure to third countries in connection with these loans.

## REGULAR CONTACT AND COOPERATION WITH OTHER CENTRAL BANKS AND INTERNATIONAL ORGANISATIONS

Norges Bank has shares in 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 also a research body and discussion forum for its member banks. The Governor of Norges Bank regularly attends meetings of the BIS.

Pursuant to section 25 of the Norges Bank Act, Norges Bank shall administer Norway's financial rights and meet the commitments ensuing from membership of the IMF. Norges Bank has been tasked by the Ministry of Finance to be responsible for day-to-day IMF work in Norway. Norway's policy position on matters to be brought before the IMF Executive Board is decided by the Ministry of Finance on the advice of Norges Bank. A chapter in the Government's *Financial Markets Report* contains an account of important matters and events relating to IMF activities, with emphasis on the past 12-18 months.

The highest decision-making body of the IMF is the Board of Governors. In 2015, Norway was represented by the Governor of Norges Bank, Mr Øystein Olsen. In February 2015, Secretary General at the Ministry of Finance, Mr Hans Henrik Scheel, replaced Secretary General Svein Gjedrem as his alternate. The Board normally meets once a year at the Annual Meeting of the



IMF. Apart from this meeting, voting by the Board of Governors takes place by ballot. An IMF Executive Board consisting of 24 executive directors is responsible for day-to-day business. The five Nordic and three Baltic countries comprise a single constituency with a joint representative on the Board. The post of executive director is rotated among the Nordic and Baltic countries. Norway held the position for the period 2013-2015. Starting in January this year, Sweden has the position for a four-year term.

The countries in the Nordic-Baltic Constituency (NBC) coordinate their views to arrive at a consensus position, which the board member representing the Constituency then presents to the IMF Executive Board. The country whose turn it is to hold the position of executive director is responsible for the daily coordination of the views of the NBC on matters to be brought before the IMF Executive Board. The Nordic-Baltic Monetary and Financial Committee (NBMFC) provides policy guidance for the work of the NBC. The Norwegian members are the secretary general of the Ministry of Finance and the deputy governor of Norges Bank. The other countries are represented at a comparable level. The NBMFC normally meets twice a year.

The International Monetary and Financial Committee (IMFC) has a key function as an advisory body to the Executive Board of the IMF. The IMFC meets twice a year. The Committee provides policy guidelines for the activities of the IMF. The IMFC's members are ministers or central bank governors who represent either a country or a multi-country constituency. Latvia and Norway represented the Nordic-Baltic Constituency at the IMFC meetings in April and October 2015, respectively.

An important part of the IMF's activities involves monitoring economic developments in member countries and globally, with particular emphasis on macroeconomic conditions and financial stability. Bilateral surveillance is mainly conducted through Article IV consultations, which take place

annually for most countries. The report from the Article IV consultation with Norway in 2015 was discussed by the Executive Board of the IMF on 5 September 2015. The report and the conclusions of the Executive Board's discussions were published on 9 September.

The IMF has for many years conducted comprehensive assessments of the financial sector in member countries, known as Financial Sector Assessment Programs (FSAP). An FSAP was conducted for Norway in 2005. In December 2013, the IMF decided that FSAP assessments would be conducted every five years, including for countries such as Norway, which was assessed to have a systemically important financial sector. At the same time, the IMF decided to hold annual Article IV consultations with Norway, following a long period of biannual consultations. From summer 2014, the IMF worked on a new FSAP assessment of Norway's financial sector, which was published at the same time as the report from the Article IV consultation for 2015.

Norges Bank cooperates extensively with the other Nordic central banks. The annual meeting of Nordic central banks in 2015 was organised by Norges Bank. Staff from various central bank departments meet at regular intervals to discuss issues relating to economic analysis, monetary policy, financial stability, payment systems, legal matters concerning central banks, human resources policy, etc. Norges Bank also has regular contact with the European Central Bank (ECB) and other central banks in EU member states.

