

Submission to the Riksdag

2017/18:RB1



## Annual report for Sveriges Riksbank 2017

---

### To the Riksdag

Sveriges Riksbank hereby submits the Riksbank's Annual Report for 2017 to the Riksdag. In accordance with Chapter 10, Article 3 of the Sveriges Riksbank Act (1988:1385), the Annual Report for Sveriges Riksbank includes an administration report, a balance sheet, a profit and loss account and an assessment of the Riksbank's internal control.

In the administration report, the Riksbank describes how the Bank has conducted monetary policy, promoted a safe and effective payment mechanism and carried out other tasks during the financial year.

*The Executive Board proposes*

that the Riksdag adopt the Riksbank's profit and loss account and balance sheet for the financial year 2017 as proposed in the Annual Report.

Stockholm, 15 February 2018

On behalf of the Executive Board

STEFAN INGVES

/Katarina Grönvall

Stefan Ingves (Chairman), Kerstin af Jochnick (First Deputy Governor), Martin Flodén, Per Jansson, Henry Ohlsson and Cecilia Skingsley participated in the decision.

The Reporting Clerk was Emma Hübinette.

# Table of contents

Statement by the Governor .....	4
<b>ADMINISTRATION REPORT.....</b>	<b>7</b>
The tasks and role of the Riksbank .....	7
Organisation and management.....	11
Maintaining the value of money – price stability.....	19
A safe and efficient payment system .....	33
Asset management .....	51
<b>BALANCE SHEET AND PROFIT AND LOSS ACCOUNT .....</b>	<b>65</b>
Accounting principles .....	65
Cash flow statement.....	72
Notes.....	75
The profit and loss account and balance sheet by function.....	94
Five-year overview .....	98
<b>INTERNAL GOVERNANCE AND CONTROL.....</b>	<b>101</b>
<b>APPENDICES</b>	
1.The departments of the Riksbank and their tasks.....	102
2.Consultation work of the Riksbank.....	104
3.The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017 .....	105
4.Glossary .....	106

# Statement by the Governor

*Monetary policy in 2017 has continued to be expansionary, with a repo rate of –0.50 per cent and continued purchases of government bonds. We are now seeing that inflation, after a long period spent below the target, is close to 2 per cent. Monetary policy has also contributed to Sweden's good economic development. At the same time, households' rising indebtedness entails a serious threat to the economy. The Riksbank's possibilities of managing this threat are, at present, limited. Instead, targeted measures are required within macroprudential policy and the policy areas of housing and taxation. Rapid changes are occurring on the payment market and the Riksbank is actively working to manage the questions brought up by technological developments and reduced cash usage.*

## **Expansionary monetary policy to safeguard the inflation target**

For several years, the Riksbank has been conducting an expansionary monetary policy to safeguard the inflation target and contribute towards the good development of the economy. The repo rate, cut below zero for the first time in 2015, was held at –0.50 per cent throughout 2017. The Riksbank's purchases of government bonds have continued over the year and, at the end of 2017, the nominal value of holdings of Swedish nominal and real government bonds amounted to SEK 310.7 billion, corresponding to almost 40 per cent of the outstanding stock.

Global economic activity is continuing to strengthen but inflation remains low abroad. Normalisation of monetary policy around the world appears to be taking longer than expected. As a small, open economy, Sweden is greatly affected by international developments. International interest rates have fallen in recent decades and policy rates in the developed economies are very low. In this type of environment, and in a situation where inflation in Sweden has undershot the target for a longer period, it has been necessary to conduct an expansionary monetary policy. This monetary policy has been a contributing reason for the current strength of the Swedish economy and for inflation, after having been below target for a longer period, being close to the target of 2 per cent in 2017.

During the year, the Riksbank changed target variable for monetary policy from the CPI to the CPIF (the CPI with a fixed interest rate). In recent years, the CPIF has been more important, in practical terms, for the formulation of monetary policy than the CPI and the changeover is aimed at creating increased clarity over how the Riksbank interprets its task of maintaining price stability. At the same time, a variation band of  $\pm 1$  was introduced around the

inflation target of 2 per cent, to illustrate in a simple way that monetary policy's capacity to steer inflation in detail is limited and that inflation normally varies around the inflation target.

### **Households' rising indebtedness – a growing threat to the economy**

Developments in the housing market continue to be very worrying. Household indebtedness has been on the increase for many years, even when interest rates were higher. Imbalances have been built up over a long period. With long-lasting very low interest rates, the risks become greater. In a situation in which monetary policy focuses on safeguarding the inflation target, the Riksbank has limited scope for any contribution towards stemming the risks on the housing market. Prices on the housing market certainly became slightly more restrained at the end of the year, but it is unclear whether or not this will be temporary. Promoting the long-term sustainable development of the Swedish economy requires a broad approach with targeted measures to manage these risks within macroprudential policy, housing policy and fiscal policy. Over the year, the Riksbank has raised a number of conceivable measures that could counteract the accumulation of risks. I consider that it is of the utmost importance for Sweden's long-term economic development that we adopt powerful measures to address these imbalances.

### **The banknote and coin changeover concluded**

Over the year, the Riksbank concluded the changeover of banknotes and coins. At the end of June 2017, the older 100 and 500-krona banknotes and the 1, 2 and 5-krona coins became invalid. The Riksbank has carried out information initiatives to inform the general public of the changeover and the withdrawal of older banknotes and coins. The changeover has been comprehensive and occasionally labour-intensive for the trade sector and banks. My opinion is that the changeover has worked well, on the whole. The Riksbank's summary and assessment of the banknote and coin changeover will be completed in 2018.

### **Changes on the payment market**

Cash usage is continuing to decline. The development is partly due to technological developments, with the technology offered becoming increasingly available in society in general and innovations on the payment market in particular. But it is also a consequence of the general public showing an ever greater preference for digital payment alternatives. The Riksbank is carefully analysing this development. This structural transformation is essentially positive, but it needs to take place at a rate that does not create problems for certain social groups or exclude anyone from the payment market. One question that

the Riksbank needs to ask itself is which role the Riksbank is to play in a possible future in which cash plays an even more modest role on the payment market. The Riksbank is therefore working on a project in which we are analysing the possibility of issuing electronic central bank money or e-kronas. All in all, it is my assessment that we are facing structural transformations in areas that previously have been stable. This development will affect all of the Riksbank's departments and we will have to take strategic decisions on the way forward.

The question of the payment system's vulnerability to cyberattacks has been important to the Riksbank over the year. Unfortunately, we do not see these risks decreasing in the next few years. Instead, this issue will continue to demand great vigilance and increased resources.

### **Committed employees and internal development work**

At the end of 2017, the Riksbank had a total of 368 employees. Over the year, the Riksbank carried out an employee survey in which most employees participated. I consider it pleasing that a clear majority of employees feel greatly motivated in their work and are proud to work for the Riksbank. However, the survey shows that many employees feel that their workloads are high. This is something we are working on and, over the year, health and our working environment have therefore been in focus.

### **Sveriges Riksbank Act to be reviewed**

The question of the role of central banks has been intensively discussed both internationally and in Sweden in the wake of the financial crisis. In December 2016, the Government decided to appoint a cross-party parliamentary committee with the task of performing a review of the monetary policy framework and the Sveriges Riksbank Act. Via a supplementary term of reference in October 2017, the committee was also assigned to investigate the Riksbank's financial independence and balance sheet. I look forward to following this work and the Riksbank will contribute to the inquiry whenever asked.

# ADMINISTRATION REPORT

## The tasks and role of the Riksbank

*The Riksbank is Sweden's central bank and a public authority under the Riksdag (the Swedish parliament). The Riksbank is responsible for conducting Swedish monetary policy, with the objective of maintaining price stability. The Riksbank also has the task of promoting a safe and efficient payment system.*

### **Maintaining the value of money – price stability**

Under the Sveriges Riksbank Act, the Riksbank shall maintain price stability, which means that inflation should be low and stable. The Riksbank has specified an inflation target, according to which the annual change in the consumer price index with a fixed interest rate (CPIF) is to be 2 per cent. When the level of the inflation target was determined in 1993, the target was defined in terms of the consumer price index (CPI) but, in September 2017, the Executive Board of the Riksbank decided to adopt the CPIF as the new target variable for monetary policy. In practice, however, the CPIF has been the Riksbank's operational target variable for several years and, by making the CPIF to a formal target variable, the Executive Board confirmed this practice.

The Riksbank's monetary policy is aimed at attaining the inflation target and, at the same time, supporting the objectives of general economic policy, whose aim is to achieve sustainable growth and high employment. This is achieved through the Riksbank, in addition to stabilising inflation around the inflation target, also endeavouring to stabilise production and employment around paths that are sustainable in the long term. The inflation target, however, takes precedence.

Monetary policy is expansionary if it means that demand increases and inflation rises. The Riksbank determines the level of its policy rate, the repo rate, to influence inflation and economic developments. The repo rate affects other interest rates in the economy and thereby economic activity and inflation. In addition, the Riksbank can employ complementary measures to make monetary policy more expansionary. The most relevant measure in recent years has been the purchase of securities. In addition, the Riksbank has stood ready to intervene on the currency market if the krona should have appreciated so rapidly as to impede the task of stabilising inflation at around 2 per cent. One important purpose of complementary measures may be to signal that the Riksbank is doing what is necessary to ensure that inflation expectations are compatible with the inflation target in the long run.

## **A safe and efficient payment mechanism – financial stability**

The Sveriges Riksbank Act states that the Riksbank shall promote a safe and efficient payment system. The Act also states that the Riksbank has responsibility for the supply of cash and for providing a central payment system (RIX). A stable financial system is needed for payments and the supply of capital to function smoothly. The Riksbank, like other central banks, must therefore also safeguard financial stability by reducing the risk for and having the capacity to manage financial crises and other serious disruptions to the financial system. It does this mainly by supplying the system with liquidity and by continually contributing to preventive work.

Financial stability is moreover a necessary condition for the Riksbank to attain its statutory objective of maintaining price stability. This is because the financial markets and the way they work affect the impact of monetary policy.

### *Preventive work and crisis management*

The Riksbank defines financial stability as meaning that the financial system can maintain its basic functions and also has resilience to disruptions that threaten these functions. The Riksbank endeavours to prevent threats to financial stability by regularly analysing developments in the financial system and in the economy in other respects, as well as informing of, and warning against, risks that are building up. The analysis focuses primarily on the major Swedish banking groups (Handelsbanken, Nordea, SEB and Swedbank), the functioning of the financial markets and the financial infrastructure required for payments by the public and the financial markets in Sweden to function.

The Riksbank works preventively by calling attention, in public and in dialogue with financial system participants, to risks and events that may threaten financial stability, both in Sweden and internationally. In this context, the Riksbank makes recommendations, not only to banks and other participants in the financial markets but also to legislators and other authorities, with the aim of getting them to understand and rectify the risks identified.

The Riksbank is in a position to influence the framing of laws and regulations that relate to supervision and crisis management, both by responding to consultation documents and by actively participating in the work of a number of international organisations.

If a financial crisis occurs, the Riksbank, Finansinspektionen, the Ministry of Finance and the Swedish National Debt Office share the responsibility for dealing with the crisis so as to minimise the economic costs. This cooperation takes place within the Financial Stability Council and elsewhere. The Council is a forum for discussion and not a decision-making body. This means that the authorities represented can communicate their opinions on what they consider should be addressed, but decisions on which measures should be adopted are taken independently by the authorities within their respective area of responsibility.



The Riksbank's financial crisis management can be divided into three main areas: supply of liquidity to the financial system; communication of the Riksbank's assessments; and cooperation with authorities and organisations in Sweden and abroad. The supply of liquidity means that banks borrow from the Riksbank through standing facilities or temporary facilities. The Riksbank can also provide liquidity assistance to individual institutions on special terms and conditions.

### *Secure and efficient financial transfers*

The Riksbank provides the central payment system RIX, which makes it easier for the market participants to make mutual financial transfers without credit or liquidity risks. Almost all of the payments in Swedish kronor that are not made internally within an individual bank are handled in the RIX system in some form. RIX is thereby of decisive importance to the efficient functioning of the Swedish financial system and the Riksbank has consequently set high targets for its availability and functionality.

RIX is also of great significance to the operational framework for the implementation of monetary policy. This is because the interest rates on the participants' accounts in the Riksbank are directly linked to the repo rate. These interest rates steer short-term interest rates on the financial markets. The Riksbank itself also carries out various transactions via RIX, such as monetary policy transactions of various types, and provides credits for extraordinary situations.

### *Safe and efficient cash supply*

The Riksbank has the exclusive right to issue banknotes and coins in Sweden and is responsible for the provision of cash. This means that the Riksbank supplies banknotes and coins, destroys banknotes and coins that can no longer be used and redeems banknotes that are no longer legal tender. The objectives are to ensure that banknotes and coins are of a high quality and that the Riksbank's provision of cash is safe and efficient. The general public and companies that handle cash must have great confidence in banknotes and coins and in cash provision. The Riksbank also follows developments on the payment markets and analyses the use of cash and alternative means of payment in the economy.

## **The Riksbank's independence**

The Riksbank is a public authority under the Riksdag. The Riksdag appoints the members of the Riksbank's General Council, and the General Council, in turn, appoints the members of the Riksbank's Executive Board. The General Council also supervises and scrutinises the work of the Executive Board.

The Executive Board of the Riksbank takes monetary policy decisions without seeking or taking instruction from any other party. By delegating the task of maintaining inflation at a low and stable level to the Riksbank, the

Riksdag has ensured that monetary policy is based on a long-term perspective and created the conditions for the credibility of the inflation target.

The Riksbank's independent status is also reflected in its financial independence, guaranteed, among other things, through the Riksbank having sufficient equity and the right to manage financial assets. The aim of asset management is to ensure that it can fulfil its statutory objective and perform its tasks, for example by implementing monetary policy, being prepared to intervene in the foreign exchange market and being able to provide temporary liquidity assistance to banks. Therefore the composition of the assets must ensure the tasks can always be performed.

### **Openness and communication**

The Riksbank attaches great importance to being open and clear about its activities. A wide range of external parties must be able to understand what the Riksbank does and why. By being open and clear about what forms the basis for the monetary policy decisions, the Riksbank increases confidence in the inflation target. This also creates confidence in how the Riksbank assesses and handles the situation on the financial markets. The Riksbank's explanations of its assessments also help market participants to form an understanding of economic developments and the risks in the financial system.

The independent status of the Riksbank also places great demands on communications and the transparency of the Riksbank's activities so that these can be examined and evaluated by the general public and the Riksdag. Much of the Riksbank's analysis work is presented in report form and all of these publications are available in full text on its website ([www.riksbank.se](http://www.riksbank.se)). The majority of them are published in both Swedish and English. The Riksbank also publishes press releases, speeches, articles and minutes from the meetings of the Executive Board and the General Council on its website. Moreover, the models that the Riksbank uses in its analysis work are also public.

#### *Box 1 – The Riksbank Committee*

On 22 December 2016, the Government decided to appoint a cross-party parliamentary committee with the task of performing a review of the monetary policy framework and the Sveriges Riksbank Act. This committee has adopted the name 'the Riksbank Committee'. The committee is to present its report, including constitutional issues, by no later than 31 May 2019.

