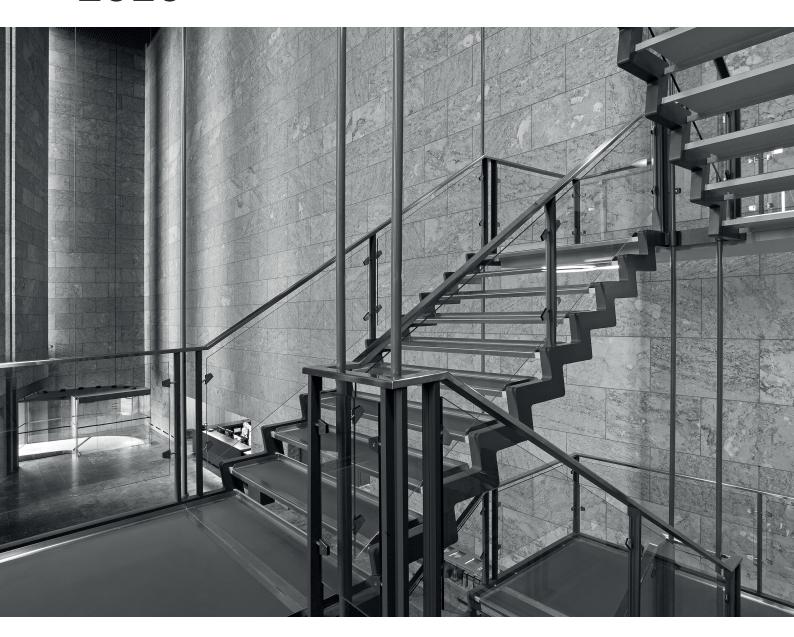
# DANMARKS NATIONALBANK

# ANNUAL REPORT 2016





# DANMARKS NATIONALBANK ANNUAL REPORT 2016

#### Annual Report 2016

This report is based on information available up to 7 March 2016.

See also www.nationalbanken.dk

Explanation of symbols:

- Magnitude nil
  Less than one half of unit employed
  Category not applicable 0
- Data not available

Details may not add up because of rounding.

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# **Foreword**

Danmarks Nationalbank is the central bank of Denmark and its overall objective is to contribute to a robust Danish economy – to "maintain a safe and secure currency system", as the Danmarks Nationalbank Act says.

Danmarks Nationalbank was established in 1818 as a private limited liability company with a monopoly on issuing Danish banknotes. With the adoption of the Danmarks Nationalbank Act in 1936, Danmarks Nationalbank became a self-governing institution, laying down monetary policy independently of the Government and the Folketing (Parliament).

Danmarks Nationalbank maintains a safe and secure currency system by focusing on stable prices, secure cash and electronic payments and general monitoring of the stability of the financial system.

In addition to the accounts, the Annual Report 2016 contains a general description of Danmarks Nationalbank's activities within those three areas.

For more detailed descriptions, reference is made to the publications and reports issued during the year and to Danmarks Nationalbank's website.

Copenhagen 7 March 2017

Lars Rohde Chairman Per Callesen

Hugo Frey Jensen





# Report of the Board of Governors on the activities of Danmarks Nationalbank

# Monetary Policy, Financial Markets and the Real Economy

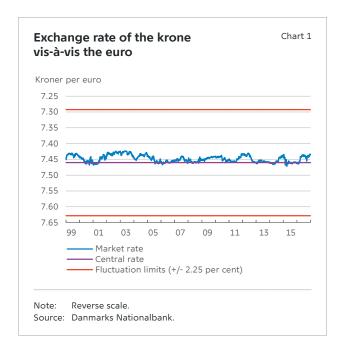
Denmark's fixed exchange rate policy ensures that the krone is kept stable against the euro. The euro area's monetary policy is conducted with a view to ensuring a stable development in prices, so pegging the krone to the euro provides a framework for a stable development in prices in Denmark. The credibility of the fixed exchange rate policy depends on Denmark's economic policies are a precondition for the fixed exchange rate policy.

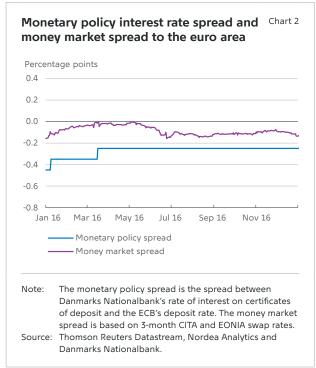
In 2016, the krone was stable vis-à-vis the euro at a slightly stronger level than its central rate in ERM2, cf. Chart 1. The monetary policy interest rate spread to the euro area determines the development in the exchange rate of the krone, and the spread to the European Central Bank, ECB, narrowed twice in 2016. The first time was in January when Danmarks Nationalbank unilaterally raised its rate of interest on certificates of deposits, which is its benchmark monetary policy interest rate. Effective 8 January, Danmarks Nationalbank raised the rate of interest on certificates of deposit by 0.10 percentage point to -0.65 per cent. The lending rate, discount rate and current account rate remained unchanged. On the same occasion, the monetary policy counterparties' total current account limit was lowered from kr. 63 billion to kr. 32 billion, reflecting a reduced need for the monetary policy counterparties to place liquidity in Danmarks Nationalbank. This meant that the spread to the ECB narrowed from -0.45 to -0.35 percentage point. The second time the spread narrowed was in March when the ECB cut its monetary policy interest rates while Danmarks Nationalbank kept the Danish monetary policy interest rates unchanged. This meant that the spread was reduced to -0.25 percentage point. The narrowing of the interest rate spread on these two occasions should be viewed in the light of intervention sales of foreign exchange in late 2015 and early 2016.

In 2016, Danmarks Nationalbank purchased foreign exchange for kr. 33.5 billion net in connection with intervention in the foreign exchange market, and the central government reduced its net foreign borrowing by kr. 21.5 billion. As a value adjustment was also made, the foreign exchange reserve increased by a total of kr. 18.5 billion, to kr. 456.0 billion.

One of the reasons for Danmarks Nationalbank's intervention was the mounting uncertainty in the European financial markets up to the UK referendum on EU membership on 23 June, which boosted demand for kroner. Most of the intervention took place before the referendum in the UK, and demand for kroner fell substantially in the days after the referendum. Consequently, the need to intervene was also reduced.

With unchanged monetary policy interest rates throughout most of 2016 and expectations of a long



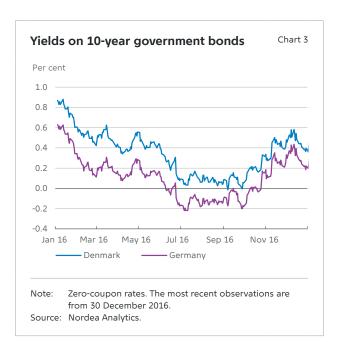


period of low interest rates, money market interest rates remained stable in 2016 at a level slightly above the rate of interest on certificates of deposit.

Yields on 10-year Danish government bonds fell in the 1st half of 2016, and in September the central government issued 10-year bonds with a negative yield for the first time ever. In the last months of the year, yields on Danish government bonds with longer maturities rose, a tendency that was also seen in the euro area and the USA. Especially after the US presidential election, yields on US Treasury bonds rose substantially, reflecting expectations of more accommodative fiscal policy and higher inflation in the USA. Yields on Danish mortgage bonds mirrored those of government bonds. Long-term mortgage yields fell steadily in the 1st half of 2016, but began to rise in the last months of the year.

While growth in China slowed down a little, the US and euro area economies continued to recover in 2016. Price inflation was weak in the euro area, but with a rising tendency towards the end of the year. Inflation expectations were also rising slightly.

In Denmark, the balanced upswing continued. The gross domestic product, GDP, rose by 1.1 per cent, which was a little less than in the preceding year, partly due to a weaker trend in exports. Conversely, private consumption picked up and residential investments rose.



The labour market continued to improve in 2016, resulting in fewer spare resources. Employment rose by around 50,000 from 2015 to 2016, while recent years' downward trend in unemployment has subsided. At the end of 2016, just over 4 per cent of the labour force was unemployed, while the economy was in a broadly neutral cyclical position and heading towards a boom. As the signs of labour shortage were becoming still clearer in certain industries, Danmarks Nationalbank recommended that the structural government balance should be brought to equilibrium within the next couple of years so that fiscal policy will contribute to stabilising the economy.

The current account of Denmark's balance of payments showed a surplus of approximately 8 per cent of GDP. This reflected a continued large private sector savings surplus, especially in firms, while there was a small government deficit.

Wage growth was around 2 per cent, which was slightly higher than in the countries Denmark traditionally competes with. Consumer prices did not rise in 2016. Hence, underlying price pressures in the economy remained weak. The rate of increase in house prices dampened a little during the year, but remained high in many areas. This applied particularly to owner-occupied flats in Copenhagen. In the assessment of Danmarks Nationalbank, the price level was high relative to the level of income and interest rates and the Copenhagen housing market was vulnerable to interest rate hikes. So there is a risk that if the real price rises seen in recent years continue, they will be followed by corresponding falls. This risk is amplified by the freeze on land tax in 2017 and possibly until 2021. Danmarks Nationalbank pointed out that the freeze is procyclical and increases price pressures in areas where price increases are already high.

#### The Stability of the Financial System

Danmarks Nationalbank contributes to the stability of the financial system by analysing the financial sector, considering and analysing systemic risks and making recommendations. In addition, Danmarks Nationalbank oversees the payments infrastructure, produces financial statistics and provides secretariat services to the Systemic Risk Council.

#### Credit register

Box 1

In 2016, Danmarks Nationalbank continued its cooperation with the Danish Financial Supervisory Authority and the banks and mortgage banks to set up a Danish credit register. The purpose of the register is to improve the statistical basis for Danmarks Nationalbank's oversight of financial stability and to strengthen the basis for the supervisory activities of the Danish Financial Supervisory Authority.

In May 2016, the European Central Bank, ECB, adopted the regulation on the European credit register, AnaCredit. The Danish register differs from the European register in a number of areas as it takes special Danish circumstances into account. The work to establish the Danish credit register will be completed in 2019.

A fall in loan impairment charges to the lowest level since the financial crisis boosted the earnings of the systemically important credit institutions in 2016. This reflects improvements in borrowers' debt serviceability and an increase in the value of the underlying collateral for loans. However, the very low level of loan impairment charges cannot be expected to persist. At the same time, the low level of interest rates is squeezing net interest income, which has been falling in recent years.

Danmarks Nationalbank's stress test of the credit institutions showed that even in a severe recession the systemic institutions would have positive excess capital adequacy in relation to the minimum requirements. For most of the institutions, the capital base has been increased over the last year or so.

The liquidity coverage ratio, LCR, of all credit institutions is comfortably above the statutory minimum requirement. In 2016, additional requirements were introduced for the systemically important credit institutions, which must meet LCR requirements in the currencies that are of significance to each institution. This requirement will be gradually phased-in until the autumn of 2017.