Following the most recent financial crisis, the EU has strengthened its monitoring of potential threats to financial stability by establishing new supervisory authorities for microprudential supervision of banks, securities markets and insurance/ occupational pensions, and a body tasked with macroprudential oversight of the financial sector, the European Systemic Risk Board (ESRB). The microprudential supervisory authorities have the power to take decisions that are binding on national supervisory authorities or that can apply directly to private agents.



Both the Constitution of Norway and the EEA Agreement place restrictions on the incorporation of such regulations into the EEA Agreement. In 2014, EEA/EFTA and EU member states reached agreement on limited cooperation that may resolve these challenges, as reported in Norges Bank's *Annual Report* for 2014. Norway is an informal observer in the ESFS by virtue of Finanstilsynet's status as Norwegian observer in the microprudential supervisory authorities. Norges Bank has also taken part in meetings of the microprudential supervisory authority for the banking sector, the European Banking Authority (EBA). The Bank has also participated in a working group that is seeking to develop new crisis resolution tools.

Since 2013, Norges Bank and Finanstilsynet have taken part as observers at the meetings of the Advisory Technical Committee (ATC), a subgroup operating under the ESRB that provides advice and assistance on issues within the ESRB's remit. The Bank took part in meetings held by the ATC and by several subgroups of the ATC in 2015.

The Governor of Norges Bank attends meetings of the Financial Stability Board Regional Consultative Group for Europe, along with the Director General of Finanstilsynet and the Secretary General of the Ministry of Finance. The group exchanges intelligence and views between those European countries that take part in the Financial Stability Board and those who do not. In 2015, Deputy Governor Jon Nicolaisen was nominated co-chair of the group for a two-year term. The other co-chair is Deputy Governor of Banque de France, Ms Anne le Lorier.

Norges Bank takes part in a number of meetings with the other Nordic countries and the Baltic countries to discuss macroprudential oversight and regulation and issues related to financial infrastructure. Even though Norway is not represented on the Basel Committee, Norges Bank participates in the work of a subcommittee, the Research Task Force.

Norges Bank has established arrangements with the ECB, the Bank of England, the Federal

Reserve and some other central banks to afford employees the opportunity to work at these institutions for periods of up to 12 months.

## TECHNICAL ASSISTANCE TO CENTRAL BANKS IN MALAWI AND ZAMBIA

For many years, Norges Bank has provided technical assistance to central banks in developing countries. In 2011, Norges Bank assumed responsibility for the IMF's technical assistance to the Bank of Zambia. Norges Bank's assistance is administered by the IMF, but funded by the Norwegian Ministry of Foreign Affairs.

The contribution by Norges Bank is equivalent to 1.5 full-time employees (FTE), of which 1 FTE is for an on-site adviser and 0.5 FTE is for experts on short-term assignments. As from 10 August 2014, Senior Adviser Steinar Selnes has held the on-site post. Phase I of the project was concluded in 2012 and Phase II in August 2015. After an evaluation of the Bank's involvement, it was decided to extend the project. It will now end at the latest by 31 March 2017. The project will then have run for a total of roughly five years.

In 2015, a total of nine short-term visits were made, each of two weeks' duration. The visits covered a broad range of the Bank of Zambia's external and internal central bank tasks, including monetary policy, financial stability, payment services, cash handling and organisational development.

Norges Bank had a similar project in Malawi between 2006 and 2012. This is documented in Norges Bank's *Occasional Papers* No. 40, "Central Bank Modernization". In December 2013, an agreement was concluded between the IMF and the Norwegian Embassy in Malawi on a limited follow-up project. Norges Bank had undertaken to provide experts to the project, and in 2015, one short-term visit was conducted. The project was brought to a close at the end of 2015.

## CHAPTER 6

# RESEARCH

Research at Norges Bank provides part of the basis for the Bank's decisions. Research activities focus on monetary policy and financial stability and researchers maintain close links with the international and Norwegian research community. The quality of research at the Bank must meet the required standards for publication in peer-reviewed, recognised international and national journals.