Among others, the report covers questions of monetary policy objectives and means, the Riksbank's role in work on financial stability, the Riksbank's role on the cash market and the governance of the Riksbank. On 12 October 2017, the Riksbank Committee was also assigned to investigate the Riksbank's financial independence and balance sheet. The Riksbank is participating in the inquiry with one adviser and one expert. In addition, the Riksbank is monitoring the work of the inquiry and the Riksbank's officials are contributing to the inquiry with information and analysis whenever requested.

# Organisation and management

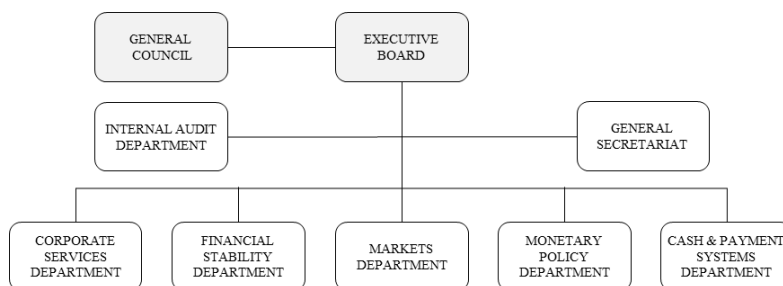
*The Riksbank continued to develop its organisation and management with the aim of achieving its vision to be among the best in comparison with other organisations. No major organisational changes were carried out in 2017 and operations proceeded on the basis of the strategic plan A 350-year old at the forefront, which started to apply in 2015.*

## Management and organisation

The Riksbank is led by an Executive Board appointed by the General Council of the Riksbank. The Executive Board is responsible for the bank's strategic management, while the General Council appoints the members of the Executive Board and adopts the Riksbank's Rules of Procedure.

In 2017, the Riksbank consisted of seven departments (see Figure 1 and Annex 1). A Management Group consisting of the heads of all departments, with the exception of the Internal Audit Department, has the task of coordinating and following up activities. The head of the Communications Division is also a part of the Management Group, which is chaired by the head of the General Secretariat.

**Figure 1 The Riksbank's organisational structure in 2017**



## General Council of the Riksbank

The General Council consists of eleven members and as many deputies. Members and deputies are appointed by the Riksdag after each general election, for a term of office of four years. The General Council selects a Chairperson and a Vice Chairperson from among its members.

## **The General Council's tasks**

Apart from appointing the members of the Riksbank's Executive Board and determining their salaries and other terms of appointment, the General Council adopts the Riksbank's Rules of Procedure, which specifies the Riksbank's overall organisation and regulation of certain managerial and decision-making matters. The General Council also determines the design of banknotes and coins.

Furthermore, the General Council submits proposals to the Riksdag concerning the allocation of the Riksbank's profits and makes a recommendation to the Riksdag with regard to the discharge from liability of the members of the Executive Board.

In addition, the General Council has the task of monitoring and controlling how the Riksbank conducts its activities and how the members of the Executive Board manages its business. The Chairperson and Vice Chairperson may attend and speak at the Executive Board's meetings, but they do not have the right to vote or make proposals. The General Council also has an audit function whose work is carried out by external consultants.

The General Council submits consultation responses within its field of competence and the Executive Board consults with the General Council on reports and formal communications with proposals to the Riksdag and the Government regarding government amendments to statutes or other central government measures.

The Chairperson and Vice Chairperson submit a report on the General Council's work to the Riksdag Committee on Finance. This usually takes place twice a year.

During the year, the General Council held nine meetings.

An account of the General Council's activities is presented in the General Council's submission to the Riksdag 2017/18:RB2 The General Council of the Riksbank's proposal for the allocation of profit 2017 etc.

## **The Executive Board of the Riksbank**

The Executive Board of the Riksbank consists of six members with terms of office of five or six years. The General Council appoints the Chairman of the Executive Board, who shall, at the same time, be Governor of the Riksbank, and at least one Vice Chairman, who shall, at the same time, be First Deputy Governor of the Riksbank.

### **The Executive Board's tasks**

The Executive Board has a joint responsibility for the strategic management of the Riksbank and decides on the instructions for the bank. The Executive Board takes decisions regarding monetary and exchange rate policy, important issues in the area of financial stability, payment issues and the Riksbank's asset management. The Executive Board also decides on strategic objectives,

business plan and budget. The Governor of the Riksbank has a mandate to follow up activities in relation to adopted plans and approved budget. The Governor of the Riksbank also has managerial responsibility for the heads of department.

The Executive Board makes decisions jointly at its meetings. The Board held a total of 23 meetings during 2017, six of which were monetary policy meetings. In addition, the Executive Board took 12 decisions by circulation.

At least twice a year, the Executive Board is required to present a written report on monetary policy to the Riksdag Committee on Finance. In 2017, there were two open hearings on monetary policy, one open hearing on financial stability and one closed hearing in front of the Riksdag Committee on Finance. A closed hearing was also held in front of the Defence Commission.

In 2017, the Executive Board consisted of the following members:

### *Stefan Ingves*

Stefan Ingves is Governor of the Riksbank and Chairman of the Executive Board. He took up the post on 1 January 2006 for a term of office of six years and received a further term of office to lead the Executive Board of the Riksbank for another six years from 1 January 2012. On 29 September 2017, the General Council decided to extend Stefan Ingves' mandate by a further five years as of 1 January 2018. Mr Ingves is a member of the General Council of the European Central Bank (ECB) and a member of the Board of Directors of the Bank for International Settlements (BIS), as well as Sweden's representative on the Board of Governors of the International Monetary Fund (IMF). He is also Chairman of the Basel Committee on Banking Supervision (BCBS) and Chairman of the Nordic-Baltic Macprudential Forum (NBMF), as well as member of the global Financial Stability Board (FSB). Furthermore, he is a member of the Financial Stability Council and, until the end of May 2017, he was Chairman of the Advisory Technical Committee (ATC) of the European Systemic Risk Board (ESRB). He is also a member of the Board of Directors of the Toronto Centre.

### *Kerstin af Jochnick*

Kerstin af Jochnick is First Deputy Governor of the Riksbank. She took up the post on 1 January 2012 for a term of office of six years. On 29 September 2017, the General Council decided to extend Kerstin af Jochnick's mandate by a further six years as of 1 January 2018. She represents the Riksbank on the General Board of the ESRB and is a Swedish member of the BCBS. She is also the Governor of the Riksbank's alternate on the ECB General Council and chairs the Cash Handling Advisory Board.

### *Martin Flodén*

Martin Flodén is Deputy Governor of the Riksbank. He took up the post on 22 May 2013 for a term of office of five years. He represents the Riksbank in the OECD's Working Party 3 (WP3) and in the Bellagio Group.

### *Per Jansson*

Per Jansson is Deputy Governor of the Riksbank. He took up the post on 1 January 2012 for a term of office of five years and, in 2016, received an extended term of office for another five years as of 1 January 2017. He represents the Riksbank on the EU Economic and Financial Committee (EFC), in the IMF cooperation between Sweden, the Netherlands, Belgium and Switzerland (G4) and on the Nordic-Baltic Monetary and Financial Committee (NBMFC). He is also a deputy on the International Monetary and Financial Committee (IMFC).

### *Henry Ohlsson*

Henry Ohlsson is Deputy Governor of the Riksbank. He took up the post on 12 January 2015 for a term of office of six years. He represents the Riksbank on the Advisory Technical Committee (ATC) of the ESRB, on the International Relations Committee (IRC) of the ECB, and on the Regional Consultative Group (RCG) of the FSB.

### *Cecilia Skingsley*

Cecilia Skingsley is Deputy Governor of the Riksbank. She took up the post on 22 May 2013 for a term of office of six years. She represents the Riksbank on the Committee on the Global Financial System (CGFS) and on the Euro Retail Payments Board (ERPB). She is the Governor of the Riksbank's alternate on the Board of Directors of the BIS and chairs the Retail Payments Council. She is also co-chair of the World Economic Forum's working group Global Future Council on the Future of Financial and Monetary Systems.

## Management of activities

The Riksbank's objectives, tasks and organisation are laid down in the Sveriges Riksbank Act, the Riksbank's Rules of Procedure and the Riksbank's Instructions. The work of the Riksbank is governed by a vision, a strategic plan, an annual business plan and internal regulations in the form of policies, rules and procedures.

The Riksbank's vision is to be among the best in terms of quality and efficiency in order to maintain a high level of public confidence. This means that our tasks are to be fulfilled to a high standard and for a reasonable cost and that the Riksbank must be among the best in comparison with other central

banks and other comparable authorities, academic institutions and private companies.

The vision is given more concrete form in operational objectives and result indicators for the Riksbank's different target areas. Each target area has its own targets, intended to put the implications of the Riksbank's vision into concrete terms for each area. One or more result indicators are linked to each target, and these are intended to give a view of how well the Riksbank is living up to its ambitions.

Operational follow-ups in recent years have shown that, in most areas, the Riksbank has lived up to the vision's level of ambition. It is, however, a challenge for a small central bank to defend this position and to contribute in the best possible way in a changing world. Changes to the financial system and the real economy are leading to new problems that need new solutions and this, in turn, places increasing demands on analysis and flexibility. Every four months of the year, the Executive Board received follow-up reports summarising the status of the indicators, the action plans, the budget and the operational risks. Any measures or reprioritisation given rise to by the results were discussed in conjunction with these follow-ups.

### **Activities developed on the basis of a strategic plan**

The Riksbank's operational plan is based on a strategic plan that summarises the task and the vision, and specifies a strategic direction for future operational plans. The strategic plan used as a guide for 2017 has the theme A 350-year old at the forefront, aimed, among other things, at the Riksbank's jubilee in 2018. The plan was adopted in the autumn of 2014 and consists of three strategic objectives: that all areas of the Riksbank's operations are to be in line with the times and the rest of the world, that it is to have an inspiring working climate that contributes to setting the right priorities and effective work, and that it is to achieve results of high quality to earn a high level of public confidence. These strategic objectives are to be attained with the aid of ten strategic priorities which will, in turn, be given more concrete form with action plans in the annual operational plan.

### *Good confidence among the Riksbank's target groups*

To monitor the development of public confidence and the confidence of various target groups in the Riksbank, the Riksbank uses regular external surveys. Every year, Kantar Sifo measures the reputations of Swedish authorities, while MedieAkademin's confidence barometer, together with the SOM Institute, measures and compares confidence in a number of different institutions and organisations in Sweden. In 2017, these surveys showed that the general public continues to have high confidence in the Riksbank. Kantar Sifo also regularly addresses a question to an Internet panel intended to represent the general public on how much confidence it has in the Riksbank. In 2017, a high proportion, averaging 56 per cent, of respondents replied that

they had very or fairly high confidence for the way in which the Riksbank conducts its work. The corresponding figure for 2016 was 53 per cent.

### *Communication*

Media reporting on the Riksbank decreased slightly in scope in 2017, compared with the previous year. Reporting was focused on monetary policy. The final phase of the banknote and coin changeover and the significance of household indebtedness for financial stability also received significant attention in the media.

The Riksbank's monetary policy communication was characterised by the message that monetary policy has contributed towards strong economic activity and rising inflation in Sweden, but also that a continued expansionary monetary policy was required for inflation to remain close to the target. One important element in communication was also to explain and support the introduction of a new target variable for monetary policy and a variation band. In addition, the Riksbank continued to highlight the risks inherent in households' high levels of indebtedness. Media reporting on monetary policy became increasingly neutral or positive as inflationary outcomes approached the inflation target. At the same time, media reporting continued to include critical discussion of the possible consequences for the Swedish economy of the negative repo rate.

Two major advertising campaigns were conducted over the year as a reminder that the older 100 and 500-krona banknotes, together with the older 1, 2 and 5-krona coins would cease to be legal tender after 30 June. The campaigns were successful and resulted in knowledge of the invalidity date increasing heavily in all groups.

### **Internal control**

Pursuant to the provisions of the Sveriges Riksbank Act, the Executive Board presents an assessment of the adequacy of internal control in the Annual Report. See also page 101.

The Executive Board is ultimately responsible for internal control and establishes overall policies and certain rules that govern the Riksbank's activities.

The internal control is evaluated on the basis of the components governance and control environment, risk analysis, control mechanisms, information and communication and follow-up and evaluation.

Under the framework of internal control, the Internal Audit Department also carries out examinations of selected areas of the operations.

There are different types of risk in the Riksbank's activities. Strategic risks, such as the risk of loss of reputation in the event of insufficient target fulfilment, for example, are managed as part of the control of activities. Financial and operational risks are managed in a special risk process, in which work on security of information is an important and prioritised area. The Risk Division



of the General Secretariat reports its independent assessment of the Riksbank's financial and operational risks to the Executive Board three times a year.

Operational risks can damage the Riksbank's operations, assets or reputation and can, for example, concern the handling of confidential information, IT support, internal processes and dependence on external parties. The operations' annual risk analyses and incident reports indicate that the risk level for the Bank as a whole did not change significantly in 2017.

## Employees

At the end of 2017, the Riksbank had a total of 368 employees (323 full-time equivalents), compared with 384 employees (336 full-time equivalents) in 2016. Over the course of the year there has been a focus on health and working environment, to promote a good work environment and this has included investments in leadership and employeeship.

### **Focus on health and working environment**

During the year, the Riksbank carried out an employee survey, which had a 92 per cent response rate. The survey showed that eight out of ten employees feel considerable motivation in their work and are proud to work at the bank. They also feel that there is a good discussion climate and the managers receive high marks. However, there is room for improvement with regard to the possibility for time to rest and recover after intensive work periods, and many employees find it difficult to prioritise between work tasks. For this reason a smaller follow-up survey was initiated, to be carried out every four months, with regard to organisational and social working environment.

Over the year, the bank increased its investment in health and keep-fit activities, for instance by raising the keep-fit allowance and offering all employees the opportunity to go for a health check-up. The sickness rate in 2017 was 1.2 per cent, compared with 1.7 per cent in 2016.

### **Leadership, employeeship and team development**

The Riksbank is focusing on further developing leadership and employeeship at the bank. All new managers go on courses in, for instance, a coaching approach and feedback, and they have all received the opportunity to learn more about organisational and social environment and team development. At the 2017 management conference, the managers also received training in how to prevent and manage conflicts and victimisation.

### **Attractive employer**

For the fifth year in a row, economics students have rated the Riksbank the most attractive employer in the public sector, according to Universum's company survey, Företagsbarometern.

## Environmental work

The Riksbank strives to work preventively and promote reduced environmental impact. Environmental work is an integral part of operations and is part of the responsibility of every manager. The measures used by the Riksbank in its environmental work and their outcomes are presented in Table 1. Energy usage (MWh) decreased in total but, as the number of man-years also decreased, total energy usage per employee is reported as marginally higher.

**Table 1 Measures used to monitor environmentally-sustainable development**

<b>Measure</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Carbon dioxide emissions from official travel (tonnes), total per employee	1.42	1.59	1.5
Energy usage, total (MWh)	5,410	5,883	5,689
Energy usage, total per employee (MWh per square metre)	17.4 (0.23)	17.5 (0.23)	17.6 (0.22)

Source: The Riksbank.