In future, data from the Land Registry will contribute to analyses of property-based extension of credit, which will make it easier to monitor whether systemic financial risks are building up – not only among banks and mortgage banks, but also among other financial sector participants.

Danmarks Nationalbank chairs and provides secretariat services to the Systemic Risk Council, which oversees systemic risks in the financial system. In September, the Council published a discussion paper on financial initiatives targeted at the property market, and in November the Council held a conference about this topic. At its meetings, the Systemic Risk Council assesses the level of the countercyclical buffer rate. At all its four meetings in 2016, the Council advised that the buffer rate in Denmark should be 0 per cent.

Following the September meeting, the Council issued a warning about systemic financial risks building up in the Faroe Islands.

#### Secure Payments

Danmarks Nationalbank contributes to secure settlement of cash and electronic payments. This is done by issuing banknotes and coins with high protection against counterfeiting and ensuring that payments between banks can be settled securely and efficiently.

Danmarks Nationalbank oversees that the Danish payments infrastructure is secure and efficient and complies with international standards. This oversight comprises the Danish payment and settlement systems and the most important payment solutions. Operation of the systems and solutions subject to oversight was generally satisfactory in 2016. Danmarks Nationalbank keeps up an ongoing dialogue with those responsible for the systems/solutions to follow up the incidents that have occurred.

Danmarks Nationalbank is working to replace the IT infrastructure behind Kronos, which is the Danish system for large, time-critical payments. The new system, Kronos2, is expected to be ready in 2017. This system supports market participants' mutual payments, monetary policy operations, collateralisation, etc.

In 2016, Danmarks Nationalbank and the financial sector established a new collaboration forum with a view to increasing operational resilience within the sector, including resilience to cyberattacks. The name of this forum is the Financial Sector forum for Operational Resilience, FSOR. Danmarks Nationalbank

chairs the FSOR and provides secretariat services. Under the auspices of the FSOR, cross-sector contingency plans to address serious operational incidents, including cyberattacks, were established in 2016 and a cyber stress test of the plans was conducted. Furthermore, the FSOR has mapped the technical infrastructure and begun to map interdependencies between the various participants. The aim is to identify risks that may have a cross-sector impact and could potentially pose a threat to financial stability in Denmark. Furthermore, Danmarks Nationalbank and the Danish Financial Supervisory Authority have jointly mapped the resilience of key participants to cyberattacks.

#### The Payments Council

The Payments Council was set up by Danmarks Nationalbank and includes representatives of a broad range of stakeholders in the Danish payments infrastructure. The Council works to promote the efficiency and security of retail payments. Danmarks Nationalbank chairs the Payments Council and provides secretariat services.

In 2016, the Council published an analysis of the role of cash in Denmark. The report looks into the declining role of cash in today's society and the attitudes of consumers and firms to cash. The Council also published a report on new actors in the Danish payments market. These actors comprise a wide range of firms, spanning from small fintech start-ups to large, global technology firms deciding to include payments in their business area. In 2016, the Council continued its collaboration with Danmarks Nationalbank on expanding the statistical basis for the payments market.

#### **Banknotes and coins**

The value of banknotes and coins in circulation was kr. 70.9 billion, representing an increase of 1.0 per cent on 2015. The value of banknotes was kr. 64.5 billion at end-2016, while the total value of coins was kr. 6.0 billion. Add to this Faroese banknotes with a value of kr. 0.4 billion.

Counterfeiting of Danish banknotes remains very limited. The number of registered counterfeit banknotes fell from 1,461 in 2015 to 880 in 2016. Of these, 859 were found in circulation. The remaining counterfeit banknotes are typically found in connection with police searches. As in the preceding years, the counterfeit banknotes found were primarily 500-krone banknotes.

At the end of 2016, Danmarks Nationalbank discontinued its in-house production of banknotes and coins. Although the volume of cash in circulation remains high in Denmark, demand for new banknotes and coins is falling. This is because the Danes increasingly use electronic means of payment, including the Dankort, direct debit, online banking and services such as MobilePay.

A four-year framework agreement has been concluded with the Mint of Finland for the supply of Danish coins. In 2017, a tender will be held for banknote production.

Danmarks Nationalbank will still be the Danish banknote and coin issuing authority after the outsourcing of production.

#### **Divestment of shareholdings**

Danmarks Nationalbank's role is to be an authority and in this context to oversee the financial sector. Consequently, Danmarks Nationalbank some years ago initiated a process aimed at gradually divesting its investments in commercial companies subject to competition. In 2016, Danmarks Nationalbank's ownership shares of Danish Ship Finance, BKS, DLR Kredit and MCH A/S were sold.

#### **Professorships**

In 2016, Danmarks Nationalbank decided to provide financial support for two professorships within economics as part of the celebration of Danmarks Nationalbank's bicentenary in 2018. Each donation comprises annual support of kr. 1 million for five years, to be used for remuneration of the full-time professor and costs for office facilities, travel, etc. in connection with the professorship. The professorships may be extended for three years. Following an open process, in which universities and other places of higher education were encouraged to apply, the universities of Aarhus and Copenhagen were chosen as the recipients of the donations.

#### Profit for the year 2016

The profit for the year is kr. 3,928 million, compared with kr. 3,595 million in 2015.

The 2016 result included an extraordinary profit of kr. 1.0 billion in the form of income from financial fixed assets.

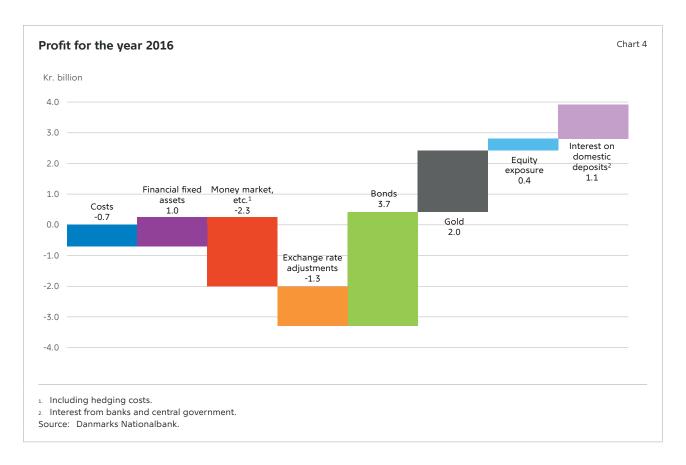
The financial result was boosted by gains of kr. 3.7 billion on the bond portfolios, while positive value adjustments of the gold stock yielded kr. 2.0 billion, cf. Chart 4. Domestic deposits provided kr. 1.1 billion in interest income. Investment of the foreign exchange reserve in the money market at negative interest rates resulted in interest costs of kr. 2.3 billion. Add to this exchange rate losses of kr. 1.3 billion due to a slight strengthening of the krone vis-à-vis the euro in 2016. Expenses amounted to kr. 0.7 billion.

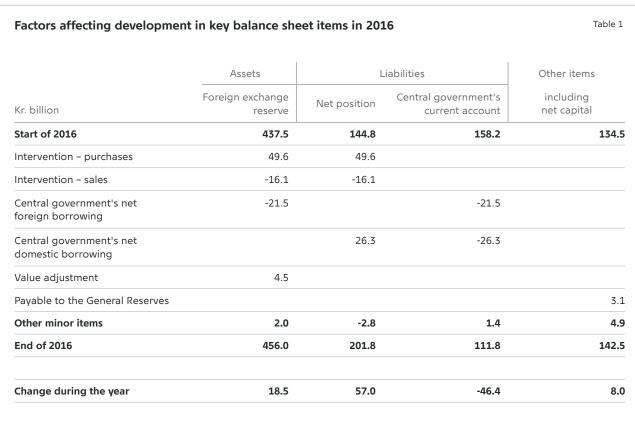
Of the profit for the year, kr. 845 million is transferred to the central government. The transfer to the central government is based on the following model:

- Danmarks Nationalbank transfers part of the average of the last five years' results, excluding value adjustments on gold, to the central government.
   The remaining part of the profit for the year is transferred to Danmarks Nationalbank's General Reserves<sup>1</sup>.
- The determination of the transfer rate takes into account that, over time, Danmarks Nationalbank's net capital should grow at the same rate as nominal GDP – unless there is an extraordinary need for consolidation.

The balance sheet increased by kr. 16.3 billion in 2016, to kr. 497.9 billion. This reflected an increase of the foreign exchange reserve following purchases of foreign exchange for kr. 33.5 billion net in connection with intervention by Danmarks Nationalbank. Since the central government reduced its net foreign borrowing in the same period, the total increase in the foreign exchange reserve was kr. 18.5 billion. Conversely, the central government's account decreased by kr. 46.4 billion. Factors affecting the key balance sheet items are shown in Table 1.

<sup>1</sup> Net capital consists of the General Reserves, Statutory Reserves and General Capital Fund.





# **Financial Ratios**

**PROFIT** 

**FOREIGN EXCHANGE RESERVE** 

# **DKK 3.9 bn DKK 0.3 bn**



**DKK 456.0 bn** DKK 18.5 bn



The increase in profit mainly reflects capital gains on the gold stock, income from the sale of financial fixed assets, etc. and gains on the bond portfolio, while negative exchange rate adjustments and deposits at negative rates of interest have a downward impact. 0.8 billion is transferred to the central government.

In 2016, Danmarks Nationalbank purchased foreign exchange for kr. 33.5 billion net in connection with intervention in the foreign exchange market, and the central government reduced its net foreign borrowing by kr. 21.5 billion. In total, the foreign exchange reserve increased by kr. 18.5 billion to kr. 456.0 billion - also due to value adjustments.

**CERTIFICATES OF DEPOSIT** 

VALUE OF GOLD STOCK

# -0.65 per cent 10 basis point 1



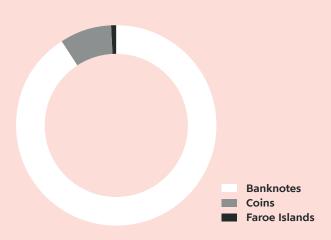
**DKK 17.5 bn** 12.9 per cent



Danmarks Nationalbank changed the rate of interest on certificates of deposit, i.e. our monetary benchmark rate, once in 2016. Effective from 8 January, the rate of interest on certificates of deposit was raised by 0.10 percentage points to -0.65 per cent.

Value adjustment of gold has resulted in a gain of kr. 2 billion, reflecting a total increase of 12.9 per cent in the price of gold measured in Danish kroner. Danmarks Nationalbank holds 66.5 tonnes of gold which is a small part of the foreign exchange reserve.

#### CIRCULATION OF BANKNOTES AND COINS



The value of banknotes and coins in circulation was kr. 70.9 billion.

The value of banknotes was kr. 64.5 billion at end-2016, while the total value of coins was kr. 6.0 billion. Add to this Faroese banknotes with a value of kr. 0.4 billion.

#### **10-YEAR GOVERNMENT BONDS**



Yields on 10-year Danish government bonds fell in the 1st half of 2016, and in September the central government issued 10-year bonds with a negative yield for the first time ever.