### RESEARCH ACTIVITIES

In 2015, twelve articles and contributions were accepted for publication in peer-reviewed journals. This is fewer than in the preceding two years, which stand out as extremely productive. The decline may reflect the transition of several senior research staff into academia. The Research Council of Norway divides peer-reviewed journals into two levels, Level 1 and Level 2, with Level 2 as the highest. Of the articles by Bank economists accepted in 2015, 67% were published in Level 2 journals. This is much higher than the target of 25% set in 2007. Despite fewer published articles, the proportion in Level 2 has gone up from 35% to 67%. Topics addressed span many fields, among them monetary policy, unemployment, forecasting, the housing market, and banking and financial markets. The Norske Bank website provides an overview of recognised and published articles.

Current research activity is documented in the Norges Bank Working Papers series. Twenty-two papers were published in this series in 2015, while the average for the past three years is 23 papers. As the number of publications in the Working Papers series is often a good indicator of future contributions to international journals, indications are that Norges Bank will continue to have a high rate of publication in years to come.

Working Papers are published on the Bank's website and the Internet portals Research Papers in Economics (RePEc) and Social Sciences Research Network (SSRN). In 2015, Norges Bank's Working Papers were downloaded 1852 times from RePEc.

### CONFERENCES, WORKSHOPS AND SEMINARS

Several conferences were arranged by Norges Bank in 2015. In collaboration with BI Norwegian Business School, the Bank's Research Unit arranged the "23rd Annual Symposium of the Society for Nonlinear Dynamics and Econometrics". There were around 120 participants from many corners of the world. In collaboration with CEPR, the "Third CEPR Economic History Symposium" was held as part of the Norges Bank Bicentenary Project. The Bank also hosted the conference on "Banking and Financial Intermediation: Frictions, Regulation and Optimal Design", attended by world-leading researchers in banking and finance. Jointly with HEC Montreal and Bank of Canada, Norges Bank organised a conference on "New Developments in Business Cycle Analysis", and with Euro Area Business Cycle Network, "Econometric Methods for Business Cycle Analysis, Forecasting and Policy Simulations". Finally, two workshops were held enti-

tled "Household Debt, Credit and Demand Risk" and "Empirical Macroeconomics". The latter was co-sponsored by BI Norwegian Business School.

One workshop was held in 2015 aimed at the Bank's staff, which also included participants from academic institutions in Norway and PhD students at Nordic universities. The workshop focused on financial frictions and agent coordination in general equilibrium models. Another explored econometric methods for calculating future exchange rates. The workshops were moderated by two of the world's leading researchers in these fields, Professor George-Marios Angeletos of MIT and Professor Barbara Rossi of the Pompeu Fabra University.

In 2015, Norges Bank researchers continued to maintain their extensive contact with colleagues at universities and other central banks as part of their day-to-day activities through joint research projects, by presenting work in progress at Norwegian and international conferences and seminars and at research seminars held at Norges Bank each week.

This contact helps to disseminate research findings within the Bank

and to bolster the Bank's professional reputation in academia and among research and policy institutions. In 2014, Norges Bank arranged 42 seminars with invited lecturers who presented their research and participated in meetings and discussions with Bank staff. A complete list of invited lecturers can be found on Norges Bank's website.

In addition to giving presentations at Norges Bank, Bank researchers gave presentations at 70 international conferences and seminars in 2015. Finally it should be mentioned that a number of the Bank's researchers also hold seminars and deliver guest lectures at Norwegian universities and university colleges and serve as referees for international professional journals.

## SUPPORT FOR ECONOMIC RESEARCH AND STUDIES

The endowed chair established by Norges Bank at the University of Oslo fosters greater awareness about macroeconomics and monetary policy issues.

In 2012, Norges Bank established its PhD scholarship programme to motivate the best young Norwegian economics students to pursue doctoral studies at a top-ranked international research institution. The programme comprises up to three financial scholarships, which are awarded to students admitted to an approved institution, and hiring of research interns. The Bank's Research Unit supports these interns during the application process for approved doctoral programmes. During the 2014/2015 academic year, there were two such candidates at the Bank. Both were admitted to a top-ranked institution (University of Wisconsin and Stanford University) and thus qualified for a financial scholarship.

Norges Bank's Economic Research Fund provides financial support for researchers studying abroad or attending international conferences to present their own work and for research conferences in Norway.