# Maintaining the value of money – price stability

*Growth in the Swedish economy continued to be good in 2017. According to the Riksbank's assessment in December, GDP grew by 2.5 per cent during the year. Inflation has shown a rising trend since 2014 and was close to the target in 2017. CPIF inflation amounted to 2.0 per cent on average, while CPI inflation was 1.8 per cent. It has required a long period of expansionary monetary policy to bring inflation up and the Executive Board emphasised that changing policy too hurriedly would be risky. Neither was monetary policy adjusted much over the year, although it was made slightly more expansionary through a decision in April on further purchases of government bonds. In December, it was also decided to bring forward reinvestments of the bonds that mature in 2019. In September, the Executive Board decided to make CPIF inflation, which had long functioned as a target variable in practice, the official target variable. A variation band around the target was also introduced as a way of illustrating that monetary policy cannot steer inflation in detail.*

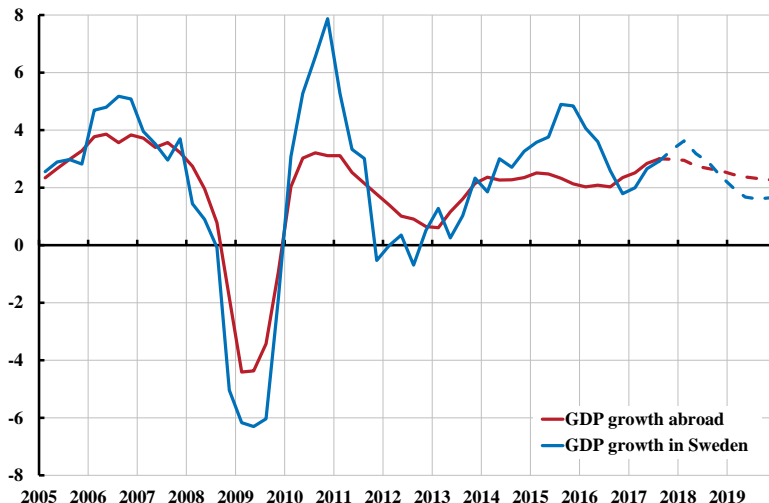
## Monetary policy

The Executive Board of the Riksbank normally holds six monetary policy meetings per year, at which it decides on the repo rate and other monetary policy measures. In conjunction with the monetary policy meetings, a Monetary Policy Report (MPR) is published, which includes forecasts for the repo rate, inflation and other economic variables.

Swedish monetary policy in 2017 was conducted in an environment in which global economic activity was becoming stronger and world trade was increasing. Inflation abroad fell at the start of 2017 in the wake of falling energy prices. Over the summer, energy prices started to rise again, which contributed to higher inflation. However, despite good economic signals, global inflation was restrained on the whole. Continued weak inflation prospects led to the normalisation of monetary policy abroad being expected to take time.

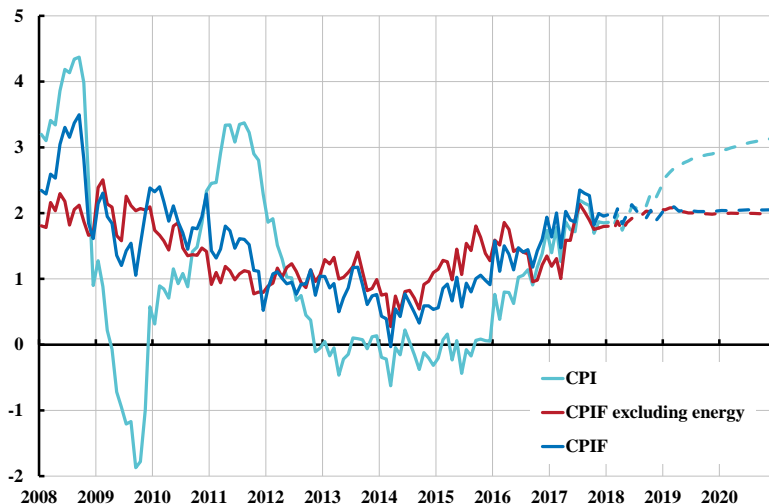
The improved international economic climate and expansionary domestic monetary policy contributed towards the continued positive development of the Swedish economy. GDP growth was good and employment increased. After having also been high from an international perspective for a few years, GDP growth over the year was in line with that abroad (see Chart 1). Inflation also continued to rise (see Chart 2). It was deemed that conditions were in place for inflation to be close to 2 per cent in the period ahead given a continued expansionary policy.

**Chart 1 GDP growth in Sweden and abroad, annual percentage change**



Note: GDP abroad is weighted by KIX. The broken lines represent the Riksbank’s forecast in December 2017, including the forecast for Q4 2017.  
Sources: National sources, Statistics Sweden and the Riksbank.

**Chart 2 The CPI, CPIF and CPIF excluding energy, annual percentage change**

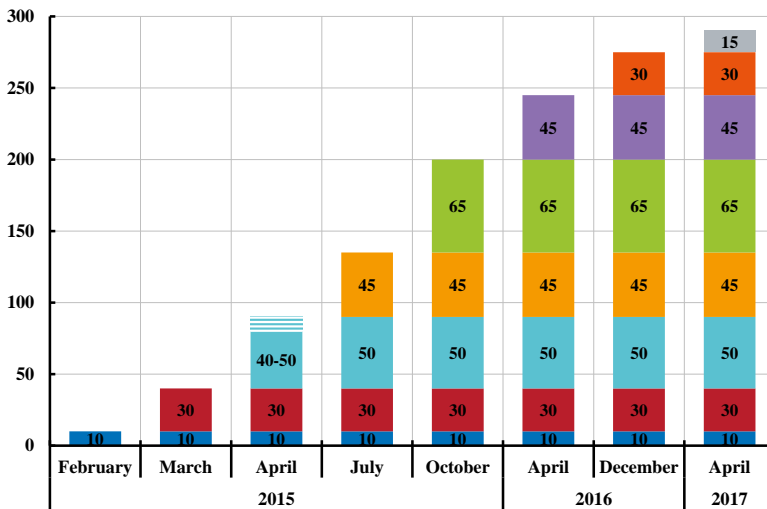


Note: The CPIF is the CPI with a fixed interest rate. The broken lines represent the Riksbank’s forecast from December 2017.  
Sources: Statistics Sweden and the Riksbank.

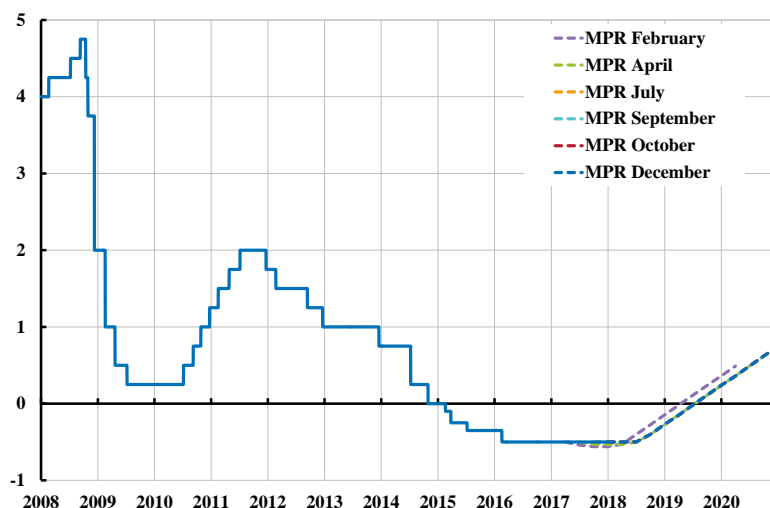
Over the year, the repo rate was held unchanged at  $-0.50$  per cent at all monetary policy meetings. The Executive Board decided in April that purchases of government bonds were to be extended by a further SEK 15 billion during the second half of 2017 (see Chart 3). The assessment was also made at the April meeting that it would take a longer time before the Riksbank would

raise the interest rate, which was expected to take place in mid-2018 (see Chart 4). One reason for the revised view taken in April was the assessment that the wage agreements concluded would lead to cost pressures in the economy rising more slowly than the Riksbank had previously expected. In December, the Executive Board decided to begin reinvestment of the bonds that mature in 2019 during January 2018. The Riksbank’s assessment is that the bond purchases do not comprise a major problem on the market, although it is taking somewhat longer to execute transactions. The Riksbank is closely monitoring developments by, for example, having regular contacts with the various participants.

**Chart 3 Purchases of government bonds decided by the Riksbank, SEK billions**



Note: Purchases of real and nominal government bonds, excluding reinvestments.  
 Source: The Riksbank.

**Chart 4 Repo rate and repo rate forecasts 2017, per cent**

Note: The unbroken line represents outcome (daily data) and the broken lines represent the Riksbank's forecasts (quarterly averages). The forecasts for April through December are almost identical.

Source: The Riksbank.

A recurring theme at the monetary policy meetings was that a very expansionary monetary policy has been required to bring up inflation and that it would be risky to make monetary policy less expansionary too early. Another recurring opinion was that the development of the krona is of major significance for inflation and that a large or rapid appreciation of the krona would make it significantly more difficult to stabilise inflation around the target. This was considered to restrict the possibilities for Swedish monetary policy to deviate from that of other countries.

#### *Box 2 – Monetary policy decisions and reservations 2017*

14 February      The repo rate was held unchanged at  $-0.50$  per cent and the delegated mandate for foreign exchange interventions was extended until October 2017. This mandate, initially decided by the Executive Board in January 2016, means that the Governor and First Deputy Governor of the Riksbank have a mandate to determine the precise details for possible interventions on the foreign exchange market in the event that it is not possible to wait for a decision from the entire Executive Board. Martin Flodén entered a reservation against extending the delegated mandate with the same justification used in January, February and July 2016, which is to say that currency interventions are not a suitable tool, under the prevailing circumstances, for making monetary policy more

	expansionary, should a need for further stimulation measures arise.
26 April	The repo rate was left unchanged at –0.50 per cent and the Executive Board decided to purchase government bonds for a further SEK 15 billion during the second half of 2017. The forecast for coming rate rises was postponed slightly. Martin Flodén, Henry Ohlsson and Cecilia Skingsley entered reservations against carrying out further bond purchases, as they considered that monetary policy did not need to be made more expansionary.
3 July	The repo rate was held unchanged at –0.50 per cent.
6 September	The repo rate was held unchanged at –0.50 per cent.
25 October	The repo rate was held unchanged at –0.50 per cent and the delegated mandate for foreign exchange interventions was extended until July 2018. Martin Flodén entered a reservation against extending the delegation mandate on the same grounds as before. Henry Ohlsson entered a reservation with the justification that in a situation with inflation and inflation expectations close to the target level, the question of potential interventions on the foreign exchange market could be managed without a special mandate.
19 December	The repo rate was held unchanged at –0.50 per cent. In January 2018, the Executive Board decided to begin reinvestment of the bonds that mature in 2019 during January 2018. Martin Flodén and Henry Ohlsson entered reservations against this decision. They advocated that the Executive Board should decide at a later stage when the bonds maturing in 2019 should be reinvested.

### **CPIF becomes target variable and variation band introduced**

In September, certain adjustments were made to the monetary policy framework. The Executive Board of the Riksbank decided then to adopt inflation measured in terms of the CPIF (the consumer price index with a fixed interest rate) as the formal target variable for monetary policy, instead of inflation measured as the CPI. At the same time, the Executive Board decided to introduce a variation band of 1–3 per cent for outcomes for CPIF inflation. This interval is intended to illustrate, in a simple way, that inflation will not be exactly 2 per cent every single month. It does not, however, affect the target for monetary policy. The Riksbank always strives to attain 2 per cent inflation, regardless of whether inflation is currently within or beyond the variation band. These adjustments were based on an analysis that had been in progress for some time and which was described in the Riksbank’s Annual Report 2016.

Preparations for the decision included a memorandum referred for consultation to 50 organisations and authorities by the Riksbank in May 2017, which described the adjustments the Riksbank was considering making. An annex to the minutes connected to the decision presented a summary of the referral bodies' statements and the Executive Board's considerations.

### *Box 3 – The level of the inflation target*

In conjunction with the introduction of inflation targeting in 1993, the Riksbank decided that the level of the inflation target should be 2 per cent. A well-defined target that could comprise a clearer anchor for price-setting and wage formation was considered necessary to break the earlier pattern of high and varying inflation, and to create the conditions for a more favourable economic development in the period ahead. When economic agents have a collective picture of how prices will develop in the future, it becomes easier to plan for the long term. One advantage of the target being 2 per cent and not lower is that wage formation can be impaired when average inflation is excessively low. The reason is that it has proved difficult in practice to lower nominal wages. If inflation is low and nominal wages cannot be lowered, it becomes difficult to adjust both average real wages and the relative wages between different companies and industries. This can ultimately bring about both higher unemployment and poorer productivity growth in the economy. These problems can be mitigated if there is a certain rate of inflation.

Another advantage, which has been particularly clear in recent years, is that a very low average rate of inflation would make it more difficult for monetary policy to counteract recessions. If average inflation is low, the nominal interest rate will also be low, on average. The lower the interest rate is in normal conditions, the less scope there is to lower it before it reaches its lower bound. This means that monetary policy becomes less expansionary than would be desirable. Even with an inflation target of 2 per cent, several central banks have been forced to cut their policy rates as far as is deemed possible and to remain there for a long period. With lower targets, the period at which the policy rate was at its lower bound would have been even longer.

## Target fulfilment

The Riksbank's monetary policy is evaluated by the Riksdag Committee on Finance. For this evaluation, the Riksbank compiles the report Account of Monetary Policy, which is published after the first Monetary Policy Report of the year. Among other things, the Account of Monetary Policy describes how inflation and the real economy have developed over the past year. The report for 2017 will be submitted to the Riksdag in March 2018.

The Riksbank strives to stabilise inflation around the inflation target, but also tries to stabilise production and employment around paths that are sustainable in the long term. The Riksbank thus conducts what is referred to as



flexible inflation targeting. One precondition for such a policy is that confidence in the inflation target is maintained.

In the assessment of monetary policy's target fulfilment, consideration should be taken not only of how inflation has developed, but also of developments in the real economy. However, both inflation and the real economy are constantly impacted by unexpected shocks, meaning that deviations from the inflation target are the rule rather than the exception.

## Inflation in 2017

After a long period of below-target inflation, CPIF inflation has risen, supported by an expansionary monetary policy. Both CPIF inflation and measures of underlying inflation have shown a rising trend since 2014 and were close to target in 2017 (see Chart 2 and Table 2).