# Organisation

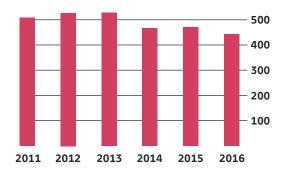
The staff turnover rate was 18.9 per cent in 2016, up from 14.5 per cent in 2015. 91 employees left their positions at Danmarks Nationalbank during 2016, and 70 new employees were hired. At the close of 2016 the number of full-time equivalents was 444 compared to 471 the year before.

The number of managers has been reduced by 37 per cent over the last five years, while the number of employees has been reduced by 9 per cent over the same period.

The decision to focus more on Danmarks Nationalbank's core tasks led to organisational changes in 2016. The IT, Facility Services and Administration departments were merged into one department for support functions, Corporate Services.

A new research unit has also been set up to strengthen cooperation with both national and international universities and other research institutions. DEVELOPMENT IN FULL-TIME EQUIVALENTS





**EMPLOYEES** 

444



The number of managers has been reduced by 37 per cent over the last five years

ABSENCE DUE TO ILLNESS

8.1



days a year in absence due to illness



☐ Total☐ Excluding long-term absence



## Danmarks Nationalbank's Representation on Committees, in International Organisations, etc.

As of 1 March 2017, Danmarks Nationalbank is represented on or in the following committees, international organisations, etc.:

#### The European Union, EU

European Systemic Risk Board, ESRB, the General Board, Governor Lars Rohde is a member.

The Economic and Financial Committee Governor Per Callesen is a member.

#### The European Central Bank, ECB

The General Council, Governor Lars Rohde is a member.

### **Board of Directors of Danmarks Nationalbank as at 1 March 2017**

Box 2

Chairman: Søren Bjerre-Nielsen, Chairman Deputy Chairman: Christian Schultz, Professor

Elected by the Folketing for the period ending 31 March 2021: Morten Bødskov, MP Kristian Thulesen Dahl, MP Pelle Dragsted, MP Josefine Fock, MP Jacob Jensen, MP

Henrik Sass Larsen, MP Joachim B. Olsen, MP Peter Skaarup, MP

Appointed by the Minister for Industry, Business and Financial Affairs for the period ending 31 March 2021: Barbara Bertelsen, Permanent Secretary, Ministry of Justice Michael Dithmer, Permanent Secretary,

Ministry of Industry, Business and Financial Affairs

Elected by	for the period
the Board of Directors	ending 31 March:
Asger Enggaard, Managing Director	2017
Kristian Hundebøll, CEO	2017
Anja Philip, Chairman of	
the Danish Consumer Council Tænk	2017
Søren Bjerre-Nielsen, Chairman	2018
Christian Schultz, Professor	2018
Anne Hedensted Steffensen, Managing	Director 2018
Bent Jensen, CEO	2019
Michael Møller, Professor	2019
Gitte Pugholm Aabo, Managing Directo	or 2019
Per Bank, Managing Director	2020
Eva Berneke, Managing Director	2020
Bente Sorgenfrey, President of	
the Confederation of Professionals in	Denmark 2020
Peter Gæmelke, Farmer,	
former Chairman of Danish Agriculture	e 2021
Claus Jensen, President of	
the Danish Metalworkers' Union	2021
Lizette Risgaard, President of	
the Danish Confederation of Trade Un	ions 2021

#### The International Monetary Fund, IMF

Board of Governors.

Governor Lars Rohde is the Danish member.

#### The Nordic-Baltic Monetary and Financial Committee

Governor Per Callesen is the Chairman.

#### The Bank for International Settlements, BIS

Governor Lars Rohde represents Danmarks Nationalbank.

## The Organisation for Economic Cooperation and Development, OECD

The Economic Policy Committee
Director Niels Lynggård Hansen is a member.

#### **Nordic-Baltic Macroprudential Forum**

Governor Lars Rohde is a member.

#### BEC

Governor Hugo Frey Jensen is an observer on the Board of Directors.

#### The Payments Council

Governor Per Callesen is the Chairman.

#### The Systemic Risk Council

Governor Lars Rohde is the Chairman. Governor Per Callesen is a member.

#### **The Economic Council**

Governor Per Callesen is a member.

#### The Board of the Danish Financial Supervisory Authority

Assistant Governor Karsten Biltoft is a member.

#### The Coordination Committee on Financial Stability

Governor Per Callesen is a member.

#### VP Securities A/S

Governor Hugo Frey Jensen is the Vice Chairman of the Board of Directors.

#### Committee of Directors of Danmarks Nationalbank as at 1 March 2017

Вох 3

Chairman: *Søren Bjerre-Nielsen*, Chairman Deputy Chairman: *Michael Dithmer* 

Elected by the Board of Directors for the period

ending 31 March 2017: Søren Bjerre-Nielsen, Chairman

Kristian Thulesen Dahl, MP Henrik Sass Larsen, MP

Michael Møller, Professor

Bente Sorgenfrey, President of

the Confederation of Professionals in Denmark

Appointed by the Minister for Industry, Business and Financial Affairs for the period ending 31 March 2021:

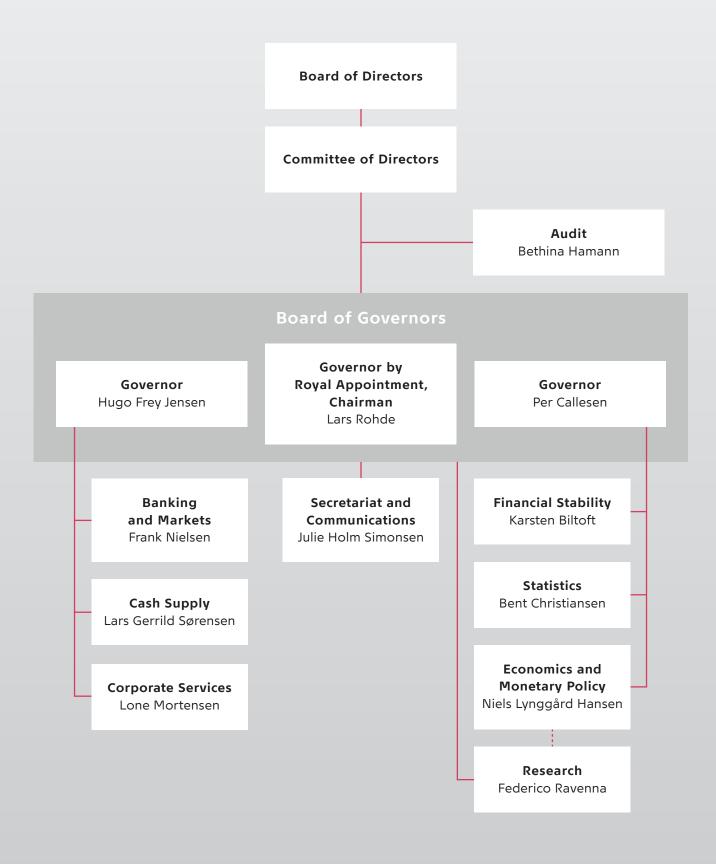
Barbara Bertelsen, Permanent Secretary,

Ministry of Justice

Michael Dithmer, Permanent Secretary,

Ministry of Industry, Business and Financial Affairs

#### Organisation Chart 1 March 2017



# Risk Management

Danmarks Nationalbank is exposed to risk on financial portfolios, on lending to banks and mortgage banks and to operational risk.

#### Financial Portfolios

Danmarks Nationalbank's financial portfolios comprise the foreign exchange reserve and the holding of domestic bonds.

The primary purpose of the foreign exchange reserve is to ensure that Danmarks Nationalbank will be able to intervene in the foreign exchange markets to support the fixed exchange rate policy. Moreover, the foreign exchange reserve must be able to support financial stability and finance loans to the International Monetary Fund, IMF, at short notice. This requires a substantial liquidity reserve. Consequently, most of the foreign exchange reserve is placed in reverse repos at short maturities, in accounts at central banks, in bonds issued by the Bank for International Settlements, BIS, and in highly rated government bonds that can be sold or pledged as collateral within a short time horizon. A total of kr. 366 billion is placed in these instruments, cf. Table 2.

In addition to the consideration of a sufficiently liquid foreign exchange reserve, Danmarks Nationalbank aims to achieve the highest possible returns while keeping the level of risk low. Consequently, part of the portfolio is exposed to equities (kr. 8 billion), corporate bonds (kr. 8 billion) and government bonds with

lower credit ratings (kr. 14 billion). These exposures contribute to increasing long-term earnings while also ensuring that the overall portfolio risk rises only moderately due the diversification effect.

Danmarks Nationalbank's stock of gold and claim on the IMF are included in the foreign exchange reserve. Under the Danmarks Nationalbank Act, Danmarks Nationalbank must hold a stock of gold. The gold stock is 66.5 tonnes and has been virtually constant in size since 1970. It had a value of kr. 17 billion at end-2016. The total claim on the IMF was kr. 17 billion at end-2016. Danmarks Nationalbank has made commitments for further loans totalling kr. 119 billion. Although these commitments are considerable, the expected drawings on them are low.

# Risks on Loans to Banks and Mortgage Banks

Danmarks Nationalbank provides monetary policy loans with a maturity of one week to monetary policy counterparties and, to facilitate settlement of payments, intraday credit is also provided.<sup>1</sup>

<sup>1</sup> Intraday credit is used by the institutions mainly in connection with securities and payment settlement, where Danmarks Nationalbank guarantees the institutions' payment obligations on a fully secured basis

Danmarks Nationalbank's financial portfolios		Table
Kr. billion	2016	201
Foreign bonds	245	28
Government bonds with a credit rating of AA- or higher Three largest counterparties: USA (kr. 58 billion), France (kr. 15 billion), Germany (kr. 13 billion)	106	16
Government bonds with a lower credit rating (BB to A+) Three largest counterparties: Italy (kr. 4 billion), Spain (kr. 4 billion), Ireland (kr. 4 billion)	14	1
Other highly rated bonds (rated AA- or higher) Government guaranteed (kr. 16 billion), supranational (kr. 11 billion), German and Swedish covered bonds (kr. 3 billion)	30	5
Bonds issued by the Bank for International Settlements	95	4
Domestic bonds	33	3
Mortgage bonds (kr. 31.5 billion), Ship Finance bonds (kr. 1.4 billion), other bonds (kr. 0.1 billion)	on)	
Money market products	167	11
Reverse repo transactions	35	8
Uncollateralised bank deposits in commercial banks	3	
Central banks accounts (including the BIS)	130	3
Other holdings and exposures		
Gold	17	1
Exposure to equities through equity futures	8	1
Corporate bonds through ETFs¹	8	
IMF <sup>2</sup>	17	2
Selected risk measures/financial ratios		
Krone duration	2.6	5.
95 per cent expected shortfall <sup>3</sup>	7.3	9.
Total average credit rating of the portfolio <sup>4</sup>	>AA+	>A
Foreign exchange exposure (before FX swaps in parentheses)		
EUR	420 (312)	403 (247
USD	0 (112)	0(145
Other	0 (5)	0(21

Note: The table shows the lowest credit rating given by Fitch, Moody's and Standard & Poor's, respectively. Rounded figures. Source: Danmarks Nationalbank, Fitch, Moody's and Standard & Poor's.