## BOOK PROJECT TO MARK NORGES BANK'S BICENTENARY IN 2016

In December 2007, Norges Bank's Executive Board adopted a resolution to launch an extensive research project aiming to publish commemorative books for Norges Bank's bicentenary in 2016. Norges Bank's Bicentenary Book Project 1816-2016 will be conducted as a collaboration with contributions from Norwegian and international research communities. International experts Professor Michael D. Bordo of Rutgers University, New Jersey, and Professor Marc Flandreau, of the Graduate Institute of International and Development Studies, Geneva, are members of the Bicentenary Project Executive Committee with Norges Bank Director Jan F. Qvigstad and Director Øyvind Eitrheim.

The following four volumes will be published in 2016:

- *Norges Bank 1816–2016*
- *A Monetary History of Norway 1816–2016*
- *Central Banks at a Crossroads. What Can We Learn From History?*
- *Norges Bank 1816–2016. En historie i bilder/ A Pictorial History*

The project will serve to highlight the role of Norges Bank as a public institution from a historical perspective. Cambridge University Press will publish the two English language volumes, Fagbokforlaget the Norwegian volumes. The pictorial history is aimed at a broad readership

and will be suitable as a gift book.

The Bank has appointed Professor Einar Lie, University of Oslo, and Professor Jan Tore Klovland, Norwegian School of Economics (in collaboration with Øyvind Eitrheim of Norges Bank), as project coordinators for the first two commemorative volumes. The third will contain contributions from the conference "Of the Uses of Central Banks: Lessons from History", held at Norges Bank from 5 to 6 June 2014. The fourth book will be edited by Harald Bøhn, Øyvind Eitrheim and Jan F. Qvigstad, with Tone Svingningen commissioned as picture editor and Aud Gloppen as graphic designer.

An article was published in Norges Bank's *Occasional Papers* series in 2015 on the Bank's role in the financial sector 1945–2013 with particular emphasis on financial stability. In conjunction with the University of Oslo's Constitutional Bicentenary Project, the Bank also sponsored a three-year PhD project to re-examine the initial decades of the Bank's history. This thesis was accepted in 2014. The University of Oslo also approved a doctoral thesis on monetary and fiscal policy during and immediately after the First World War. Both theses will be published in Norges Bank's *Occasional Papers* series in 2016. In conjunction with the Bank's Bicentenary Project, three research papers in the Working Papers series were published in 2015.

## CHAPTER 7

# COMMUNICATION

Transparency and good communication are essential in enabling the Bank to execute its core tasks in a sound manner. They are vital to the effectiveness of monetary policy and for ensuring confidence that the Government Pension Fund Global (GPF) is being managed appropriately.

Norges Bank's communication must be correct, predictable, open and responsible. The Bank fulfils this obligation through active communication in the form of press conferences, speeches and lectures, publications and meetings with different groups. All essential information is published on the Bank's website.

### PRESS CONFERENCES

Media coverage can be a decisive factor in ensuring that the Bank's communication reaches the public. Press conferences are an important channel for communicating the Bank's work and the assessments of the Executive Board. All press conferences are streamed live on the Bank's website. Norges Bank held a total of 10 press conferences in 2015.

Norges Bank also holds a number of press seminars each year to enlighten journalists and provide them with more detailed information regarding the Bank's operations. Three press seminars were held in 2015: one in connection with the 2014 *Report on Responsible Investment*, one in connection with the 2015 *Financial Infrastructure Report*, and one relating to the 2015 *Financial Stability Report*.

### SPEECHES AND LECTURES

Speeches and lectures are another important channel for informing the public about the Bank's operations. They are intended to reach a

wide audience and present the Bank's core activities. The Bank's aim is to ensure a balanced geographical spread of speaking venues.

Between them in 2015, the Governor, Deputy Governor, and CEO of Norges Bank Investment Management gave a total of 32 published speeches and lectures, of which four were given abroad, 15 in Norway outside Oslo and 13 in Oslo. Audiences included economics experts, political representatives, academia, students, business sector representatives, interest organisations, the social partners (employer and employee organisations), journalists and diplomats. Speech and lecture topics varied widely and included monetary policy, financial stability, responsible investment of the GPF, and general economic issues.