**Table 2 Comparison of different measures of inflation, annual percentage change**

	Annual average		
	2015	2016	2017
CPIF	0.9	1.4	2.0
CPIF excluding energy	1.4	1.4	1.7
CPI	0.0	1.0	1.8

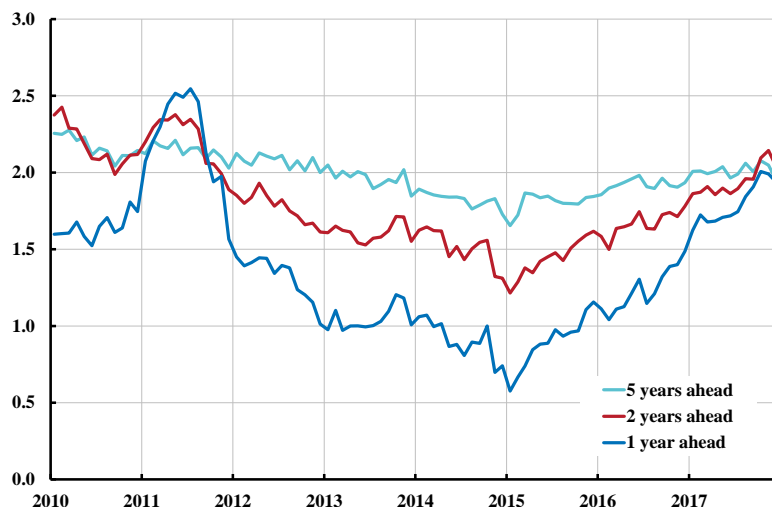
Note: The CPIF is the CPI with a fixed interest rate.

Sources: Statistics Sweden and the Riksbank.

CPIF inflation amounted to 2.0 per cent on average in 2017, compared with 1.4 per cent in 2016. In this sense, target fulfilment was very good. CPI inflation also increased markedly, from 1.0 per cent in 2016 to 1.8 per cent in 2017. Over the spring, inflation became unexpectedly high, partly due to temporary factors, but also as a result of a relatively broad rise in prices for services. The Riksbank made the assessment that CPIF inflation, supported by a continued expansionary monetary policy, will remain close to 2 per cent in the years ahead.

Inflation expectations have also risen for a number of years after having been a bit below target. Expectations five years ahead were close to 2 per cent over the whole year (see Chart 5).

**Chart 5 Inflation expectations among money market participants, per cent**



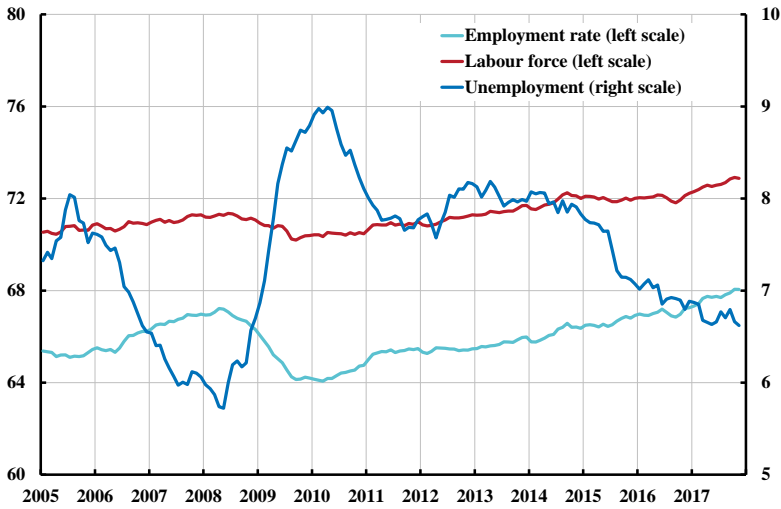
Source: TNS Sifo Prospera.

### **The development of the real economy in 2017**

The Swedish economy continued to develop strongly in 2017. Towards the end of 2017, a downturn in housing prices took place, but there were no signs that this had had any immediate negative effect on confidence in the economic development of households and companies. For the year as a whole, GDP growth was 2.5 per cent according to the Riksbank's forecast in December.

The situation on the labour market has shown an improving trend since the start of 2013, with a rising employment rate and falling unemployment. The strong economic situation means that demand for labour is high and it has become increasingly difficult for companies to recruit qualified personnel. This is expected to affect local wage formation and bring about rising wage increases over and above the levels in the central agreements. Unemployment fell slightly further in 2017, to an average of 6.7 per cent, according to the Riksbank's assessment in December, at the same time as the employment rate and labour force participation rate increased (see Chart 6).

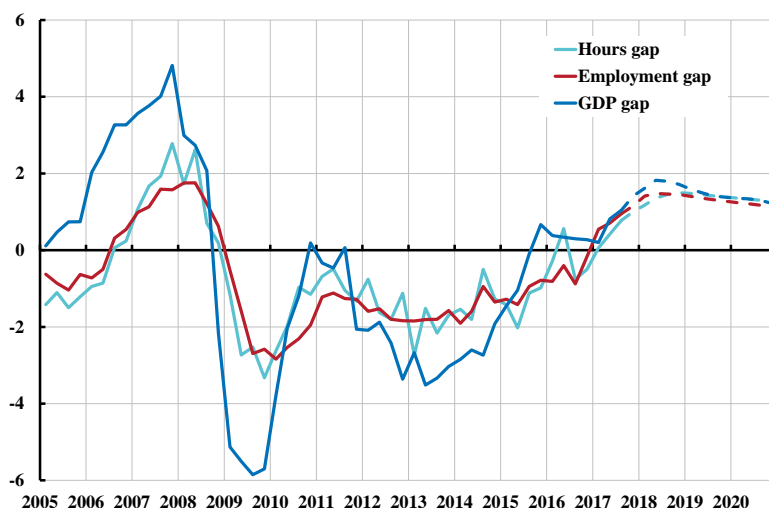
**Chart 6 Labour force participation, the employment rate and unemployment, per cent**



Note: Seasonally-adjusted data. Three-month moving average. This data refers to persons aged 15–74. The labour force participation rate and employment rate are measured as a percentage of the population. Unemployment is measured as a percentage of the labour force.

Source: Statistics Sweden.

To measure the economic situation, the Riksbank uses different measures of resource utilisation, for example the GDP gap, the hours gap and the employment gap. These measure the deviation from the respective long-term trends of GDP, hours worked and employment. The overall view given by the measure is that resource utilisation was higher than normal in 2017 (see Chart 7). Resource utilisation is also expected to rise slightly further and to remain higher than normal in the next few years.

**Chart 7 GDP gap, employment gap and hours gap, per cent**

Note: The gaps refer to the deviation in GDP, the number of hours worked and the number of those employed from the Riksbank's assessed trends. The broken lines represent the Riksbank's forecast from December 2017.

Sources: Statistics Sweden and the Riksbank.

#### *Box 4 – Statistics*

Under the provisions of the Sveriges Riksbank Act, the Riksbank shall make public statistical data concerning foreign exchange and credit conditions on a continual basis. Statistics on the financial market, securities issues and the balance of payments are produced and published on behalf of the Riksbank by Statistics Sweden (SCB). The Riksbank is responsible for the quality, content and development of the statistics.

The Riksbank itself compiles and publishes daily turnover statistics on the fixed-income and foreign exchange markets from the Riksbank and Swedish National Debt Office's counterparties. In addition, interest rates and exchange rates are published on the Riksbank's website on a daily basis.

Three times a year, the Riksbank conducts interviews with 40–45 companies to gain a rapid and up-to-date view of developments for non-financial corporations. Furthermore, the Riksbank conducts statistics work in several international institutions such as the European System of Central Banks (ESCB), Eurostat and the Bank for International Settlements (BIS).

The effects of globalisation on statistics are being increasingly observed in international statistics work. This is reflected, not least, in balance of payments statistics. In 2017, a study was made of recent decades' large surplus on the Swedish current account. The study showed that a large part of the surplus arises in multinational corporations' production and sales abroad.

### *Continued development of micro data*

Since 2015, the Riksbank and Statistics Sweden have conducted a joint project aimed at setting up two new statistical surveys. The surveys will include detailed information on both companies' credits (KRITA) and on companies' securities holdings (VINN), and this information will gradually start to be used in the Riksbank's analysis work in 2018. In April, the Riksbank decided on new regulations covering the compilation of credit information.

In October, the Riksbank published the report "The Riksbank's proposal for new statistics on households' financial assets and liabilities". The background is that households' assets and liabilities have increased significantly in recent years, at the same time as there is a lack of detailed data in Sweden over household balance sheets. This information is invaluable to the assessment of the household sector's resilience to various economic shocks, as well as monetary policy's effects on the economy. The report has served as a basis for a dialogue with various interested parties over the autumn and, in December, the Riksbank took a decision on investigating the preconditions for the proposed compilation.

### *Amended legislation*

The Act (2014:484) on a Database for the Oversight and Supervision of the Financial Markets provided the Riksbank and Finansinspektionen with the necessary conditions for coordinating and sharing certain collected data with the assistance of Statistics Sweden. Further information will have to be handled in the database as the two databases VINN and KRITA come into use. For example, this will include information from the Riksbank's own balance sheet, something that the Act does not allow at present. Consequently, at the end of 2016, the Riksbank took the initiative to attempt to have amendments made to the Act to adjust it to the authorities' needs. Over the year, an updated legislative proposal has been drafted by the Ministry of Finance. A decision on an amendment of the Act was taken in November. The new Act entered into force on 1 January 2018.

## Monetary policy development work

Over the year, the Riksbank continued its work of developing the monetary policy analysis. One question that was analysed concerned which repo rate level can be expected over the long term, given that global real interest rates have fallen for a long time and are currently conspicuously low. Another example of work carried out over the year is the compilation by the Riksbank of its experiences of publishing interest rate forecasts. The work of deepening the analysis of inflation also continued.

## **Revised assessment of the repo rate in the long term**

International studies point out that the long-term, more normal level of the real interest rate today is significantly lower than previously. This reflects a structural development and is an expression of the propensity to save having increased, while the propensity to invest has decreased in the world as a whole. As the global economy recovers and the effects of the financial and debt crisis gradually wear off, interest rates are expected to rise. However, structural factors are deemed to continue to contribute to interest rates being lower than they were prior to the financial crisis. Many international studies conclude that, in the long run, the real interest rate will probably be around 1 per cent or even lower. Given inflation expectations of about 2 per cent, this would correspond to a nominal rate of around 3 per cent.

In the light of this global trend in interest rates, several central banks have adjusted their assessments of their own economy's long-term, normal rate downwards. Over the year, the Riksbank made the assessment that the repo rate, in the long run, can be expected to be between 2.5 and 4.0 per cent. The assessment is in line with those made by other central banks and analysts of international long-term rate levels. The assessment is lower than the Riksbank's previously published interval of 3.5–4.5 per cent from 2010, which was, in part, based on historical real interest rates and historical growth. An update of these factors indicates that the long-term interest rate level has fallen by around 1 percentage point. The new assessment has been integrated into the Riksbank's forecast models.

## **The Riksbank's experiences of publishing interest rate forecasts**

The Riksbank started publishing its own forecasts of the repo rate in 2007. In their review of the Riksbank's monetary policy 2010–2015 conducted by Marvin Goodfriend and Mervyn King on behalf of the Riksdag Committee on Finance, published in January 2016, the authors recommended the Riksbank to evaluate its experiences of publishing its own interest rate forecasts. In its annual evaluation of monetary policy, the Riksdag Committee on Finance also considered that experiences of the repo rate path should be thoroughly evaluated.

The Riksbank published such an evaluation in June. The study noted that, overall, the Riksbank's experiences of making its own repo rate forecasts are positive. The Riksbank's internal work on the material for monetary policy decision-making has developed and improved. The possibilities for an open external discussion and evaluation of monetary policy have also improved due to the Riksbank's publication of its own forecasts for the repo rate.

However, there have also been challenges. One of these has been that the repo rate forecasts have not been particularly accurate. However, as the study shows, this is true of many countries and many analysts. Possible explanations of this include the trend decline in global real interest rates that has occurred in recent decades and the large negative shocks to which the global economy

has been exposed since 2008 in the form of both the global financial crisis and the European sovereign debt crisis. Another challenge lies in the differences between market rates and the Riksbank's repo rate forecasts.

Two things for the Riksbank to continue to address are how the accuracy of repo rate forecasts can be improved and how important changes in the repo rate are in comparison to changes in the repo rate path.

As a result of Goodfriend and King's recommendation to evaluate its experiences of publishing repo rate forecasts, the Riksbank also arranged, on 11–12 May, the international conference *The Future of Forward Guidance* for invited participants and speakers. The focus of the conference was how central banks should communicate with regard to their future monetary policy.

### **Continued work on the analysis of inflation**

The work of deepening and refining the inflation analysis continued over the year. One project has examined to which extent information from the Internet can be used to improve inflation forecasts. The amount of information published on the Internet is increasing very rapidly. Since the spring of 2015, the Riksbank has worked, on an experimental basis, on collecting certain price data from the Internet with the aim of assessing whether this can be used as a basis for forecasts of inflation. During the year, the project was evaluated in an Economic Commentary. The results imply that it is possible to automate data collection from the Internet and that the data can contribute towards more accurate short-term inflation forecasts.

Another analysis dealt with the correlation of wage development and the economic situation, and was summarised in an article in the Monetary Policy Report in July. Wages have risen slowly both in Sweden and abroad, even though economic activity has strengthened. The article noted that wage growth may have been influenced by different factors, such as structural changes to the labour market, and that wage and inflation expectations may have adapted to the long period of low inflation. The link between wages and inflation runs, above all, via unit labour costs and, as the Riksbank expects both wages and productivity to develop weakly in the years ahead, these costs are still expected to rise in line with the historical average.

#### *Box 5 – The Riksbank's research in 2017*

The Riksbank's research is primarily focused on areas of direct significance to the Bank's activities. The aim of this research is to provide a better foundation for the Riksbank's policy decisions.

The Riksbank's research is published in international scientific journals but also in the Riksbank's journal *Economic Review*. The research results are also communicated through presentations at other central banks and universities, as well as at international conferences.

Researchers who are specialised in financial stability study Swedish households and companies with the aim of understanding their economic behaviour. One example of this research is a paper published in the Review of Financial Studies that empirically demonstrates that negative credit information (the occurrence of records of non-payment) has a direct negative effect on individuals' employment income in Sweden.

Researchers who focus on macroeconomics and monetary policy also contribute towards facilitating the understanding of a complex reality. Examples of research within this area include a research paper that shows that central banks should take significant account of the real economy when conducting monetary policy to maximise household welfare. This conclusion supports the Riksbank's monetary policy strategy, which is aimed at contributing to reducing the variations in the real economy – for example output and employment – provided that the credibility of the inflation target is not threatened.

Researchers from the Research Division also collaborate with other members of staff at the Riksbank with the aim of developing better material ahead of policy decisions. One example of this is an article in Economic Review that analyses whether the Riksbank and other Swedish forecasters take sufficient consideration of Sweden's international dependence in their forecasts of domestic development. It compares the Riksbank's forecasts for international GDP growth and inflation with a number of major Swedish forecasters, including the National Institute of Economic Research. Among other things, the article suggests that both the Riksbank and the National Institute of Economic Research take too little consideration of foreign developments in their inflation forecasts in the long-term and in the projections for GDP in both the short- and long-term. The analysis could form one of several tools for improving the forecasting precision in the future.

As part of the work of marking the Riksbank's 350th jubilee in 2018, the Research Division arranged a conference in April on the theme of the history of central banking. Two days were spent discussing the papers to be included in a jubilee book produced in cooperation with Cambridge University Press. The book describes the historical development of the Riksbank and compares it with eleven other central banks to identify not only common denominators in the development of central banks, but also interesting distinctive features.

In addition to this, the Riksbank's researchers have also taught doctoral students and master's students at Swedish universities over the year. This reflects the Riksbank's willingness to collaborate with the academic world and other central banks to exchange knowledge and to safeguard the future supply of competence.