- 1. Exchange Traded Funds.
- 2. In addition, there is a counterpart on the liabilities side for Special Drawing Rights of kr. 15 billion allocated by the IMF.
- 5. 95 per cent expected shortfall expresses the average loss in the 5 per cent worst cases and has been calculated for a 1-year horizon. The underlying risk factors are assumed to be normally distributed and have been estimated on the basis of observations from 1 January 2001 onwards. All observations are included with the same weight.
- 4. The average credit rating has been weighted by the market values of the holdings. Repo transactions and holdings without credit ratings (primarily BIS) have not been included. At end-2016, the average credit rating for repo counterparties was around A, while it was higher than AA for the underlying collateral.

Finally, Danmarks Nationalbank provides loans for banknote holdings. The use of monetary policy loans was, once again, very limited in 2016, as the banks had ample liquidity deposited in accounts at Danmarks Nationalbank.

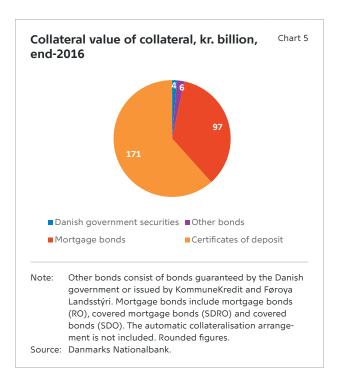
No ceiling has been imposed on the opportunity to borrow from Danmarks Nationalbank, but adequate collateral must always be pledged. Danmarks Nationalbank can only incur credit losses on lending if two events coincide: a counterparty defaults and the realisation value of the collateral pledged turns out to be lower than the credit granted. The risk of credit losses is very low.

#### Collateral Basis and Lending in 2016

There were no outstanding monetary policy loans at end-2016.

To facilitate the settlement of payments, Danmarks Nationalbank every day offers an intraday credit line for the institutions to draw on in connection with the settlement of payments and securities. At year-end, the credit line was kr. 222 billion for payments with 2 January 2017 as the value date.<sup>2</sup> The credit line was used only to a limited extent.

The collateral base for Danmarks Nationalbank's lending consists of mortgage bonds and securities issued or guaranteed by public authorities. The collateral value – i.e. the market value less the haircut of the assets pledged by the counterparties to Danmarks Nationalbank – amounted to kr. 106 billion at the end of 2016. In addition, the institutions can pledge certificates of deposit as collateral for intraday credit. The collateral value of these amounted to kr. 171 billion, cf. Chart 5.3



#### Operational Risk

Operational risk is the risk of direct or indirect losses due to inadequate or failed internal processes, human errors and actions, system errors or losses due to external events. Operational risk also comprises business and reputational risks. As indicated by the definition, operational risk is often associated with specific, individual events.

Danmarks Nationalbank continuously seeks to identify, assess, manage and follow up significant operational risks. Danmarks Nationalbank's risk management process is aimed at ensuring uniformity and comparability between operational risks, which makes it possible to prioritise initiatives in line with Danmarks Nationalbank's overall objectives.

As part of the process to focus more on Danmarks Nationalbank's core tasks, it was decided in 2016 to outsource some of Danmarks Nationalbank's IT operations and to reduce operational risk.

Following several violent robberies in the preceding years, it was decided in 2010 to introduce a number of standardised requirements for security management in firms handling cash in Denmark, as well as physical and technical requirements for the design of cash centres and cash transports. This resulted in the DS 3999 security standard, which was to be

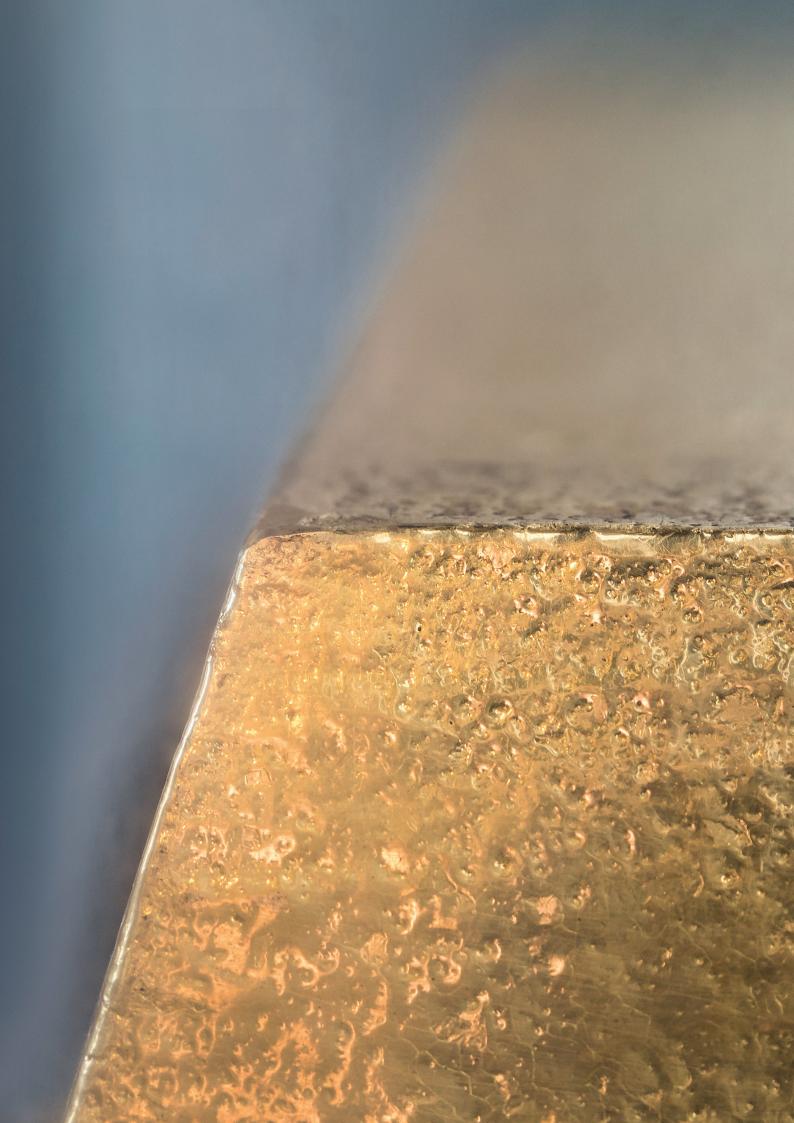
<sup>2</sup> The size of the credit line takes into account that the institutions may automatically reserve all their available liquidity for settlement at night, when they have no other need for liquidity. The credit line is lower than the overall collateral value of the collateral pledged as some institutions do not reserve all their available liquidity.

<sup>3</sup> In addition, the institutions can utilise the automatic collateralisation arrangement, which allows them to pledge securities accounts at VP Securities, typically their trading accounts, as collateral for intraday credit. The collateral base under the automatic collateralisation arrangement is the same as for Danmarks Nationalbank's monetary policy lending.

phased in over a number of years. Danmarks Nationalbank has complied with the standard since 2014, and at end-2016 both cash-in-transit companies in the Danish market also observed the new standard.

#### **Insurance Policy**

Danmarks Nationalbank's insurances and insurance policies are reviewed on an annual basis in collaboration with an external insurance agent. The review in 2016 did not give rise to any major changes to the insurance program.





# Key Figures and Financial Ratios 2012-16

Profit and loss account (kr. million)	2016	2015	2014	2013	2012
Net income from interest, etc.	-51	1,877	1,144	660	914
Value adjustment of gold	2,001	-217	1,792	-6,234	792
Other value adjustments	1,723	2,345	3,104	-391	2,788
Income from financial fixed assets, etc.	957	263	1,495	152	99
Other income	4	5	5	123	60
Expenses, including depreciation	-707	-659	-575	-629	-592
Other expenses	-	-19	-	-	-19
Profit/loss for the year	3,928	3,595	6,965	-6,319	4,042
Allocated as follows:					
Allocation to net capital	3,083	2,727	5,196	-7,742	2,339
Payable to the central government	845	868	1,769	1,423	1,703
	3,928	3,595	6,965	-6,319	4,042
Balance sheet (kr. million)	2016	2015	2014	2013	2012
Assets					
Foreign exchange reserve assets	459,040	440,593	460,901	477,120	504,329
Monetary policy lending	-	325	35,039	23,145	66,401
Other lending	3,530	3,177	2,544	2,475	3,347
Domestic bonds	32,926	32,887	33,687	33,960	34,093
Other assets	2,444	4,705	4,302	10,525	20,379
Total assets	497,940	481,687	536,473	547,225	628,549
Liabilities					
Banknotes and coins	70,923	70,166	67,338	66,491	65,805
Monetary policy deposits	201,796	145,128	155,078	227,358	286,671
Central government	111,772	158,244	214,869	163,376	163,694
Foreign exchange reserve debt	3,004	3,084	3,345	3,125	2,685
Other liabilities	36,478	34,181	27,687	23,915	38,992
Total creditors	423,973	410,803	468,317	484,265	557,847
Total net capital	73,967	70,884	68,156	62,960	70,702
Total liabilities	497,940	481,687	536,473	547,225	628,549
Financial ratios	2016	2015	2014	2013	2012
Foreign exchange reserve (kr. million) Net position of banks and mortgage banks	456,036	437,509	457,556	473,995	501,644
vis-à-vis Danmarks Nationalbank (kr. million)	201,796	144,803	120,039	204,213	220,270
Growth in banknotes and coins (per cent)	201,790	4.2	1.3	1.0	5.4
Change in net capital (per cent)	4.3	4.2	8.3	-11.0	3.4
Average no. of staff (full-time equivalents)	451	468	476	528	518

# Board of Governors' Report on Danmarks Nationalbank's Accounts

The profit for the year was kr. 3,928 million, compared with a profit of kr. 3,595 million in 2015.

The increase mainly reflects capital gains on the gold stock, income from the sale of financial fixed assets, etc. and gains on the bond portfolio, while negative exchange rate adjustments and deposits at negative rates of interest have a downward impact.

Net interest income from net foreign assets, including dividends, was negative, reflecting a fall in euro area interest rates, among other factors. Expenses of kr. 1,252 million were posted under this item in 2016, compared with expenses of kr. 96 million in 2015.

Value adjustment of net foreign assets was negatively affected by developments in the relationship between euro and kroner, which led to an exchange rate loss of kr. 1,282 million in 2016. Conversely, market value adjustments of foreign assets resulted in a gain of kr. 2,697 million.

Value adjustment of Danmarks Nationalbank's gold stock resulted in a gain of kr. 2.001 million, reflecting an increase in the price of gold, compared with a loss of kr. 217 million in 2015.