The Governor's annual address, "Economic Perspectives", was attended by political representatives, business leaders, public sector representatives, journalists and academia. Other important speeches included speeches to Norges Bank's regional network and the annual hearings before the Storting's Standing Committee on Finance and Economic Affairs. The Governor



also gave a lecture at other venues, such as the London School of Economics. The Governor, Deputy Governor and CEO of Norges Bank Investment Management also gave speeches at conferences arranged by Norges Bank.

The *Monetary Policy Report* was presented to the financial sector and market participants in London. In addition, Norges Bank staff spoke regularly on topics related to the Bank's operations.

## NORGES BANK'S WEBSITE AND SOCIAL MEDIA

Norges Bank's website is the Bank's primary channel of communication, enabling the Bank to provide open and easily accessible information. The website contains news and information on the Bank's activities, as well as background material relating to the Bank's analyses and decisions.

Norges Bank makes active use of social media channels such as Twitter, YouTube, Flickr, LinkedIn and Instagram. The Bank has also created three Facebook pages, one for recruitment, one for the new banknote series and one for the Bank's bicentenary. Using these channels allows the Bank to reach a greater number and a wider range of target groups than through traditional channels.

## PUBLICATIONS

Norges Bank issued the following publications in 2015 (in Norwegian and English unless otherwise specified):

- Norges Bank's Annual Report
- Government Pension Fund Global Annual Report
- Report on responsible investment
- Monetary Policy Report with financial stability assessment (4)
- Government Pension Fund Global Quarterly Report
- Financial Stability Report (1)
- Financial Infrastructure Report (1)
- Årsrapport om oppgjerssystemet til Noregs Bank [Annual report on Norges Bank's settlement system] (Norwegian only)
- Årsrapport om setlar og myntar [Annual report on banknotes and coins] (Norwegian only)
- Norges Bank's Survey of Bank Lending (quarterly) (4)
- Noregs Banks pengemarknadsundersøking (1) [Norges Bank's money market report] (Norwegian only)
- Regional network report (quarterly, English version includes national summary only) (4)
- Månadsrapportar om Noregs Banks oppgjerssystem og tryggleik for lån [Monthly reports on Norges Bank's settlement system and collateral for loans] (Norwegian only)
- Norges Bank's foreign exchange reserves (quarterly) (4)
- Norges Bank Papers (5)
- Staff Memo (5)
- Working Papers (22)
- Economic Commentaries (5)
- NBIM Discussion Notes (5)
- Asset Manager Perspective (3)
- Position Papers (2)
- Expectations Documents (3)



## ESTABLISHMENT OF THE NORGES BANK EDUCATION CENTRE

In connection with the bicentenary celebration in 2016, Norges Bank will take an important further step in the development of shared communications and knowledge by establishing the Norges Bank Education Centre at the Bank's headquarters in Bankplassen in Oslo.

The Education Centre will be a permanent arena for learning through experience, where the relationships between the Bank's tasks and the 200-year long history of Norges Bank will be communicated through interactive installations.

The principal installation will be a Role Play in Four Acts, where players are asked to solve key issues linked to the functions of Norges Bank. Here are some examples of relevant issues:

- What is money and what needs to be in place for money to work?
- What role do banks play in the economy, and what is the relationship between banks and the central bank, and how can the authorities counteract financial instability?
- How does the central bank's policy rate work and what factors does the central bank take into consideration when setting the key policy rate?
- What does it mean to invest large financial assets globally and what considerations are important in order to safeguard the wealth for future generations?

The principal audience for the Education Centre is high school students. Visits can also be tailored for other groups subject to capacity.

# APPENDIX

## GOVERNING BODIES, MANAGEMENT AND ORGANISATION 2016

### EXECUTIVE BOARD

#### **Øystein Olsen**, Chair

Appointed Governor of Norges Bank from 1 January 2011 for a term of up to six years.