## A safe and efficient payment system

*The financial system functioned well in 2017. However, the Riksbank deemed that households' high indebtedness continued to comprise a major risk that could threaten macroeconomic and financial stability. The Riksbank continued to influence the financial regulatory framework in national and international forums. In addition, the Riksbank worked on deepening its analyses of important stability issues.*

*The financial infrastructure was deemed to be secure and efficient, even if there were operational risks that needed to be managed. The Riksbank's payment system RIX functioned well over the year and the banknote and coin changeover was concluded.*

### Financial stability

The Riksbank's financial stability work in 2017 largely consisted of monitoring developments in Sweden and abroad so as to analyse any risks that may be accumulating in the financial system and threatening stability. The Riksbank also proposed measures to reduce these risks.

Otherwise, work continued on influencing the formulation and introduction of national and international financial regulations. As part of this, the Riksbank participated in international work and also submitted several consultation responses (see also Annex 2). The Riksbank also participated in the Financial Stability Council.

### **National work to strengthen the financial system**

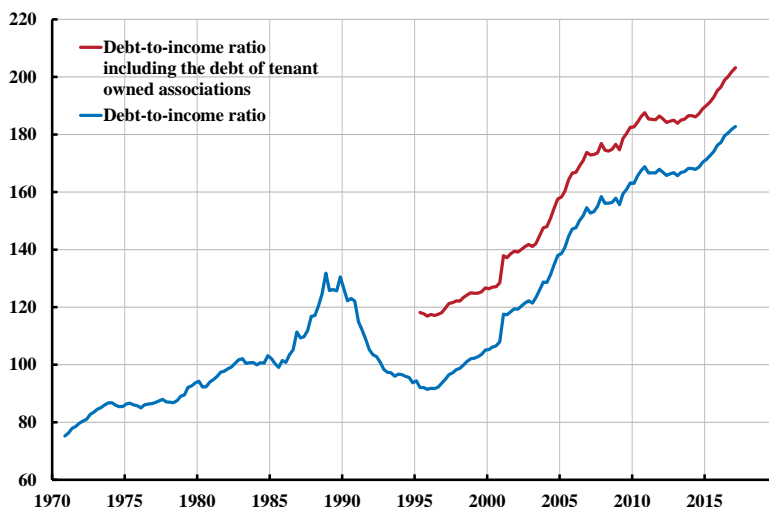
The Riksbank assessed is that the Swedish financial system functioned well in 2017. However, there were vulnerabilities and risks that may threaten financial stability. According to the Riksbank, the greatest risk to the Swedish financial system was households' high and rising indebtedness.

Furthermore, the Riksbank deemed that the financial infrastructure was secure and efficient, even if there were operational risks that needed to be managed.

### *Household indebtedness continues to comprise a serious threat*

The high and rising indebtedness among households continued to comprise a serious risk for the Swedish economy in 2017. Swedish households are highly indebted from both a historical and international perspective. The aggregate debt-to-income ratio, which is to say debt in relation to disposable income, amounted to over 180 per cent in the autumn of 2017 (see Chart 8).

**Chart 8 Household debt-to-income ratio, percentage of disposable income**



Sources: Statistics Sweden and the Riksbank.

In parallel with the rising indebtedness, housing prices have also risen heavily over a long period of time. However, the rise in prices slowed down in the middle of the summer and, over the autumn, prices fell slightly. The increased supply of housing in recent years may have contributed to the slowdown. In the Riksbank's forecast, housing prices are set to increase more slowly in the next few years, due in part to the supply of housing continuing to increase and household mortgage rates starting to rise. The Riksbank deemed that a slower rate of price increase is positive and will contribute to a more stable development on the housing market and a slower rate of increase in household debt. At the same time, there is a risk that the increased construction will not match the demand for housing. A situation could also arise in which housing construction continues to increase heavily at the same time as demand weakens. If greater imbalances arise, this could result in rapid and major adjustments to the highly elevated housing prices, posing risks to financial and macroeconomic stability.

The combination of large debts and the fact that most mortgage holders have variable-rate loans, means that households can rapidly be affected by rising interest rates and greater price falls on the housing market. The Riksbank emphasised this in an article in the year's second report on financial stability. One reason why indebtedness is rising is the poor functioning of the housing market. Housing policy measures are required to achieve a better functioning housing market that can mitigate the risks associated with the high level of household indebtedness in the long term. Among other things, the Riksbank stressed the importance of creating a better balance between supply and demand on the housing market and emphasised the importance of carrying out

reforms leading to the housing stock being used more efficiently. One reason why the housing market is functioning poorly is that the rent-setting system creates supply limits and lock-in effects that make it particularly difficult for young people and people who are not yet established on the housing market to find housing. Tax policy also needs to be reviewed. Among other things, this could involve reviewing capital gains taxation when homes are sold, property tax and tax relief on interest expenditure. The Riksbank also emphasised the role of macroprudential measures in reducing risks related to households' high and rising indebtedness and was positive to Finansinspektionen's proposal for more stringent amortisation requirements.

*The banking system's exposures to the property market makes it vulnerable*

Over the year, the Riksbank continued to illustrate the vulnerabilities existing in the Swedish financial system. One vulnerability is linked to the major exposures to the property market. Loans to Swedish households and non-financial corporations with housing or other types of property as collateral have increased and currently make up about 80 per cent of the major banks' lending. The banks, in turn, fund these loans to a high degree on the capital market, and especially with covered bonds, the collateral for which is made up of mortgages. As mortgages have increased, so has the volume of covered bonds. This makes the banks sensitive to a fall in housing prices, as this could affect confidence in them, as well as making it more difficult and expensive to find funding.

*Large banking system either with or without Nordea*

The Riksbank considered that Nordea's planned relocation of its headquarters from Sweden to Finland would not reduce the risks in the Swedish financial system as Nordea's operations in Sweden were not expected to change, either in terms of size or in terms of interconnectedness with other banks. The Riksbank emphasised that it is important that the relocation of Nordea's headquarters does not lead to increased stability risks, as a result, for example, of reduced capital and liquidity requirements for the bank, and that Finland can shoulder the responsibility entailed by this move to a banking union that is not yet fully complete.

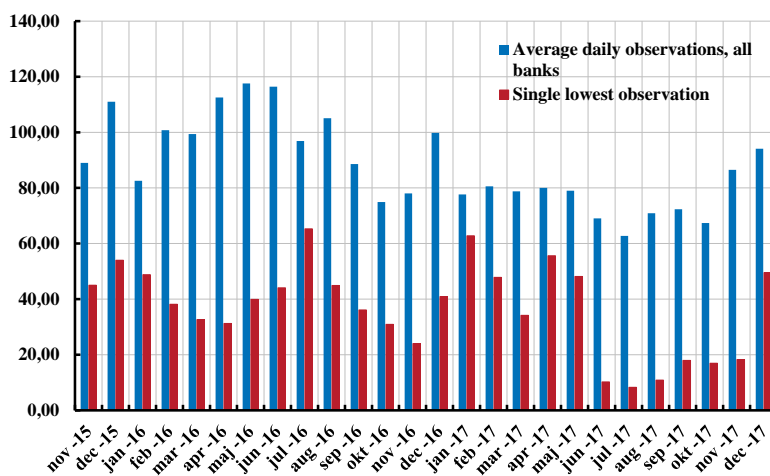
*It is important that the banks retain more capital and reduce their liquidity risks*

Over 2017, the Riksbank continued to emphasise the importance of the banks having good resilience so that they can manage the risks and vulnerabilities existing in the Swedish banking system. For example, the Riksbank highlighted the banks' liquidity risks in two articles in the year's first and second reports on financial stability, as well as the banks' capital situation in a staff memo. The Riksbank also urged Finansinspektionen to introduce a leverage

ratio requirement of 5 per cent for the major Swedish banks to increase their resilience, which is higher than the proposed minimum level of 3 per cent expected to be introduced within the EU.

In addition to Swedish kronor, the Swedish banking system also has significant assets and liabilities in foreign currency and is thereby exposed to liquidity risks. The Riksbank therefore urged Finansinspektionen to place requirements on the Swedish banks' liquidity coverage ratios (LCRs) in all significant currencies, as some of the major banks periodically have very low LCRs, particularly in Swedish kronor (see Chart 9). Some of the major banks have at times had LCRs of only around 10 per cent. If one assumes that the cash flow is even over a month, an LCR of 10 per cent in SEK would mean, put simply, that a bank could meet its liquidity requirement in SEK for around 3 days. The Riksbank considers that the requirement for LCRs in Swedish kronor should be set at 60 per cent at least.

**Chart 9 The major Swedish banks' daily LCRs in Swedish kronor, per cent**



Note: Average daily LCR in Swedish kronor per month, and the single lowest observations.  
Source: The Riksbank.

### *A sufficiently large foreign currency reserve to manage financial stress*

In a situation of financial stress, a liquidity requirement may arise in foreign exchange with which the banks themselves will be unable to cope. The Riksbank maintains a foreign currency reserve to be able to meet such a requirement and, over the year, highlighted the importance of the foreign currency reserve not being smaller than it is today as preparedness must continue to

exist to meet the liquidity requirement that may arise in a crisis. One alternative to maintaining a foreign currency reserve is for the Riksbank not to acquire foreign currency until a crisis is imminent or has already occurred. However, this could be both expensive and very difficult, even impossible. This matter will be investigated further by the Riksbank Committee (see Box 1).

### *Operational risks need to be managed in the financial infrastructure*

Over the year, the Riksbank continued to monitor infrastructure companies' work on cybersecurity. As IT operations are increasingly being outsourced to external suppliers, it is important to monitor how this affects resilience against cyberattacks. The Riksbank also highlighted that there will be heightened operational risk in the financial system until Euroclear Sweden has replaced its IT system for securities settlement.

### *Financial Stability Council*

The Financial Stability Council met twice in 2017. At the Council's meetings, the authorities continued to discuss matters including the risks inherent in households' high indebtedness. The Riksbank noted that the measures implemented so far have mainly been aimed at new lending. For better balance on the housing market, the Riksbank argued that measures were needed that affect the entire stock, such as a review of tax relief and property taxes. The Riksbank also noted that it will always be difficult to find the perfect occasion to adopt measures and that waiting to implement measures was a high risk strategy. The Riksbank also pointed out the dilemma inherent in real interest rates largely being determined globally at the same time as there is an imbalance on the Swedish housing market.

The Council also discussed the consequences of Nordea's planned relocation of its headquarters to Finland. In addition, the Riksbank highlighted the importance of countries now consistently introducing the Basel III Accord.

Over the year, the authorities in the Financial Stability Council also carried out scenario exercises aimed at exercising Swedish authorities' crisis management of financial undertaking corporations. The authorities also worked in developing a manual for crisis management, as well as taking care of the lessons learnt from previous scenario exercises. The work of preparing further scenario exercises was also initiated over the year.

### *Retail payments council*

The retail payments council will act as a forum for dialogue and consultation concerning the Swedish market for payment services. Over the year, in its role as provider of a secretariat for the Swedish retail payments council, the Riksbank has worked on coordinating the remaining activities in the work programme drawn up in conjunction with the formation of the council in 2015 for the period 2015–2017. Over the autumn, the retail payments council adopted a work programme for 2017–2019.

## **International work to strengthen the financial system**

The laws regulating Swedish banks and financial institutions are largely based on standards developed on an international level. An important part of the Riksbank's work on financial stability is therefore participating in various international forums to influence the formulation of financial standards and financial supervision.

Over the year, the Riksbank participated in discussions and decisions on the formulation of standards, rules and supervision on both the global and EU levels. In many of these issues, the Riksbank also cooperates with Finansinspektionen, the Swedish National Debt Office and the Ministry of Finance. This international work takes place primarily within the framework of the Basel Committee, the Committee on Payments and Market Infrastructures (CPMI), the IMF and various EU bodies such as the European System of Central Banks (ESCB), the European Banking Authority (EBA), the European Systemic Risk Board (ESRB) and the Economic and Financial Committee (EFC).

### *Global cooperation*

The Basel Committee on Banking Supervision is a global committee that designs minimum standards, guidelines and recommendations for the regulation and supervision of banks as regards capital adequacy and liquidity. Governor Stefan Ingves is Chairman and First Deputy Governor Kerstin af Jochnick is the Riksbank's representative on the Committee. Officials from the Riksbank have also actively participated in several of the Committee's working groups. In 2017, the Committee primarily worked on concluding the reforms of the Basel III Accord, which includes global standards for banking regulation aimed at strengthening the resilience of the global financial system. In December, an agreement was reached on the Basel III Accord. Over the year, the Committee also worked on a review of how much capital banks must retain for exposures against governments and other public bodies. Furthermore, the Committee worked on developing new principles for how certain risks in the shadow banking sector are to be managed. The Committee also evaluates the effects of the reforms agreed since the financial crisis and the changed behaviour that may result. In addition, the Committee has continued with evaluations of how the various member states have introduced the global standards. The Riksbank has participated in work on all of these issues, which will also ultimately affect the Swedish financial sector.

The Financial Stability Board (FSB) is an international organisation that oversees and makes recommendations for the global financial system. Sweden is not a member of the FSB, but, over the year, the Riksbank participated in a number of the FSB's sub-groups and was involved, among other things, in the work on developing crisis management for financial infrastructure, which fo-

cused on central counterparties (CCPs). Governor Stefan Ingves also participated in the FSB's meetings as part of his role as Chairman of the Basel Committee.

### *Global cooperation on financial infrastructure*

Over the year, the Riksbank participated in the work of the CPMI, which, together with the international organisation for the oversight of securities (IOSCO), has continued to work on strengthening the resilience of central counterparties (CCPs). One result of this work is the guidance document on financial risk management published during the year. Furthermore, the CPMI has consulted the market on issues concerning how central banks can issue digital currencies and how digital innovations may affect services offered by central banks. The CPMI has also worked on surveying cross-border payments and on developing a strategy for reducing the risk of fraud in systems for large-value payments such as RIX.

The Riksbank has also participated in the international oversight arrangement for several financial infrastructure systems in which payments and transactions with financial instruments are managed. The Riksbank also participated in the oversight of SWIFT, which is a global supplier of secure financial messaging services, which are used by parties including banks and central banks around the world.

### *European cooperation*

The Riksbank participated in the Economic and Financial Committee (EFC), which prepares meetings of the Economic and Financial Affairs Council (ECOFIN). Among other things, the Committee discussed strategic issues with a bearing on the EMU and the functions of the Single Market, the Council's action plan for managing the problems of the banks' non-performing loans (NPLs), the mid-term review of the Capital Markets Union and the Commission's review of the European system for financial supervision. Among other things, the Riksbank worked for more effective measures to address non-performing loans.

Over the year, the Riksbank, through its participation in the ESCB, continued to be active in issues concerning the design of Europe's future payment infrastructure. Focus also continued to lie on the ECB's work on promoting a European regulatory framework for real-time payments between private individuals, as well as solutions for the clearing and settlement of real-time payments. Within the framework of the cooperation between the ECB and the European Banking Authority (EBA), the Riksbank discussed the level of security that is to apply to electronic payments under the new payment services directive.