Average deposits by banks and mortgage banks and the central government fell during 2016. Combined with the fact that the rate of interest on certificates of deposit was raised to -0.65 per cent in January 2016, this led to a decrease in interest income from kr. 1,853 million in 2015 to kr. 1,119 million in 2016.

The profit contribution from the domestic securities portfolio was kr. 435 million, compared with kr. 69

million in 2015. This is mainly attributable to rising prices of mortgage bonds.

No credit losses were registered on Danmarks Nationalbank's commitments regarding monetary policy counterparties and other external investments in 2016, and it is not deemed to be necessary to make provisions for such losses at year-end.

Danmarks Nationalbank divested a number of share-holdings in 2016. This provided net gains of kr. 866 million.

Danmarks Nationalbank's operating expenses rose by a total of kr. 60 million compared with 2015. Of these, staff expenses account for kr. 12 million and other expenses kr. 48 million. Developments have generally been driven by costs in relation to outsourcing of IT operations and banknote and coin production in the form of provisions for severance arrangements as well as assistance in connection with the outsourcing and replacement of employees who have left before time. Furthermore, there were increased operating expenses for IT systems to support Danmarks Nationalbank's core business.

Danmarks Nationalbank achieved a net profit of kr. 23 million in connection with the sale of the property located at Niels Juels Gade 7.

#### **Balance sheet**

The balance sheet increased by kr. 16 billion to kr. 498 billion in 2016. The foreign exchange reserve contributed a total increase of kr. 19 billion. This development is also reflected in the change in the net position, which has increased by kr. 57 billion.

However, this is offset by a reduction of the balance of the central government's current account, which decreased by kr. 47 billion. Developments in the foreign exchange markets led to a net change of kr. 2.5 billion in the market value of unsettled foreign exchange transactions.

#### Distribution of the result for the year

As of the financial year 2015, Danmarks Nationalbank implemented a new model for distribution of the result for the year. The profit for the year of kr. 3,928 million is distributed as follows: kr. 3,083 million is transferred to the General Reserves and kr. 845 million to the central government. In accordance with the model for distribution of the result for the year, this amount was calculated as 30 per cent of the average profit for the last five years, excluding value adjustment of gold.

# Statement by the Board of Governors

The Board of Governors have today considered and approved the Annual Accounts of Danmarks Nationalbank for 2016.

The Annual Accounts have been prepared in accordance with the Danmarks Nationalbank Act.

In our opinion, the Accounts give a true and fair view of Danmarks Nationalbank's assets, liabilities and financial position at 31 December 2016, and of the result of Danmarks Nationalbank's activities for the financial year 1 January-31 December 2016.

Copenhagen, 28 February 2017

#### **Board of Governors**

Lars Rohde Chairman Per Callesen

Hugo Frey Jensen

# Internal Audit's Report

#### To the Board of Directors

#### Opinion

In our opinion, the Accounts give a true and fair view of Danmarks Nationalbank's assets, liabilities and financial position at 31 December 2016, and of the result of Danmarks Nationalbank's activities for the financial year 1 January-31 December 2016 in accordance with the Danmarks Nationalbank Act.

What we have audited

The Accounts of Danmarks Nationalbank for the financial year 1 January-31 December 2016 comprise the Profit and Loss Account, Balance Sheet, Notes and Accounting Policies (the "Accounts").

### Statement on the Board of Governors' Report on the activities of Danmarks Nationalbank

The Board of Governors is responsible for the Board of Governors' Report on the activities of Danmarks Nationalbank.

Our opinion on the Accounts does not include the Board of Governors' Report on the activities of Danmarks Nationalbank, and we do not express any opinion with certainty about the report.

In connection with our audit of the Accounts, it is our responsibility to read the Board of Governors' Report on the activities of Danmarks Nationalbank and in that connection to consider whether the report is materially inconsistent with the Accounts or with the knowledge we have gained during the audit or otherwise seems to contain any material misstatement.

In addition, it is our responsibility to consider whether the Board of Governors' Report on the activities of Danmarks Nationalbank includes the information required under the Danmarks Nationalbank Act.

In our opinion and based on the work performed, the Board of Governors' Report on the activities of Danmarks Nationalbank is in accordance with the Accounts and has been prepared in accordance with the requirements laid down in the Danmarks Nationalbank Act. We have not found any material misstatements in report.

### Danmarks Nationalbank's Committee of Directors and Board of Directors' responsibility for the Accounts

The Committee of Directors and Board of Directors are responsible for the preparation and fair presentation of Accounts in accordance with the Danmarks Nationalbank Act. The Committee of Directors and Board of Directors are also responsible for internal controls considered necessary by the Committee of Directors and Board of Directors for preparing Accounts that are free of material misstatement, whether due to fraud or error.

#### **Basis of opinion**

We have conducted the audit in accordance with International Standards on Auditing. Those standards require that we plan and perform the audit with a view to obtaining reasonable assurance that the Accounts are free of material misstatement.

The audit included an assessment of the Committee of Directors' and the Board of Directors' established procedures and internal controls that are relevant to Danmarks Nationalbank's preparation and fair presentation of the Accounts, including an assessment of the risk of material misstatement. The audit also included evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by the Committee of Directors and Board of Directors, as well as evaluating the overall presentation of the Accounts.

The audit comprised the most significant areas and risk areas and we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Copenhagen, 28 February 2017

Bethina Hamann State-Authorised Public Accountant

# Independent Auditors' Report

#### To the Board of Directors

#### Opinion

In our opinion, the Accounts give a true and fair view of Danmarks Nationalbank's assets, liabilities and financial position at 31 December 2016, and of the result of Danmarks Nationalbank's activities for the financial year 1 January-31 December 2016, in accordance with the Danmarks Nationalbank Act.

#### What we have audited

The Accounts of Danmarks Nationalbank for the financial year 1 January-31 December 2016 comprise the Profit and Loss Account, Balance Sheet, Notes and Accounting Policies (the "Accounts").

#### Basis of opinion

We conducted our audit in accordance with International Standards on Auditing (ISA) and additional requirements applying in Denmark. Our responsibility according to these standards and requirements is described in more detail in the section Auditors' responsibility for audit of the Accounts in this Auditors' opinion.

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

#### Independence

We are independent of Danmarks Nationalbank in accordance with the IESBA's Code of Ethics for Professional Accountants and the additional requirements applying in Denmark, and we have also complied with our other ethical obligations in accordance with the IESBA's Code of Ethics.

### Statement on the Board of Governors' Report on Danmarks Nationalbank's Accounts

The Board of Governors is responsible for the Board of Governors' Report on Danmarks Nationalbank's Accounts.

Our opinion on the Accounts does not include the Board of Governors' Report on Danmarks Nationalbank's Accounts,

and we do not express any opinion with certainty about the report.

In connection with our audit of the Accounts, it is our responsibility to read the Board of Governors' Report on Danmarks Nationalbank's Accounts and in that connection to consider whether the report is materially inconsistent with the Accounts or with the knowledge we have gained during the audit or otherwise seems to contain any material misstatement.

In addition, it is our responsibility to consider whether the Board of Governors' Report on Danmarks Nationalbank's Accounts includes the information required pursuant to the Danmarks Nationalbank Act.

In our opinion and based on the work performed, the Board of Governors' Report on Danmarks Nationalbank's Accounts is in accordance with the Accounts and has been prepared in accordance with the requirements laid down in the Danmarks Nationalbank Act. We have not found any material misstatements in the report.

#### Responsibility for the Accounts and the audit

Danmarks Nationalbank's Committee of Directors and Board of Directors' responsibility for the Accounts

The Committee of Directors and Board of Directors are responsible for the preparation and fair presentation of Accounts in accordance with the Danmarks Nationalbank Act. The Committee of Directors and Board of Directors are also responsible for internal controls considered necessary by the Committee of Directors and Board of Directors for preparing Accounts that are free of material misstatement, whether due to fraud or error.

When preparing the Accounts, the Committee of Directors and Board of Directors are responsible for assessing Danmarks Nationalbank's ability to continue as a going concern, for providing information about going concern issues where this is relevant and for preparing the Accounts on the basis of the going concern accounting principle, unless the Committee of Directors and Board of Directors plan either to liquidate

Danmarks Nationalbank or to discontinue operations or has no other realistic alternative than to do so.

Auditors' responsibility for audit of the accounts

Our objective is to obtain a high degree of certainty that the overall Accounts are free of material misstatement, whether due to fraud or error, and to present an auditors' report with an opinion. A high degree of certainty is a high level of certainty, but is not a guarantee that an audit performed in accordance with the ISA and the additional requirements applying in Denmark will always disclose material misstatements, if any. Misstatements may occur as a result of fraud or error and can be deemed to be material if it can reasonably be expected that they will, individually or jointly, have an impact on the financial decisions made by users on the basis of the accounts.

As part of an audit performed in accordance with the ISA and the additional requirements applying in Denmark, we perform professional assessments and exercise professional scepticism during the audit. In addition:

- We identify and assess the risk of material misstatement in the Accounts, whether due to fraud or error, plan and perform audit activities in response to such risk and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion. The risk of not discovering material misstatements is higher for material misstatements resulting from fraud than for material misstatements resulting from error as fraud may include conspiracy, forgery, wilful omissions, misrepresentation or non-observance of internal controls
- We gain insight into the internal controls of relevance to the audit in order to design audit activities that are appropriate in the circumstances, but not to express an opinion on the effectiveness of Danmarks Nationalbank's internal controls.
- We consider whether the accounting policies applied are appropriate and whether the accounting estimates made and related information prepared by the Committee of Directors and Board of Directors are reasonable.
- We express an opinion as to whether the preparation of the Accounts by the Committee of Directors and Board of

Directors on the basis of the going concern accounting principle is appropriate and whether, on the basis of the audit evidence obtained, there is material uncertainty linked to events or circumstances that may cause substantial doubt as to Danmarks Nationalbank's ability to continue as a going concern. If we reach the conclusion that there is material uncertainty, we must in our auditors' report draw attention to information about this in the Accounts or, if such information is not sufficient, qualify our opinion. Our opinions are based on the audit evidence obtained until the date of our auditors' report. However, future events or circumstances could mean that Danmarks Nationalbank is no longer able to continue as a going concern.

We consider the overall presentation, structure and content
of the Accounts, including information in the notes, and
whether the Accounts reflect the underlying transactions
and events in such a way that they provide a true and fair
view thereof.

We communicate with the top management on, inter alia, the planned scope and timing of the audit, as well as material audit observations, including any material shortcomings in the internal controls identified by us during our audit.

We also make a statement to the top management saying that we have met relevant ethical requirements regarding independence and inform the top management of all relations and other circumstances that may reasonably be conceived to affect our independence and, where relevant, related security measures.

Copenhagen, 28 February 2017 **PricewaterhouseCoopers**Statsautoriseret Revisionspartnerselskab

CVR number 3377 1231

Erik Stener Jørgensen State-Authorised Public Accountant

Christian F. Jakobsen State-Authorised Public Accountant

# Signatures

These Accounts, audited in the manner prescribed by the bylaws of Danmarks Nationalbank, are hereby adopted by the Board of Directors at the meeting on 14 March 2017.