#### **Jon Nicolaisen**, First Deputy Chair

Appointed Deputy Governor of Norges Bank from 1 April 2014 for a term of up to six years.

#### **Egil Matsen**, Second Deputy Chair

Appointed Deputy Governor of Norges Bank from 18 January 2016 for a term of up to six years.

#### **Hilde Myrberg**

Appointed 1 January 2014-31 December 2017.

#### **Kjetil Storesletten**

Appointed 1 January 2014-31 December 2017.

#### **Karen Helene Ulltveit-Moe**

Appointed 1 January 2014-31 December 2017.

#### **Kathryn Moore Baker**

Appointed 1 January 2016-31 December 2019.

#### **Steinar Juel**

Appointed 1 January 2016-31 December 2019.

#### **Alternates**

To be appointed

#### **Employee representatives**

##### **Gøril Bjerkhol Havro**

Appointed 1 January 2011-31 December 2016.

##### **Henrik Borchgrevink** (alternate)

##### **Mona Helen Sørensen**

Appointed 1 January 2016-31 December 2016.

### SUPERVISORY COUNCIL

#### **Reidar Sandal**, 2010-2013, 2014-2017

(Chair, 2010-)

#### **Tormod Andreassen**, 2012-2015, 2016-2019

(Deputy Chair, 2016-)

#### **Vidar Bjørnstad**, 2012-2015, 2016-2019

#### **Ingrid Fiskaa**, 2016-2019

#### **Helle Hammer**, 2016-2019

#### **Toril Hovdenak**, 2014-2017

#### **Kjetil Lund**, 2016-2019

#### **Morten Lund**, 2010-2011, 2012-2015, 2016-2019

#### **Peter Meidell**, 2014-2017

#### **Iver Nordseth**, 2014-2017

#### **Frank Sve**, 2006-2009, 2010-2013, 2014-2017

#### **Synnøve Søndergaard**, 2010-2013, 2014-2017

#### **Ingebrigt S. Sørfonn**, 2012-2015, 2016-2019

#### **Paul Birger Torgnes**, 2014-2017

#### **Randi Øverland**, 2012-2015, 2016-2019

#### **Alternates**

##### **Lars Tvete**, 2014-2015, 2016-2019

##### **Jonas Varhaug**, 2016-2019

### OFFICE OF THE SUPERVISORY COUNCIL

Director Sverre Erik Forsstrøm

### INTERNAL AUDIT

Director Ingunn Valvatne

### NORGES BANK CENTRAL BANKING OPERATIONS

Governor Øystein Olsen

Deputy Governor Jon Nicolaisen

Deputy Governor Egil Matsen

### General Secretariat

Executive Director Birger Vikøren

**Communications**

Director Runar Malkenes

**General Counsel**

Marius Ryel

**Financial Stability**

Executive Director Sindre Weme

**Monetary Policy**

Executive Director Ida Wolden Bache

**Markets and Banking Services**

Executive Director Kristin Gulbrandsen

**Corporate and Shared Services**

Executive Director Jannecke Ebbesen

**Governance, Risk and Compliance**

Director Kathrine Stang Ottesen

**NORGES BANK INVESTMENT MANAGEMENT**

Chief Executive Officer Yngve Slyngstad

Deputy Chief Executive Officer Trond Grande

**Allocation strategies**

Chief Investment Officer Ole Christian Bech-Moen

**Asset strategies**

Chief Investment Officer Øyvind G. Schanke

**Equity strategies**

Chief Investment Officer Petter Johnsen

**Risk management**

Chief Risk Officer Dag Huse

**Operations**

Chief Operating Officer Age Bakker

**Administration**

Chief Administrative Officer Trond Grande

**Compliance and control**

Chief Compliance and Control Officer Stephen A. Hirsch

**NORGES BANK REAL ESTATE MANAGEMENT**

Chief Executive Officer Karsten Kallevig

**Risk management**

Chief Risk Officer Lars Dahl

**Operations**

Chief Operating Officer Nina Kathrine Hammerstad

**Administration**

Chief Administrative Officer Mie Holstad

**Compliance and control**

Chief Compliance and Control Officer Jan Thomsen