### *European cooperation on macroprudential policy*

The European Systemic Risk Board (ESRB) identifies, analyses and counteracts financial systemic risks in the EU and the Riksbank participates in a number of expert groups. In 2017, the Riksbank's experts contributed to the work of the various groups within the ESRB, as well as to several of the reports and consultation responses published by the ESRB. This included the report on how non-performing loans in Europe are managed. The Riksbank also contributed to the ESRB's work of developing the macroeconomic scenarios forming the basis for the stress tests in the banking and insurance sector and the stress test of CCPs.

### *Nordic-Baltic cooperation*

Over the year, the Riksbank continued with the Nordic-Baltic cooperation in the field of financial stability. In 2017, two meetings of the Nordic-Baltic Macroprudential Forum (NBMF) were held. This is a forum for cooperation between central banks and financial supervisory authorities, which focuses on financial stability risks and cross-border banking operations in the region. Governor Stefan Ingves is chairman of the NBMF. In addition to general risks that could affect the region, the group continued to discuss matters including how authorities can mutually recognise each other's measures for macroprudential policy.

The Riksbank also continued its work in the Nordic-Baltic Stability Group (NBSG), a forum for ministries of finance, central banks and financial supervisory and resolution authorities in the Nordic and Baltic countries. The stability group has the task of strengthening preparedness for the management of cross-border financial stability issues in the Nordic-Baltic region. One important question concerns preparations for a Nordic-Baltic crisis exercise which is planned to take place at the start of 2019; the Riksbank chairs the sub-group responsible for the preparations.

### *Box 6 – International commitments*

In addition to the international and European cooperation aimed at strengthening the financial system, the Riksbank also has other international commitments.

#### *The International Monetary Fund*

The Riksbank's work with the IMF includes developing Sweden's position in cooperation with the Ministry of Finance ahead of discussions in and decisions by the IMF's Executive Board.

The Riksbank contributes to the IMF's funding through capital contributions and arrangements to borrow. In the autumn of 2016 and spring of 2017, the IMF signed new bilateral loan agreements with about forty of its member countries, including Sweden via the Riksbank. There are still risks in



the world economy, meaning that these loans are needed to maintain the IMF's lending capacity so that the Fund will be able to manage any possible expanded need for loans. The loans cover the period until 2020, at most.

In November, the IMF's annual Article IV consultation was concluded, in which the Executive Board of the IMF discussed the report on Sweden's economy based on the IMF delegation's visit to Stockholm in September. The IMF gave its general support to the authorities' actions but requested structural reforms to the housing market, among other things. These reforms were aimed at reducing stability risks, increasing access to cheaper housing and other objectives. Furthermore, the IMF highlighted the Swedish banks' dependence on wholesale funding in foreign currency and therefore encourages a liquidity requirement in euros and US dollars, in parallel with an EU regulation. In addition, the IMF considers that the Riksbank must maintain a sufficiently large foreign currency reserve.

#### *Technical assistance*

In 2017, the Riksbank provided expert assistance in central bank issues, so-called technical assistance. Most activities took place in Ukraine, but expert assistance also covered initiatives in Palestine, Kenya, Namibia and Albania. The activities were financed by funds from the Swedish International Development Cooperation Agency, Sida.

### **Detailed analysis**

In certain selected areas, the Riksbank worked to deepen its analysis of the financial system in particular.

#### *A new indicator of financial vulnerability*

In 2017, the Riksbank developed a new indicator, a so-called early warning indicator (EWI) for financial vulnerability in the Swedish financial system. The indicator is intended to show how vulnerability builds up in the credit sector.

Evaluations show that the indicator would have functioned well during the build-up to the financial crises of 1990 and 2008. At present, the indicator shows a heightened probability of large and lasting declines in total lending to households and companies and such declines have historically coincided with persistent lower GDP growth.

#### *Raised capital levels in the major Swedish banks may be socioeconomically justifiable*

In 2017, the Riksbank presented new calculations showing that raised capital levels for the major Swedish banks could be socioeconomically justifiable as they would reduce the likelihood of a financial crisis in Sweden.

In its analysis, the Riksbank balances the anticipated socioeconomic costs of higher capital ratios against the anticipated socioeconomic gain. Higher capital ratios may increase the banks' funding costs, which could make it more expensive for their customers to borrow for investments, thereby reducing the level of GDP. On the other hand, the probability of a banking crisis decreases if banks have more capital as a buffer against major losses. This is valuable as crises can be very costly for society.

The Riksbank's updated calculations indicate that an appropriate leverage ratio level for major Swedish banks should be somewhere between 5–12 per cent.

### *Risks on the commercial property market*

The Riksbank deepened its analysis of the commercial property market in 2017. Both in Sweden and other countries, this market has often played a significant role in larger financial crises, as, among other things, it has a large portion of borrowed capital, making it important to the financial system. The major Swedish banks are major lenders to the commercial property companies and a large part their lending also takes place with commercial property as collateral.

As commercial property prices have risen in Sweden, property companies have also increased their liabilities both via bank loans and wholesale funding. The price growth can largely be explained by fundamental factors such as low interest rates and good economic growth but the Riksbank's assessment is that risks are nevertheless present as these factors can quickly change. If problems were to arise on the commercial property market, the major Swedish banks risk being hit by loan credit losses. It is therefore important to continue to keep track of developments going forward in order to identify any changes that may increase the risks to financial stability.

### *Financial operations and technological innovations*

FinTech, which is to say financial services combined with new technological innovations, has received considerable attention in recent years. The Riksbank, like other government agencies and international standard-setting organisations, has therefore begun analysing FinTech and its effects on the financial system.

One conclusion is that FinTech can be positive for the financial system in that it enables faster and more cost-effective financial transactions, increases the supply of financial services and automates reporting between financial institutions and authorities. At the same time, this development may entail risks for financial stability, as increasingly volatile financial transaction flows could entail increased liquidity risks. The removal of financial transactions from central agents can also make it more difficult for authorities to gain knowledge of financial transactions, which in turn could make it more difficult to uncover unsound or illegal activities such as money laundering and the

funding of terrorism. The Riksbank is continuing to monitor developments in FinTech.

### *Nordic cybersecurity conference*

In 2017, Danmarks Nationalbank initiated a collaboration with other Nordic central banks on an annual Nordic cybersecurity conference. The first conference was held in November in Copenhagen and, in 2018, the Bank of Finland will act as host. Its purpose is to spread knowledge and facilitate the discussion of preventive cybersecurity measures.

### *Deepening of the banking union*

In autumn 2017, the Riksbank published an Economic Commentary that describes the so-called banking union initiated within the EU. Put simply, the banking union involves the creation of a structure for the joint supervision and management of banks in crisis, together with a joint system for deposit guarantees. For non-euro countries, participation in the banking union is voluntary, but no non-euro countries have chosen to join yet. However, the Swedish Government has decided on an inquiry into the pros and cons of membership.

Even if Sweden chooses to remain outside, it is important to understand what the banking union means and how it works, not least as Swedish authorities must nevertheless adapt to the banking unions regulations in various ways. In addition, if Nordea's planned relocation of its headquarters to Finland takes place, it will affect the allocation of responsibility between Swedish authorities and the banking union's decision-making institutions.

## The RIX payment system

The Riksbank provides the payment system RIX, which handles large-value payments in Swedish kronor between banks and other actors in a safe and efficient way. Payments are made in the form of transfers between accounts held by the different participants – banks, clearing organisations and other market participants – with the Riksbank. For RIX to function in a safe and efficient manner requires sufficient credit limits among the participants, well-functioning management of collateral and well-functioning technical systems. The Riksbank continually exercises, on its own and together with the participants, the implementation of payments in a situation in which the technical system does not function.

### **Number of participants, transactions and turnover**

In 2017, three new participants joined and one participant chose to leave RIX. At the close of the year, there were a total of 31 participants in the system.

On average, RIX handled 20,359 transactions per day in 2017. This is an increase of 13.6 per cent compared with the previous year. Daily turnover,

adjusted for monetary policy instruments, averaged about SEK 513 billion. This implies an increase of 16.8 per cent compared with the previous year. The average transaction amounted to around SEK 31 million. The corresponding figure for 2016 was SEK 35 million.

The RIX system is funded by its participants. On 1 March 2017, the fixed monthly fee was raised from SEK 40,000 to SEK 60,000. Also on 1 March 2017, the additional fee, which is paid by participants with domestic revenues of at least SEK 1 billion, was raised from SEK 1.5 million to SEK 3 million per month. On 1 May 2017, the monthly fee for all institutions opting to have the possibility of intraday credit was raised from SEK 10,000 to SEK 20,000. Other fees were left unchanged. The increased fees are mainly due to increased costs for the Riksbank's new system for managing collateral that was introduced over the year.

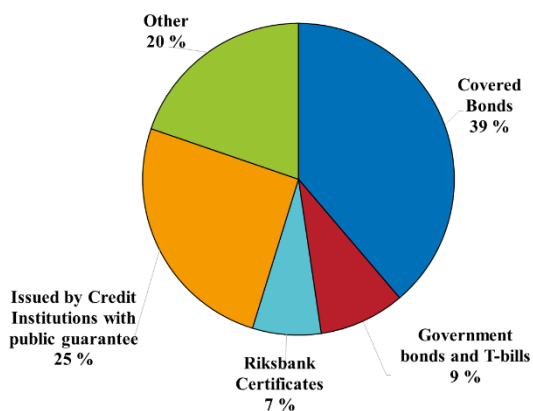
### Management of collateral and credit limits

To reduce the risk of transfers through the RIX system failing because of a participant lacks liquidity, the Riksbank can supply liquidity during the day by granting credit to the participants against collateral. This means that transfers can be made more quickly, thus increasing the efficiency of the payment system. The collateral accepted by the Riksbank mainly consists of bonds or other debt instruments with a high credit rating.

In 2017, participants in RIX had an average credit facility of SEK 177 billion per day. On average, 55 per cent of this credit facility was utilised.

At the close of 2017, covered bonds stood for 39 per cent of the value of all collateral pledged to the Riksbank (see Chart 10).

**Chart 10 Collateral value pledged for credit per 29 December 2017, per type of security**



Source: The Riksbank.

## **Upgrades and improvements of technical systems**

In 2017, the Riksbank has replaced the system for the handling of collateral, COLIN, with a new system called QCMS. The new system was introduced to streamline the handling of collateral and to reduce operational risks.

## **Crisis management in the payment system**

Ensuring that RIX can continue to fulfil its function even in the event of a technical system failure requires efficient contingency routines and continual exercises of crisis management. In 2017, the Riksbank carried out exercises of varying scope, both independently and with the RIX participants. For example, one joint exercise was carried out with all RIX participants, in which the scenario involved a total stop in the RIX system with subsequent transition to manual routines. The objective of the exercises is to achieve a good ability to limit negative consequences, exercise cooperation with others and take the right decisions in a crisis.

In 2017, together with the Swedish National Debt Office, clearing organisations and major banks, the Riksbank carried out an exercise to test the routine for cooperation established in 2016. The routine can be used if a serious operational disruption occurs in the central functions for clearing and settlement in the Swedish payment system.

The Riksbank is also chairman of a group for private-public cooperation in the financial sector (FSPOS).

## **Follow-up**

The RIX system is evaluated on the basis of three operative goals: technical availability, cost coverage and customer satisfaction.

The target for technical availability is defined as the time that the system functions and payments are settled. The target value for this is 99.85 per cent. The outcome for 2017 was 100 per cent. No incidents meaning that RIX was unable to process payments occurred.

All costs relating to the provision of services in RIX are to be covered by fees paid by the participants. In 2017, these costs amounted to SEK 71.5 million, 110 per cent of which was covered by fees. Over a three-year period (2015-2017), cost coverage was 97 per cent. The requirement for full cost coverage is measured over a three year period, in which revenues are to correspond to 100 per cent of costs  $\pm 10$  per cent.

Every second year, the Riksbank conducts a survey to evaluate how users perceive the Riksbank's services. The survey for this year showed that customer satisfaction is very high, as 100 per cent were satisfied or very satisfied. The target value for this is 80 per cent.

## Cash provision

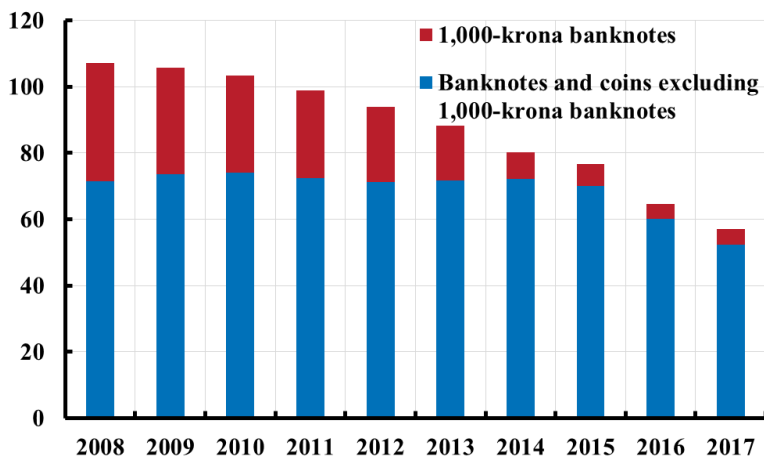
The Riksbank provides banknotes and coins to the banks and follows the development of the value of cash in circulation. During the year, the Riksbank concluded the changeover of banknotes and coins when two older banknotes and three older coins became invalid. The entire banknote and coin changeover has worked well.

### Development in value of cash in circulation

The amount of cash in circulation increased until the end of 2007 but has subsequently decreased every year. For many years, it was mainly 1,000-krona banknotes that decreased (see Chart 11). When the Riksbank carried out the changeover of banknotes and coins between 2015 and 2017, large reductions also occurred of other denominations. Some banknotes and coins that were probably previously saved by members of the public have not been replaced by new ones. However, the amount of cash in circulation increased over the year's final quarter.

In 2017, the older 1, 2 and 5-krona coins became invalid and can no longer be redeemed at banks or at the Riksbank. As these coins can no longer be redeemed, they were written off the Riksbank's balance sheet in 2017, meaning that the volume of cash in circulation decreased by SEK 1.3 billion.

**Chart 11 Average value of banknotes and coins in circulation, SEK billion**



Source: The Riksbank.

The total value of cash in circulation amounted to SEK 58 billion at the end of 2017, of which the value of banknotes amounted to SEK 55 billion and the value of coins amounted to SEK 3 billion (see Table 3). Of this SEK 58 billion, SEK 6.5 billion was in invalid banknotes. The value of valid cash in circulation, which is to say SEK 51.5 billion, corresponds to about 1 per cent of GDP.

The value of the cash in circulation is governed by the demand for banknotes and coins, which varies over the course of a year. Another way of describing the amount of cash in circulation over a year is to calculate an average for the value on the final day of the month over the twelve months of the year. This average value amounted to SEK 57 billion in 2017, of which the value of banknotes amounted to SEK 53 billion and the value of coins to SEK 4 billion (see Table 3).

**Table 3 Value of banknotes and coins in circulation, SEK billion**

	2013	2014	2015	2016	2017
Total value on 31 December	86	83	73	62	58
Banknotes	80	78	68	58	55
Coins	5	5	5	5	3
Total value, average during the year	88	80	77	65	57
Banknotes	83	75	71	60	53
Coins (excluding commemorative coins)	5	5	5	5	4

Note: The data in the table have been rounded off.  
Source: The Riksbank.