As at 1 March 2017 the Board of Directors comprises

Søren Bjerre-Nielsen, Chairman	Christian Schultz, Deputy Chairman	
Per Bank	Eva Berneke	Barbara Bertelsen
Morten Bødskov	Kristian Thulesen Dahl	Michael Dithmer
Pelle Dragsted	Asger Enggaard	Josephine Fock
Peter Gæmelke	Kristian Hundebøll	Bent Jensen
Claus Jensen	Jacob Jensen	Henrik Sass Larsen
Michael Møller	Joachim B. Olsen	Anja Philip
Lizette Risgaard	Bente Sorgenfrey	Anne Hedensted Steffensen
Peter Skaarup	Gitte Pugholm Aabo	

# **Accounting Policies**

#### General

Danmarks Nationalbank's Accounts for the year 2016 are presented in accordance with the Danmarks Nationalbank Act. In all significant respects these accounting policies are in accordance with the sound policies for European central banks in the euro area. The main differences relate to unrealised gains on foreign exchange and securities, which are recognised in the profit and loss account in Danmarks Nationalbank's Accounts.

The basic accounting assumptions are economic reality. The effects of transactions and events are recognised when they occur and stated and presented in the accounts for the year which they concern. The Accounts include all material and relevant circumstances. Revaluations are shown irrespective of their impact on profits and net capital, and calculation and valuation methods are applied consistently within each category of conditions. When initially recognised, assets and liabilities are stated at cost price. Subsequently, assets and liabilities are valued as described under each accounting item.

Transactions in foreign currency are converted to Danish kroner at the exchange rate applying on the transaction date. On the balance sheet date, all financial assets and liabilities in foreign currency are converted at the exchange rate applying on that date. Both realised and unrealised gains and losses are recognised in the profit and loss account.

No changes were made to the accounting policies in 2016.

#### **Profit and Loss Accounts**

#### Net interest, etc.

Besides income on interest-bearing assets and liabilities, interest income and expenses comprise maturity reductions of the bond portfolios, fees, premia and discounts on T-bills and certificates of deposit, income from Exchange Traded Funds as well as premia on forward securities and forward exchange contracts.

#### Value adjustments, etc.

Value adjustments comprise market value adjustments and exchange rate adjustments on financial assets and liabilities and gold. Both realised and unrealised gains and losses are recognised in the profit and loss account.

#### Income from financial fixed assets, etc.

Income from financial fixed assets, etc. comprises dividend received from shares, gains from the sale of equity investments, etc., as well as revaluation and write-down. Income is recognised in the year when the dividend is announced.

#### Other income

Other income comprises income from Danmarks Nationalbank's sale of coins and medals, as well as other income that is not related to Danmarks Nationalbank's primary activities or that is not annually recurring.

#### **Expenses**

Staff expenses comprise salaries and remuneration, including pension contributions and support, etc., training costs and other staff expenses. Other expenses comprise materials for production of bank-

notes and coins, etc., current expenses for Danmarks Nationalbank's properties, IT expenses and other expenses.

#### Other expenses

Other expenses comprise expenses that are not related to Danmarks Nationalbank's primary activities or that are not annually recurring.

#### **Balance Sheet**

# Gold

Gold is stated at the fair value on the balance sheet date.

#### Financial assets and liabilities

Financial assets and liabilities traded in active markets are stated at the fair value on the balance sheet date.

Holdings of Exchange Traded Funds and stock futures, which are included in "Foreign assets", are traded on an active market, so the fair value is based on quoted prices.

For bond portfolios in less active or inactive markets, which are included in "Foreign assets" and "Domestic bonds", the fair value on the balance sheet date has been calculated by a model based on estimation and assessment techniques taking into account recent transactions in similar instruments, the discounted payment flows for the portfolios and the relevant term structure based on the market conditions existing on the balance sheet date.

Monetary policy accounts, including certificates of deposit and other lending and deposits, are stated at nominal value.

#### Repurchase agreements and securities lending, etc.

Securities sold in connection with simultaneous repurchase agreements and securities made available for lending are included in Danmarks Nationalbank's respective holdings.

#### Financial fixed assets, etc.

Capital investments and equivalent investments and equity investments in associated companies (in which the ownership interest or voting rights are 20 per cent or more) are stated at the acquisition value, unless the fair value is lower.

#### Tangible and intangible fixed assets

Tangible and intangible fixed assets comprise Danmarks Nationalbank's properties, technical building facilities (lifts, electrical installations, etc.), technical production facilities (for banknote and coin production), office equipment and vehicles, hardware and software and fixed assets under construction.

Fixed assets are stated on the balance sheet at acquisition prices less accumulated depreciation and write-down.

Assets with an acquisition value of less than kr. 100,000 per unit are carried as expenditure in the year of acquisition.

Depreciation and amortisation on a linear perannum basis takes place over the expected useful lives of the assets. The useful lives are assessed as follows:

- Bank properties 100 years
- Other properties 25-50 years
- Building improvements 25 years
- Technical building facilities 10-25 years
- Technical production facilities 5-10 years
- Hardware and software 3-5 years
- Other machinery and equipment 3-5 years

Fixed assets under construction comprise expenses incurred for intangible development projects and tangible fixed assets under construction. Expenses are transferred to the relevant fixed asset groups when the assets are ready for use.

Profit/loss on the sale of fixed assets is recognised in the profit and loss account under depreciation, amortisation and write-down and is stated as the difference between the sales price and the book value at the time of sale.

#### Other assets

Other assets include, inter alia, interest receivable, positive net value of hedging instruments in the form of unsettled foreign exchange transactions and other financial derivatives by instrument type, and prepaid expenses.

Financial derivatives such as forward securities and forward exchange contracts, interest rate and currency swaps, etc. are stated at fair value on the balance sheet date.

#### Banknotes and coins

Banknotes and coins in circulation are stated at their nominal value.

#### Other liabilities

Other liabilities comprise, inter alia, payables, negative net value of hedging instruments in the form of unsettled foreign exchange transactions and other financial derivatives by instrument type, and uncovered pension commitments, commitments by way of support and severance payments and other provisions for guarantees provided.

Financial derivatives such as forward securities and forward exchange contracts, interest rate and currency swaps, etc. are stated at fair value on the balance sheet date.

#### **Contingent liabilities**

Other liabilities concerning guarantees provided are stated at the estimated value of the payment obligation

#### **Pension commitments**

For defined contribution pension plans, the current premium payments to the pension companies are carried as expenditure in the profit and loss account, and the pension commitment hereafter passes to the pension companies.

For defined benefit pension plans, provisions are made in the accounts of Danmarks Nationalbank for uncovered pension undertakings compiled according to actuarial principles.

# Profit and Loss Account

(kr. 1,000)	Note	2016	2015
Net income from interest, etc.:	1		
Interest on net foreign assets		-1,370,336	-157,762
Income from Exchange Traded Funds		118,469	61,770
Interest on monetary policy lending and deposits and certificates of	2	818,959	1,207,891
Interest on domestic bonds		126,791	203,468
Interest on the central government's deposits		300,096	645,253
Interest on other domestic loans and deposits		-44,667	-83,736
Commission and other income		184	215
Net income from interest, etc., total		-50,504	1,877,099
Value adjustments, etc.:			
Value adjustment of gold	3	2,000,763	-216,720
Value adjustment of foreign exchange positions	4	1,415,034	2,479,997
Value adjustment of domestic bonds		307,827	-134,745
Value adjustments, etc., total		3,723,624	2,128,532
Profit/loss from financial portfolios		3,673,120	4,005,631
Income from financial fixed assets, etc.	5	957,294	263,118
Other income	6	4,083	4,810
Expenses:			
Staff expenses	7	385,853	373,954
Other expenses	8	284,609	236,375
Total expenses		670,462	610,329
Depreciation, amortisation and write-down of tangible and intangible fixed assets	9	36,465	48,935
Other expenses	10	-	19,000
Profit/loss for the year		3,927,570	3,595,295
Distribution of the result for the year:			
Allocation to General Reserves		3,083,026	2,727,507
Payable to the central government		844,544	867,788
		3,927,570	3,595,295

# **Balance Sheet**

(kr. 1,000)	Note	2016	2015
Assets			
Gold	11	17,491,210	15,490,447
Foreign assets	12	424,894,336	405,501,696
Claims on the IMF, etc.	13	16,654,593	19,601,238
Claims re banks' and mortgage banks' TARGET accounts at the ECB		55,209	707,075
Monetary policy lending	14	-	325,000
Other lending	15	3,529,665	3,177,192
Domestic bonds	16	32,925,695	32,887,130
Financial fixed assets, etc.	17	184,063	802,211
Tangible and intangible fixed assets	18	646,088	718,524
Other assets	19	1,532,360	2,447,970
Accruals		26,922	28,026
Total assets		497,940,141	481,686,509
Liabilities			
Banknotes	20	64,913,157	64,214,945
Coins	20	6,010,395	5,951,206
Monetary policy deposits	20	0,010,333	3,331,200
Net current accounts and settlement accounts	21	28,918,744	51,018,229
Certificates of deposit	21	172,877,000	94,110,000
Other deposits	22	15,384,686	15,800,949
Central government	23	111,772,459	158,243,722
Foreign liabilities	24	3,003,581	3,084,282
Counterpart of Special Drawing Rights allocated by the IMF	25	14,512,242	14,507,188
Other liabilities	26	6,580,922	3,872,059
Total creditors		423,973,186	410,802,580
General Capital Fund		50,000	50,000
Statutory Reserves		250,000	250,000
General Reserves		73,666,955	70,583,929
Total net capital	27	73,966,955	70,883,929
Total liabilities		497,940,141	481,686,509
Apportionment of foreign exchange reserve assets	28		
Financial derivatives for conversion of foreign exchange exposure	29		
Other financial derivatives	30		
Contingent liabilities	31		
Loan and purchase commitments to the IMF	32		
Pension commitments	33		
rension communents	33		

#### Note 1 - Net income from interest

Overall, 2016 was characterised by very low interest rates. As in 2015, a large proportion of the foreign exchange reserve accrued zero or negative interest, resulting in declining earnings. Interest rate developments led to a fall in total net interest income from a profit of kr. 1,877 million to a loss of kr. 51 million in 2016.

This is mainly because net income from interest concerning foreign net assets is negative and fell by kr. 1,213 million to kr. -1,370 million, reflecting a negative return on money market products and current accounts and negative premium on forward exchange contracts. Negative maturity reduction of kr. 2.4 billion is included in net income from interest.

The monetary policy interest rates were changed on one occasion in 2016, when the rate of interest on certificates of

deposit was raised by 10 bp to -0.65 per cent. Average net deposits from the monetary policy counterparties amounted to kr. 152 billion in 2016. Due to the combination of net deposits and interest rate developments, Danmarks Nationalbank posted net interest income of kr. 819 million from these accounts. Average net deposits from these institutions amounted to kr. 263 billion in 2015, and Danmarks Nationalbank had net interest income of kr. 1,208 million on such deposits.

The average deposit of the central government in 2016 was kr. 147 billion (2015: kr. 201 billion). This decrease has led to a fall of kr. 345 million in net interest income.

Interest on domestic bonds fell by kr. 77 million to kr. 127 million in 2016. Interest income was reduced by kr. 0.4 billion relating to maturity reductions.

#### Note 2 - Interest on monetary policy lending and deposits and certificates of deposit

	818,959	1,207,891
Interest on certificates of deposit	818,794	1,205,010
Interest on monetary policy lending	165	2,881
(kr. 1,000)	2016	2015

#### Note 3 - Value adjustment of gold

Value adjustment of the gold stock entailed a gain of kr. 2,001 million, reflecting a total increase of 12.9 per cent in the price of gold measured in Danish kroner.

# Note 4 - Value adjustment of foreign exchange positions

	1,415,034	2,479,997
Exchange rate adjustment	-1,281,775	1,645,821
Market value adjustment	2,696,809	834,176
(kr. 1,000)	2016	2015

Market value adjustment increased by kr. 1.9 billion relative to 2015, mainly due to value adjustment of bonds and equities. Conversely, exchange rate adjustments led to a

loss of kr. 1.3 billion, which can be attributed to strengthening of the krone vis-à-vis the euro.

# Note 5 - Income from financial fixed assets, etc.

Front off sales of infancial fixed assets, etc.	957,294	263.118
Profit on sales of financial fixed assets, etc.	<b>90,990</b> 866,304	263,118
VP Securities A/S	-	14,532
Bank for International Settlements (BIS)	17,261	18,069
Danish Ship Finance A/S	73,729	230,517
(kr. 1,000)	2016	2015

# Note 6 - Other income

	4,083	4,810
Other income	-	190
Sale of coins and medals	4,083	4,620
(kr. 1,000)	2016	2015

Note 7 - Staff expenses

(kr. 1,000)	2016	2015
Salaries and remuneration	310,917	301,003
Pension contributions and support	52,974	55,807
Training	7,202	6,946
Other staff expenses	14,760	14,515
	385,853	378,271
Of which used for intangible development		
projects capitalised under fixed assets	-	-4,317
	385,853	373,954
Of which remuneration of the management:		
Governors, salaries	9,728	9,587
Governors, pension contributions	1,785	1,754
Committee of Directors and Board of Directors	925	898
	12,438	12,239
Salaries to the Governors are as follows:		
Lars Rohde, Chairman	3,454	3,403
Per Callesen	3,137	3,092
Hugo Frey Jensen	3,137	3,092
	9,728	9,587
Remuneration of the Committee of Directors and Board of Directors is as		
Chairman of the Committee of Directors and the Board of Directors	117	114
Deputy Chairman of the Committee of Directors	87	86
Deputy Chairman of the Board of Directors	35	34
Other members of the Committee of Directors, total (kr. 57,000/member/year)	286	281
Other members of the Board of Directors, total (kr. 24,000/member/year)	400	383
	925	898

No bonus schemes exist at Danmarks Nationalbank.

In 2016, the average number of employees was 451 full-time equivalents (2015: 468).

# Note 8 - Other expenses

	284,609	236,375
Other expenses	47,616	36,684
IT expenses	138,949	100,850
Real property, current expenses	52,996	50,743
Materials for coin production	8,714	13,530
Materials for banknote production	36,334	34,568
(kr. 1,000)	2016	2015

# Note 9 - Depreciation, amortisation and write-down of tangible and intangible fixed assets

	36,465	48,935
Profit on sale of fixed assets	30,292	7,667
	66,757	56,602
Write-down of fixed assets	6,992	-
Hardware and software	35,956	27,013
Machinery and other operating equipment	9,117	13,694
Properties	14,692	15,895
(kr. 1,000)	2016	2015

Profit on sale of fixed assets relates mainly to the sale of the property located at Niels Juels Gade 7.

# Note 10 - Other expenses

In 2015, Danmarks Nationalbank had an expense relating to a disbursement in connection with the issue of a

commemorative coin to mark the 75th birthday of Her Majesty Queen Margrethe II.

# Note 11 - Gold

The value of the gold stock was kr. 17.5 billion at year-end, compared with kr. 15.5 billion at the end of 2015. The reason for the increase is that the price of gold, measured

in kroner, rose by 12.9 per cent in 2016. The gold stock was unchanged at  $66,550 \ \mathrm{kg}$ .

# Note 12 - Foreign assets

	424,894,336	405,501,696
Other foreign assets	-	1,610
Repo transactions against collateral in foreign bonds	34,941,680	83,020,312
Margin claims re futures	530,918	1,179,557
Claims re two-way collateral in cash	4,976,587	596,328
Claims on foreign commercial banks	1,984,984	489,705
Claims on central banks and supranational institutions	129,071,228	31,484,288
Exchange Traded Funds in corporate bonds	8,119,828	5,320,082
Foreign bonds	245,269,111	283,409,814
(kr. 1,000)	2016	2015

Foreign bonds comprise primarily government bonds issued in the USA and the euro area, respectively, and instruments issued by the BIS.

Claims on central banks, supranational institutions and foreign commercial banks include demand deposits and uncollateralised deposits.

Claims re two-way collateral in cash relate to collateral pledged in euro concerning Danmarks Nationalbank's swap lines.

Claims re futures include partly margin deposits, partly margin outstandings in the underlying assets. The total exposure to stock futures is positive by kr. 7.5 billion (long position), while the exposure to bond futures is negative by kr. 21.0 billion (short position). This can be seen from note 30.

Collateralised lending in the form of reverse repo transactions is collateralised against foreign government and government guaranteed bonds.

Note 13 - Claims on the IMF, etc.

The IMF's drawing right       31,967,192       15,3         Reserve position with the IMF       624,562       2,5         Holdings of Special Drawing Rights (SDRs) at the IMF       13,648,806       13,7         Loans to the PRG Trust       354,308       3         Bilateral loans under the 2009 loan agreement       1,717,999       1,7		16,654,593	19,601,238
IMF quota       32,591,754       17,5         The IMF's drawing right       31,967,192       15,3         Reserve position with the IMF       624,562       2,5         Holdings of Special Drawing Rights (SDRs) at the IMF       13,648,806       13,7         Loans to the PRG Trust       354,308       3	Loans under New Arrangements to Borrow (NAB)	308,918	1,241,533
IMF quota The IMF's drawing right  Reserve position with the IMF Holdings of Special Drawing Rights (SDRs) at the IMF  14,273,368  32,591,754 17,9 15,3 16,2 15,3 16,2	Bilateral loans under the 2009 loan agreement	1,717,999	1,717,400
IMF quota The IMF's drawing right  Reserve position with the IMF Holdings of Special Drawing Rights (SDRs) at the IMF  17,9 17,9 17,9 17,9 17,9 18,9 19,17 1	Loans to the PRG Trust	354,308	360,752
IMF quota       32,591,754       17,9         The IMF's drawing right       31,967,192       15,3         Reserve position with the IMF       624,562       2,5		14,273,368	16,281,553
IMF quota 32,591,754 17,9 The IMF's drawing right 31,967,192 15,3	Holdings of Special Drawing Rights (SDRs) at the IMF	13,648,806	13,746,564
IMF quota 32,591,754 17,9	Reserve position with the IMF	624,562	2,534,989
	The IMF's drawing right	31,967,192	15,381,676
(kr. 1,000) 2016	IMF quota	32,591,754	17,916,665
	(kr. 1,000)	2016	2015

Each IMF member country is assigned a *quota* based on its relative position in the world economy. The member countries' quota shares determine their voting power, access to loans from the IMF and contribution to the funding of the IMF. When the IMF's 14th quota reform from 2010 took effect on 26 January 2016, Denmark's quota in the IMF increased by SDR 1,548 million to SDR 3,439 million. At end-2016, the quota was kr. 32.6 billion.

Danmarks Nationalbank has paid up 25 per cent of the Danish quota to the IMF in foreign exchange, while the remaining 75 per cent has been paid into the IMF's account at Danmarks Nationalbank in Danish kroner. This account is used for the IMF's transactions in Danish kroner, and the balance of the account constitutes the IMF's drawing right at Danmarks Nationalbank. The difference between Denmark's membership contribution and the IMF's holding of Danish kroner is called the reserve position with the IMF.

Holdings of Special Drawing Rights with the IMF: As part of the SDR cooperation, Danmarks Nationalbank may be asked to purchase SDRs to increase its holdings to up to three times the accumulated allocation of SDR 1,531 million, corresponding to SDR 4,594 million. With the current holdings of SDRs, the maximum further purchase is equivalent to kr. 29,888 million. An amount corresponding to the IMF's accumulated allocations to Denmark can be found in Note 25 "Counterpart of Special Drawing Rights allocated by the IMF".

Loans to the PRG Trust amount to kr. 354 million. Redemptions totalled kr. 6.4 million in 2016. Denmark's loan commitment was increased by SDR 300 million on 17 November 2016, so that it totalled SDR 500 million at 31 December 2016, including interest corresponding to kr. 4,738 million. These loans are guaranteed by the Danish government. The maximum maturity for drawings under this agreement is 10 years.

Bilateral loans under the 2009 loan agreement: Danmarks Nationalbank's bilateral loan agreement from 2009 expired on 31 October 2013. No new loans were granted under this agreement in 2016. At end-2016, bilateral loans totalled kr. 1,718 million. The maximum maturity for drawings under this agreement is 5 years.

Loans under the NAB agreement amount to SDR 181 million. No new loans were granted under this agreement in 2016. The maximum maturity for drawings under this agreement is 10 years.

The total amounts drawn under the NAB agreement and the 2009 bilateral loan agreement cannot exceed the credit commitment under the NAB agreement. In connection with the approval of the IMF's 14th quota reform, Danmarks Nationalbank's credit commitment under the NAB was reduced by SDR 1,578 million to SDR 1,630 million, corresponding to kr. 15,444 million. The loans under the 2009 bilateral loan agreement and the NAB agreement mean that further drawings cannot exceed an amount corresponding to kr. 13,417 million.

The bilateral loan agreement from 2012 was replaced by a new agreement in 2016. The IMF may still borrow up to the equivalent of 5,300 million euro (kr. 39,402 million) under this agreement. The maximum maturity for drawings under this agreement is 10 years. No drawing rights have been exercised under the agreement, and this will not be relevant until the IMF's lending capacity falls below a level determined by the IMF's Executive Board.

Reference is made to Note 32 for an overview of loan and purchase commitments to the IMF.

# Note 14 - Monetary policy lending

The volume of monetary policy lending averaged kr. 0.3 billion in 2016. There was no outstanding lending at 31 December 2016.