### **Banknote and coin changeover concluded**

In October 2016, the Riksbank began to issue new 100 and 500-krona banknotes, and new 1, 2 and 5-krona coins. At the end of June 2017, the older banknotes and coins in these denominations became invalid. Following this, the coins could be deposited in bank accounts until 31 August. The banknotes can still be deposited in bank accounts until 30 June 2018.

In the spring and early summer, the Riksbank conducted the information campaign *Efterlyst* (“Wanted”) to inform the public that the older banknotes and coins were to become invalid.

When the last two older banknotes and the three older coins became invalid, the Riksbank concluded the banknote and coin changeover. The banknote changeover has worked well. As expected the coin changeover has been labour-intensive for the trade sector and the banks, considering the large amounts of older coins that the general public has handed in in the form of payments and deposits in bank accounts. Despite its extent, the coin changeover has largely also functioned well. The return of older banknotes and coins corresponds well to the expectations the Riksbank had when the changeover started in 2015. The value of returned banknotes and coins that became invalid in 2016 and 2017 amounted to SEK 64 billion on 31 December 2017 (see Table 4). The proportion of banknotes returned amounted to 92 per cent and the proportion of coins returned amounted to 52 per cent.

As it is still possible to redeem invalid banknotes, the figure for returned banknotes may increase. At the end of the year, there was an amount corresponding to just over SEK 5 billion left of the banknotes that became invalid

in 2016 and 2017. At the end of the coin changeover, there was an amount corresponding to SEK 1.3 billion left that had not been returned to the Riksbank.

**Table 4 Value of returned banknotes and coins becoming invalid in 2016 and 2017 and percentage share of returned banknotes and coins since start of changeover in 2015**

Denomination	Returned* (SEK million)	Returned* (per cent)
1,000	4,607	96
500	48,952	94
100	7,197	85
50	854	79
20	983	59
5	730	55
2	1	9
1	702	50
Total	64,027	

\*Returned since changeover started in 2015.

Note: The data in the table have been rounded off.

Source: The Riksbank.

Over the year, the Riksbank sold older coins to be melted down for metal recycling.

During the year, the Riksbank commissioned a survey of the general public's knowledge of and attitudes towards the changeover. The result of the survey showed that an overall majority of respondents felt well-informed of the fact that Sweden had received new banknotes and coins and that the older banknotes and coins had become invalid. Most felt that they had been able to get rid of their older banknotes in a simple and easy manner, while slightly fewer had the same experience with the coins. Many considered that the new 200-krona banknote was a good thing, while the attitude towards the 2-krona coin is less positive. The majority of respondents were satisfied with the banknotes' motifs, design and format, while fewer were satisfied with the coins. The majority considered it very easy or fairly easy to see the difference between the different denominations of the new banknotes, while the opposite applied to the coins.

In 2017, the Riksbank worked on a summary and evaluation of the banknote and coin changeover which, among other things, covers the general public's and cash market's opinions of the changeover, the environmental effects of the changeover and an account of returned banknotes and coins. The evaluation



of the banknote and coin changeover will be completed in the first quarter of 2018.

### Follow-up

The Riksbank considers that there is great confidence in banknotes and coins in Sweden. There was little counterfeiting of Swedish banknotes in 2017 (see Table 5). The value of counterfeit notes removed from circulation amounted to SEK 148,050. The number of counterfeit banknotes amounted to 537. About two-thirds of these were 200-krona banknotes.

In 2017, the Riksbank has worked with cash market participants in working groups under the framework of the Cash Handling Advisory Board.

**Table 5 Number of banknotes and coins**

	2013	2014	2015	2016	2017
Number of banknotes in circulation (millions)	334	325	317	288	265
Number of coins in circulation (millions)	1,911	1,918	1,917	1,823	1,433
Number of counterfeited banknotes	1,048	246	295	379	537

Note: The information on the number of banknotes and coins in circulation refers to the average over the year and is rounded off. The information on number of coins in circulation does not include commemorative coins.

Source: The Riksbank.

### *Box 7 – Developments on the payment market*

The usage of electronic payment services has shown an increasing trend in recent years, at the same time as the usage of paper-based direct debits and cash has decreased. In an international comparison, Sweden is one of the countries with the lowest level of cash usage and highest number of card payments per person and year.

The ever lower level of cash usage among the Swedish population is partly due to technological developments and the increased digitalisation in society as a whole, but there are also demographic drivers. Younger generations tend to use more digital services and less cash than older generations. The trend towards decreased cash usage will probably continue, which opens up for a series of questions on future payments.

The trend towards a cashless society could ultimately make society vulnerable in that the payment market would be concentrated among a small number of private participants, payment services and infrastructures. This development will also leave households few possibilities to save and pay in risk-free central bank money, which could ultimately contribute towards reduced resilience in the payment system. Consequently, in mid-March, the Riksbank initiated a project to investigate whether it would be possible to issue

a digital complement to cash, an ‘e-krona’, and whether such a complement could support the Riksbank in the task of promoting a safe and efficient payment system. In September, the project published a report that presented an overall concept for an e-krona. The Riksbank will continue to investigate the conditions for the e-krona over the next year but has not, as yet, taken any decision on issuing the e-krona.

## Asset management

*The Riksbank's expansionary monetary policy with continued purchases of Swedish government bonds led the balance sheet total to increase in 2017. However, the increase in Swedish and foreign interest rates over the year had a negative impact on the value of the assets. In addition, the foreign assets decreased in value due to the Swedish krona strengthening on average against the currencies in the foreign currency reserve.*

### Financial assets and liabilities

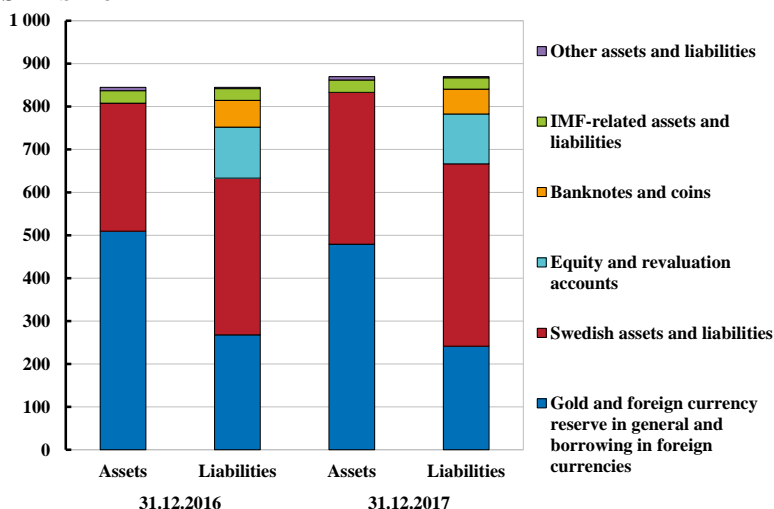
The Riksbank manages financial assets to ensure that it can fulfil its statutory objectives and perform its tasks (see the section The tasks and role of the Riksbank). The financial assets largely consist of the gold and foreign currency reserve. This gives the Riksbank the possibility, if necessary, to supply temporary liquidity assistance in foreign currency and to intervene on the foreign exchange market. The foreign currency reserve consists of debt securities in foreign currencies with high liquidity and low credit risk, primarily government bonds. The Riksbank also holds assets in the form of securities issued in Swedish kronor. These assets mainly consist of the nominal and real government bonds that the Riksbank purchased over the period 2015–2017 for monetary policy purposes (see the section Maintaining the value of money – price stability). The Riksbank's assets also include receivables from the IMF, as the Riksbank is responsible for the obligations ensuing from Sweden's membership of the Fund. The Riksbank stands prepared to use its gold and foreign currency reserve to lend money to the IMF, which, in turn, lends money to countries with balance of payment problems (see Box 6 – International commitments).

The Riksbank's financial liabilities mainly consist of the liability in SEK arising when the banking system deposits part of its liquid assets with the Riksbank. The Riksbank also has financial liabilities in foreign currencies to the Swedish National Debt Office. These liabilities consist of US dollars and euros that the Riksbank has borrowed from the Debt Office to strengthen the foreign currency reserve.

Over the year, the balance sheet total increased by SEK 24.8 billion to SEK 869.6 billion, primarily due to the Riksbank's purchases of Swedish government bonds (see Chart 12). The Riksbank's equity (including the financial result for the year and the revaluation accounts) decreased by SEK 2.5 billion to SEK 116.2 billion, mostly due to the dividend paid by the Riksbank to the Treasury. At the end of 2017, the total return on the Riksbank's financial assets and liabilities amounted to SEK –0.7 billion (see Table 6).

A more detailed description of the various components of asset management and their development over the year can be found in the following section.

**Chart 12 The Riksbank's balance sheet at the end of 2016 and 2017, SEK billion**



Source: The Riksbank.

**Table 6 The Riksbank's asset management at the end of 2017, SEK million**

	Assets	Liabilities	Return	Return excl. exchange rate effects
<b>Gold and foreign currency reserve incl. the IMF</b>	<b>510,441</b>	<b>269,133</b>	<b>-3,050</b>	<b>-1,472</b>
Gold reserve	43,190	–	778	–
Foreign currency reserve	438,565	242,828	-3,509	-1,478
IMF	28,686	26,305	-319	6
<b>Derivative instruments</b>	<b>–</b>	<b>575</b>	<b>231</b>	<b>-111</b>
<b>Securities in SEK</b>	<b>357,687</b>	<b>–</b>	<b>-2</b>	<b>-2</b>
<b>Monetary policy transactions</b>	<b>81</b>	<b>418,542</b>	<b>2,147</b>	<b>2,147</b>
Standing facilities	20	284	2	2
Fine-tuning	1	27,055	504	504
Riksbank Certificates	60	391,203	1,641	1,641
<b>Total</b>	<b>868,209</b>	<b>688,250</b>	<b>-674</b>	<b>562</b>

Note: The calculation of the return is based on both assets and liabilities and is reported for the Riksbank's net receivables.

Source: The Riksbank.

## Gold and foreign currency reserve

The gold and foreign currency reserve is primarily to be managed so that the Riksbank can always be ready to fulfil its commitments. The reserve must therefore be composed so that it can be used, when necessary, to provide temporary liquidity support to Swedish banks, to fulfil Sweden's part in the IMF's international lending and to intervene on the foreign exchange market. Secondly, management strives to achieve a good risk-adjusted return. In 2017, the Riksbank assessed that the composition of the gold and foreign currency reserve was appropriate for the Riksbank's purposes at the same time as it achieved a good risk-adjusted return. The overall distribution of assets in the gold and foreign currency reserve was therefore held unchanged over the year.

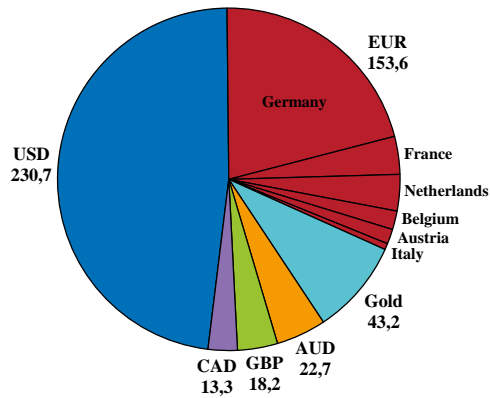
The Riksbank's preparedness to provide temporary liquidity assistance in foreign currency at short notice places heavy demands on the composition of the gold and foreign currency reserve. Most of the foreign currency reserve is maintained in those currencies in which emergency liquidity assistance may be needed and in such assets as can rapidly be converted into liquid funds. Consequently, the foreign currency reserve's assets mainly consist of government bonds in US dollars and euros. At the end of the year, the total assets in US dollars and euros amounted to 48 per cent and 32 per cent respectively of the gold and foreign currency reserve (see Chart 13).

In 2017, in order to spread the risks and attain a higher risk-adjusted return, the Riksbank followed the procedure of previous years and invested a small part of the reserve in other currencies than the US dollar and the euro. These investments were mostly made in British government bonds, Australian government and federal state bonds and Canadian government and provincial bonds.

As the Riksbank's assets mainly consist of US dollars and euro, the bank's financial result is affected by the way the value of these two currencies develops in relation to the Swedish krona. However, the effect on the result is counteracted by the Riksbank also having liabilities in US dollars and euro. To further reduce the effect of exchange rate changes, over the year the Riksbank converted some of its exposure to US dollars to exposure to Norwegian kroner with the aid of currency swaps. A currency swap is an agreement to exchange one currency for another over a predetermined period of time. Chart 14 shows the Riksbank's currency exposures at the end of the year.

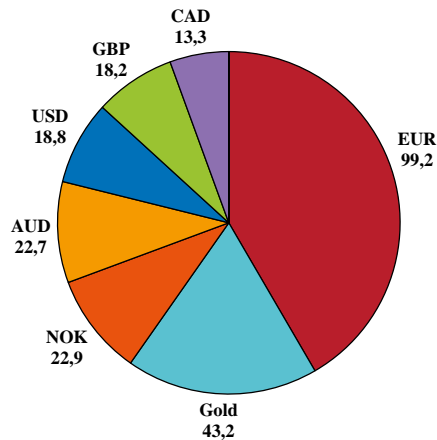
Due to the internationally-low interest rates and the increased risk of an increase in interest rates, the Riksbank decided, over the year, to retain the interest-rate sensitivity of the foreign currency reserve at a fairly low level around 3, measured as modified duration. The measure shows how sensitive the value of a debt security is to changes in the interest rate.

**Chart 13 Composition of the foreign currency reserve at the end of 2017, SEK billion**



Note: The figures in the chart show the market value of the gold and foreign currency reserve, including accrued interest.  
Source: The Riksbank.

**Chart 14 The Riksbank’s foreign currency exposure at the end of 2017, SEK billion**

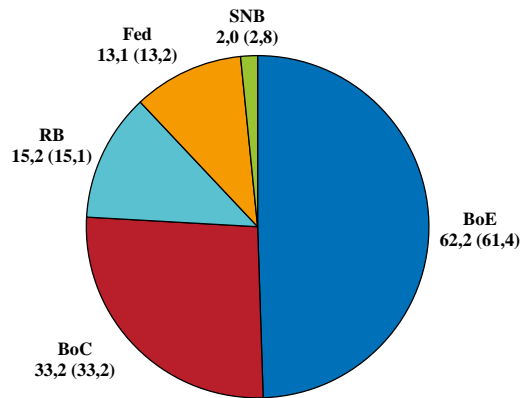


Note: The figures in the chart show the Riksbank’s foreign currency exposure including accrued interest. The calculation of foreign currency exposure is based on both assets and liabilities (including currency swaps) and is reported for the Riksbank’s net receivables.  
Source: The Riksbank.

## The liquidity of the gold reserve was strengthened in 2017

The Riksbank has a gold reserve that amounts in total to 125.7 tonnes of gold. The Riksbank owns gold largely due to gold's historical link to banknotes and coins, as the Riksbank was obliged to be able to redeem banknotes for gold during a period when the gold standard was in use, among other things. Nowadays, however, gold is a financial asset that, like the currency reserve, aims to ensure that the Riksbank can carry out its tasks. The Riksbank's gold reserve is stored by the central banks in the United Kingdom (the Bank of England), Canada (the Bank of Canada), the United States (the Federal Reserve Bank of New York) and Switzerland (the Swiss National Bank), as well as at the Riksbank's own depot in Sweden (see Chart 15).