# Note 15 - Other lending

Banks, two-way collateral in cash Other loans 416,475	9,626 35,576
	,
Other loans 75	35,576

# Note 16 - Domestic bonds

	32,925,695	32,887,130
Mortgage bonds, etc. Ship Finance bonds	31,572,460 1,353,235	31,531,093 1,356,037
(kr. 1,000)	2016	2015

# Note 17 - Financial fixed assets, etc.

	184,063	802,211
Equity investments in associated companies	61,560	330,062
Capital investments and equivalent investments	122,503	472,149
(kr. 1,000)	2016	2015

Danmarks Nationalbank's portfolio of capital investments and equivalent investments comprises the capital subscription to the ECB and shares in the Bank for International Settlements (BIS) and SWIFT. Danmarks Nationalbank divested its investments in Danish Ship Finance, DLR Kredit, Messecenter Herning and Bankernes Kontantservice in 2016.

The following special conditions apply to capital investments and equivalent investments: The capital subscription to the ECB amounts to 6 million euro, equivalent to kr. 45 million. As a non-euro area member of the European System of Central Banks (ESCB), Danmarks Nationalbank has paid up 3.75 per cent of its share of 161

million euro (1.4873 per cent) of the ECB's total capital of 10,825 million euro. The purpose of the capital subscription is to contribute to the operation of the ECB. As a non-euro area member of the ESCB, Danmarks Nationalbank neither participates in the distribution of profits nor the allocation of losses in the ECB.

The BIS shares have been paid up at 25 per cent of their nominal value. Danmarks Nationalbank has an obligation to pay up the remaining 75 per cent of the nominal value of its BIS shareholding if asked to do so by the BIS. This payment obligation amounts to SDR 32 million, equivalent to kr. 304 million.

Equity investments in associated companies comprise:

	Equity investment/ voting rights	Share of Equity	Share of result
VP Securities A/S	24.2 / 24.2 per cent	kr. 83.3 million	kr. 30.8 million

# Note 18 - Tangible and intangible fixed assets

	646,088	718,524
ninery and other operating equipment	37,547	7,954
Hardware and software	100,164	129,386
Machinery and other operating equipment	5,894	14,675
Properties	502,483	566,509
(kr. 1,000)	2016	2015

At the most recent official assessment, Danmarks Nationalbank's properties were valued at kr. 1,412 million.

#### Note 19 - Other assets

	1,532,360	2,447,970
Other minor items	3,001	3,842
Prepaid expenses and other receivables	274,568	99,205
Materials used for production of banknotes and coins	-	31,549
Accrual of interest	1,247,740	2,309,298
Market value of unsettled domestic securities transactions	7,051	4,076
(kr. 1,000)	2016	2015

# Note 20 - Banknotes and coins

Banknotes increased by kr. 698 million to kr. 64.9 billion relative to the preceding year, while coins showed a slight

increase of kr. 59 million. Banknotes include kr. 399 million in Faroese banknotes.

# Note 21 - Net current accounts and settlement accounts

	28,918,744	51,018,229
Drawing on current accounts	222,485,795	132,554,888
Deposits in current and settlement accounts	251,404,539	183,573,117
(kr. 1,000)	2016	2015

At 31 December 2016, Danmarks Nationalbank acts on a fully secured basis as guarantor to VP Securities A/S for kr. 5.5 billion (2015: kr. 23.6 billion) and to the Danish Bankers Association (Sumclearing) for kr. 243.9 billion (2015: kr.

153.1 billion) in connection with the banks' and mortgage banks' payment settlements with 2 January 2017 as the value date.

# Note 22 - Other deposits

	15,384,686	15,800,949
Banks and mortgage banks Other deposits	55,286 15,329,400	712,256 15,088,693
(kr. 1,000)	2016	2015

Banks and mortgage banks includes deposits in current accounts in euro totalling kr. 55 million.

# Note 23 - Central government

The central government's deposits amounted to kr. 111,772 million at 31 December 2016. This accounting item includes the central government's share of the profit/loss for the year of kr. 845 million.

# Note 24 - Foreign liabilities

These liabilities comprise deposits in kroner at Danmarks Nationalbank by supranational institutions and other central banks. The European Commission's deposit amounts to kr. 2,983 million.

#### Note 25 - Counterpart of Special Drawing Rights allocated by the IMF

This liability comprises the IMF's original allocation of Special Drawing Rights to Denmark. Total allocations were SDR 1,531 million at 31 December 2016. There were no changes in the allocation of SDRs in 2016. The current holdings of SDRs are specified in Note 13 "Claims on the IMF, etc."  $\,$ 

#### Note 26 - Other liabilities

	6,580,922	3,872,059
Other liabilities	54,577	49,318
Wage-related payables	94,930	88,205
Payables	47,820	43,537
Accrual of interest	514,899	314,765
Market value of other financial derivatives denominated in foreign currency	1,672,287	2,494,333
Market value of unsettled foreign exchange transactions	4,196,409	881,901
(kr. 1,000)	2016	2015

# Note 27 - Net capital

Net capital at 31 December 2016	300,000	73,666,955
Carried forward from the profit/loss for the year	-	3,083,026
Net capital at 1 January 2016	300,000	70,583,929
(kr. 1,000)	General Capital Fund and Statutory Reserves	General Reserves

# Note 28 - Apportionment of foreign exchange reserve assets

	459,040	310,569	110,374	18	38,079
- Of which non-rated assets	104,130	57,893	46,204	3	30
- Of which BB+ to BB-	560	-	560	-	-
- Of which BBB+ to BBB-	8,503	8,288	215	-	-
- Of which A+ to A-	34,473	33,698	756	-	19
- Of which AA+ to AA-	113,385	51,714	61,576	15	80
- Of which AAA	163,843	158,976	1,063	-	3,804
Foreign assets	424,894	310,569	110,374	18	3,933
Claims on the IMF	16,655	-	-	-	16,655
Gold	17,491	-	-	-	17,491
Foreign exchange reserve assets					
2016 (kr. million)	Total	EUR	USD	GBP	Other

161,049 75,550 11,660 543 54,822	63,012 74,467 11,078 - 5,321	89,039 1,079 582 543 49,468	8,870 - - - 0	128 4 0 -
75,550 11,660	74,467	1,079 582	, - -	4
75,550	74,467	1,079	-	4
,	,	•	,	
161,049	63,012	89,039	8,870	128
101,878	90,211	1,071	7,796	2,800
405,502	244,089	141,782	16,666	2,965
19,601	-	-	-	19,601
15,490	-	-	-	15,490
Total	EUR	USD	GBP	Other
	15,490 19,601 405,502	15,490 - 19,601 - 405,502 244,089	15,490 19,601 405,502 244,089 141,782	15,490 19,601 405,502 244,089 141,782 16,666

Exposure is placed according to the lowest credit rating given by Fitch, Moody's and S&P, respectively. Non-rated

assets comprise securities issued by and deposits at the BIS and holdings of Exchange Traded Funds.

Note 29 - Financial derivatives for conversion of foreign exchange exposure

	-3,376	158,517	-144,330	-17,400	-163
Sale	-13,694	-	-13,694	-	-
Currency and interest rate swaps: Purchase	11,200	11,200	-	-	-
Sale	-2,090	-2,090	-	-	0
Unsettled spot currency trades: Purchase	2,090	2,090	-	-	0
Net positions at market value Forward exchange contracts: Purchase Sale	150,496 -151,378	147,317 -	- -130,636	- -17,400	3,179 -3,342
2015 (kr. million)	Total	EUR	USD	GBP	Other
	-5,868	107,379	-110,839	-183	-2,225
Sale	-7,073	-	-7,073	-	-
Currency and interest rate swaps: Purchase	5,401	5,401	-	-	-
Unsettled spot currency trades: Purchase Sale	2 -2	1 -1		- -	1 -1
Net positions at market value Forward exchange contracts: Purchase Sale	110,675 -114,871	105,279 -3,301	3,168 -106,934	52 -235	2,176 -4,401
2016 (kr. million)	Total	EUR	USD	GBP	Other

Note 30 - Other financial derivatives

2016 (kr. million)	Total	DKK	EUR	USD
Principals at market value Forward contracts, securities: Purchase Sale	4,361 -	4,361 -	- -	-
Futures, bonds: Purchase Sale	- 20,986	-	- 7,513	- 13,473
Futures, shares: Purchase Sale	7,520 -	- -	3,706 -	3,814 -
2015 (kr. million)	Total	DKK	EUR	USD
Principals at market value Forward contracts, securities: Purchase Sale Futures, bonds: Purchase Sale	3,487 - - -	3,487 - - -		-
Futures, shares: Purchase Sale	15,573 -	- -	7,864 -	7,709 -

# Note 31 - Contingent liabilities

	49,512	53,831
Other guarantees	600	500
VP Securities A/S, guarantee for errors by other account-holding institutions	15,296	16,685
VP Securities A/S, share of Guarantee Capital	33,616	36,646
(kr. 1,000)	2016	2015

In addition, Danmarks Nationalbank has established an intervention agreement with the ECB.

Note 32 - Loan and purchase commitments to the IMF

(kr. million)	2016	2015
The IMF's drawing right  Danmarks Nationalbank's obligation to purchase SDRs	31,967 29,888	15,382 29,775
Undrawn amount of loan facility for the PRG Trust Undrawn amount of loan facilities for the IMF in connection with the NAB	4,384 13.417	1,534 27,427
Undrawn amount of loan facilities for the IMF in connection with bilateral loans (2012 agreement)	39,402	39,551
	119,058	113,669

These commitments constitute Danmarks Nationalbank's maximum further loan and purchase commitments to the IMF. The current credit exposure is stated in Note 13, which

also provides details on the loan and purchase commitments.

#### Note 33 - Pension commitments

Present and former employees of Danmarks Nationalbank have either a defined contribution or a defined benefit pension plan.

For defined contribution pension plans, Danmarks Nationalbank carries the ongoing premium payments to the pension companies as expenditure. Once the pension contributions for these plans have been paid to the pension companies, Danmarks Nationalbank has no further pension commitments to these employees.

With regard to defined benefit pension plans, Danmarks Nationalbank is obliged to ensure the policyholder a defined pension benefit. For these plans, Danmarks Nationalbank bears the risk concerning the future development in interest rates, wages, inflation, mortality, etc. Danmarks Nationalbank is thus obliged to make the contributions necessary to ensure the fulfilment of the pension undertakings.

Pension commitments for the defined benefit pension plans are calculated as the capital value of the future benefits payable under the plan. The pension undertakings are based primarily on the salary on retirement. The capital value is calculated on the basis of assumptions concerning the future development in e.g. wage levels, interest rates, inflation and mortality.

The defined benefit pension plans are essentially covered via Danmarks Nationalbank's Pension Fund subject to winding-up.

Key figures for the accounts of the Pension Fund:

(kr. million)	2016	2015
Pension commitments and other liabilities	3,445	3,311
Fair value of the assets of the Pension Fund	4,657	4,528
Net capital of the Pension Fund	1,212	1,216
Solvency requirement of the Pension Fund	136	132

Other defined benefit pension plans are covered in a pension company.

Danmarks Nationalbank Havnegade 5 DK-1093 Copenhagen K www.nationalbanken.dk