**Chart 15 Storage of the gold reserve at the end of 2017, tonnes**



Note: The figures in parentheses show storage of the gold reserve at the end of 2016.  
Source: The Riksbank.

Storing all of the gold in the same place would entail too much of a security risk, so the Riksbank stores the gold in different locations around the world. This distribution takes account of the need to be able both to convert the gold to liquid assets and to spread risk. Almost half of the gold reserve is stored in the United Kingdom, where the world's largest commercial gold market, the London Bullion Market, is based. This market is the most liquid and central marketplace for trading bullion. Holding it at the Bank of England allows a large part of the Riksbank's gold to be converted at very short notice, should the need arise. In this sense, the gold can be considered a liquid asset.

Only gold bars that are classed as London Good Delivery (LGD) bars are acceptable for trading on the London Bullion Market. This classification entails specific requirements regarding the shape, weight, gold content and refiners of the bars. Gold bars that deviate from the LGD standard cannot be

traded on this market and therefore have lower liquidity. To ensure that the Riksbank has the most liquid gold reserve possible, in 2017 the Riksbank upgraded the part of its gold reserve that did not meet the LGD standard by replacing these bars with new gold bars that do meet the standard. This exchange comprised 15.6 tonnes of gold. A few gold bars that have particular significance for Sweden's economic history and the cultural heritage maintained by Swedish authorities have been preserved in their original form. These gold bars are now stored in Sweden.

During 2017, the Riksbank also transferred 0.8 tonnes of gold from the Swiss National Bank to the Riksbank's account held at the Bank of England. Otherwise, both the geographical allocation of the gold and the gold reserve's total size measured in tonnes are unchanged. All in all, the measures implemented in 2017 mean that the liquidity of the gold reserve has been strengthened.

As in previous years, the Riksbank also stored gold on behalf of others in 2017.

### **Negative return on the gold and foreign currency reserve**

The return on the foreign currency reserve amounted to SEK –3.5 billion. The negative return is mainly due to the fact that the currencies in the foreign currency reserve weakened on average against the Swedish krona over the year. The overall exchange rate effect, which is to say the return attributable to exchange rate fluctuations, amounted to SEK –2.0 billion. The return excluding exchange rate effects amounted to SEK –1.5 billion, primarily because interest rates in general rose on the markets where the Riksbank had invested parts of its assets.

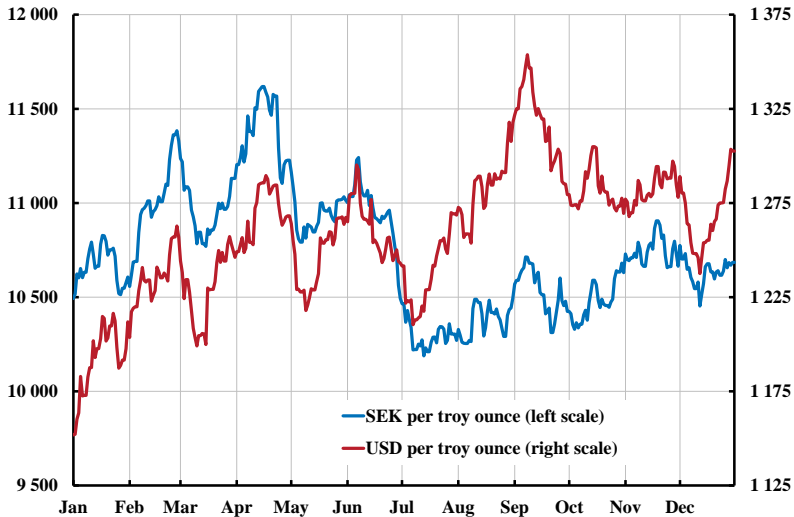
Gold is traded and priced in US dollars, and, in 2017, the price of gold expressed in dollars increased by 13.1 per cent (see Chart 16). However, as the dollar weakened against the Swedish krona, the price of gold in kronor only increased by 1.8 per cent. The return on the Riksbank's holdings of gold thereby amounted to SEK 0.8 billion over the year.

The external costs for upgrading part of the Riksbank's holdings of gold to the LGD standard amounted to SEK 10 million.

Over the year, the Riksbank's liability to the Swedish National Debt Office was, in principle, held unchanged in foreign currency. However, as the krona appreciated, the value of this liability, measured in kronor, decreased by SEK 18.7 billion, reaching SEK 239.3 billion by the end of the year. Loans in US dollars and euros amounted at year-end to 77 per cent and 23 per cent respectively of the liability to the Debt Office.

At the end of the year, the total value of the Riksbank's derivative instruments was negative and entailed a liability of SEK 0.6 billion. The return on these derivative instruments excluding exchange rate effects amounted to SEK –0.1 billion over the year (see Table 6). More information on derivative instruments can be found on page 68.



**Chart 16 Gold price movements 2017**

Note: One troy ounce is equivalent to about 31 grammes.

Source: Reuters.

### *Box 8 – The Riksbank’s financial risk management*

The Riksbank’s financial risk policy sets the framework for the management of the financial risks arising in the administration of the Riksbank’s assets and liabilities. The financial risks consist of liquidity risk, market risk and credit risk. The follow-up of the risks the Riksbank is exposed to is mainly carried out in the Markets Department, which is responsible for day-to-day risk control. The Risk Division, in turn, is responsible for overall and independent risk control.

The Riksbank regularly conducts stress tests to measure the sensitivity of the gold and foreign currency reserve to unexpected market events. The stress tests show how much the value might change if a particular scenario, hypothetical or historical, were to occur.

### **Evaluation of the management of the foreign currency reserve in 2017**

The Riksbank’s management of the foreign currency reserve is evaluated by making a comparison of the risk-adjusted return on the foreign currency reserve with an equivalent return on what is known as a reference portfolio. Without considering return, this reference portfolio is composed of the securities that are particularly important if the Riksbank is to be able to carry out its tasks. In 2017, the reference portfolio consisted of 60 per cent US and 40 per cent German government bonds, whose overall interest-rate sensitivity was 4, measured as modified duration. The risk-adjusted return is measured as

a Sharpe ratio and is calculated both excluding and including exchange rate effects.

The risk-adjusted return in Swedish kronor was higher for the foreign currency reserve than it was for the reference portfolio (see Table 7). The foremost reason for this was that the lower proportion of US dollars entailed a higher return on the foreign currency reserve.

Measured in local currency, it was primarily the foreign currency reserve's lower exposure to US interest rates and higher exposure to German interest rates that contributed towards the risk-adjusted return on the foreign currency reserve being lower than that of the reference portfolio (see Table 7). However, the foreign currency reserve's more diversified composition contributed to the risk measured as volatility was lower than in the reference portfolio.

**Table 7 Return, risk and Sharpe ratio at the end of 2017, return and risk as a percentage**

	Foreign currency reserve	Reference portfolio
<b>Measured in Swedish kronor</b>		
Return	-1.3	-4.5
Risk	5.3	7.0
Sharpe ratio	-0.1	-0.5
<b>Measured in local currency</b>		
Return	-0.3	0.6
Risk	1.1	1.7
Sharpe ratio	-0.3	0.3

Source: The Riksbank.

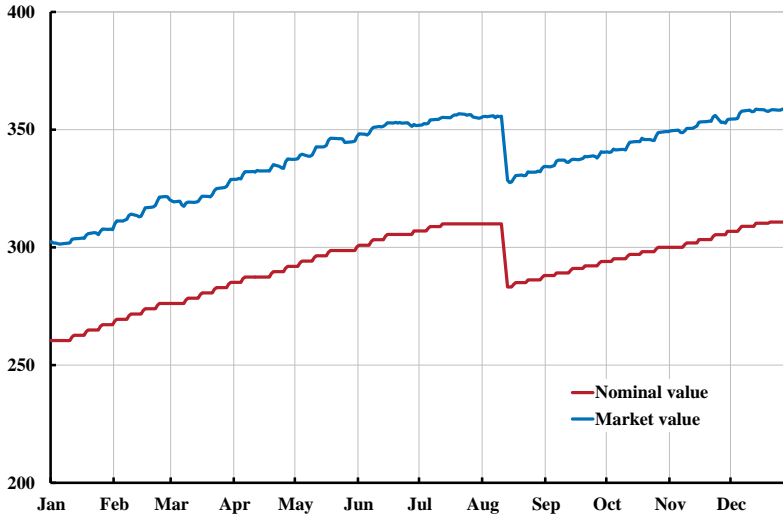
## Securities in Swedish kronor

Over the year, the Riksbank purchased Swedish nominal and real government bonds for monetary policy purposes to a nominal value totalling SEK 77 billion, including reinvestments of maturities and coupon payments on the government bond portfolio (see the section Maintaining the value of money – price stability). The greater part of this amount, SEK 54 billion, referred to purchases of nominal government bonds. All bond purchases over the year were conducted on the secondary market at a total of 71 auctions (see Chart 17).

The comprehensive purchases of Swedish government bonds have meant that the Riksbank's return is now more sensitive to interest rates (a more detailed risk analysis can be found in the section Analysis of the Riksbank's financial result and equity). Over the year, the market value of the holdings of Swedish government bonds was negatively impacted by the rise in Swedish interest rates over the year and the return on the holdings amounted to SEK – 2 million (see Table 6). At the end of the year, the market value of the Riksbank's holdings of Swedish government bonds amounted to SEK 357.7 billion. The remaining time to maturity on the bonds varied from 14 months to

21 years and the bonds' total interest-rate sensitivity, measured as modified duration, amounted to 4.9. As a proportion of the outstanding stock of Swedish nominal and real government bonds, the Riksbank's holdings amounted to 39 per cent.

**Chart 17 The Riksbank's holdings of Swedish government bonds 2017, SEK billion**



Note: The chart shows the market value and the nominal value of the Riksbank's holdings of Swedish government bonds over the year. Reinvestments of maturities and coupon payments on the government bond portfolio were distributed throughout the year.

Source: The Riksbank.

## Monetary policy transactions

The Swedish banking system has a structural liquidity surplus that is regularly deposited at the Riksbank through various monetary policy transactions. The Riksbank mainly borrows the liquidity surplus either via overnight loans, so-called fine-tuning transactions, or by issuing Riksbank Certificates. This borrowing means that the Riksbank has a debt to the banks. The Riksbank also provides so-called standing facilities, which means that the banks can borrow money from or deposit money with the Riksbank overnight.

Deposits from the banking system amounted to SEK 418.5 billion at year-end, which is an increase of SEK 53.4 billion from the previous year (see Table 6). This increase is largely due to the Riksbank's purchases of Swedish government bonds for monetary policy purposes (see the section Maintaining the value of money – price stability). The increased deposits can also be explained by a decline in the value of outstanding banknotes and coins of SEK 4.4 billion (see the section Cash provision) and by the Riksbank transferring SEK 2.5 billion to the Treasury in May. Over the year, negative deposit rates led to total deposits generating SEK 2.1 billion in interest income. Average

deposits during the year via Riksbank Certificates and fine-tuning transactions amounted to SEK 323.6 billion and SEK 83.0 billion respectively.

## The Riksbank's financial commitments to the IMF

The Riksbank contributes towards the funding of the IMF via capital contribution and arrangements to borrow, and stands prepared to use the gold and foreign currency reserve to meet its commitments to the Fund. The Riksbank's commitments to the IMF are described in more detail in Box 6 – International commitments and in the section Balance sheet and profit and loss account.

Over the year, total commitments to the IMF increased when the Riksbank entered into a new credit agreement. This agreement gives the IMF the right to borrow up to the equivalent of 7.4 billion special drawing rights (SDR) and applies until 31 December 2020 at the latest. This agreement could be said to replace the Riksbank's previous credit agreement for SDR 6.7 billion that expired in February. The Riksbank's other transactions with the IMF, which is to say those related to the IMF's onward lending to other countries, contributed towards the utilised part of the Riksbank's commitments to the IMF increasing over the year. However, all in all, the IMF only utilises a small part of the maximum commitment, corresponding to just over SEK 249 billion (see Table 8).

The value of the Riksbank's receivables from the IMF was SEK 28.7 billion at the end of the year, while the value of the Bank's liabilities to the IMF was SEK 26.3 billion (see table 6). The return on the net receivables amounted to SEK 6 million over the year, excluding exchange rate effects.

**Table 8 Sweden's financial obligations to the IMF at the end of 2017, SEK million**

	Utilised	Maximum	Unutilised
Capital contribution (quota)	1,472	51,753	50,281
NAB	2,914	26,355	23,441
Credit agreement	–	86,450	86,450
PRGT agreement	–	5,841	5,841
SDR	24,049	78,821	54,772
<b>Total</b>	<b>28,435</b>	<b>249,221</b>	<b>220,785</b>

Note: The utilised part of the Riksbank's commitment to the IMF does not include the item PRG-HIPC lending, which means that the value of the utilised part differs from the value of the Riksbank's receivables from the IMF. The table reports the commitment concerning SDR, including the SDR originally allocated by the IMF (for a more detailed account of commitments to the IMF, see also Notes 2, 19 and 38 in the section Balance sheet and profit and loss account).

Source: The Riksbank.

## Analysis of the Riksbank's financial result and equity

The Riksbank's result derives largely from the development of the krona exchange rate, as well as international and Swedish interest rates. Recent years' low interest rates have meant that interest income from the Riksbank's foreign securities is low. If interest rates remain low, interest income will also remain low. If interest rates instead start to rise, interest income will gradually rise as securities mature and are replaced by new ones. However, at the same time, the value of the Riksbank's securities will fall, which is expected to impair the total return from asset management (interest income plus change in market value).

In 2017, the total return on the Riksbank's foreign securities was negative. In the long run, interest rates are expected to rise from the current low levels. In addition, the krona is expected to appreciate gradually, reducing the value in Swedish kronor of assets denominated in foreign currency. Over the coming five-year period, the Riksbank is therefore expected to achieve a result that is significantly lower than was the case over the previous five-year period. If the krona appreciates heavily or if there is a strong rise in interest rates, the Riksbank may make significant losses. In the latter case, the Riksbank's ability to make dividend payments to the government will decrease.

The purchases of Swedish government bonds made by the Riksbank over the period 2015–2017 also affect its income. The bond purchases were funded by increased deposits from the banks. The cost for this is determined by the interest rate on the Riksbank's deposits in the form of Riksbank Certificates (the repo rate), fine-tuning transactions (the repo rate minus 0.10 percentage points) and deposit facilities (the repo rate minus 0.75 percentage points). The repo rate is currently negative, meaning that deposits from the banks are making a positive contribution to the Riksbank's result. However, in 2017, Swedish bond yields rose, decreasing the value of the Riksbank's Swedish government bonds. If the repo rate also rises, the cost of funding the holdings of government bonds will increase, impairing the Riksbank's result. In addition, a higher level of interest rates on the bond market would mean that the value of the Riksbank's Swedish government bonds would decrease further.

The buffers in the form of unrealised profits that have been built up in recent years may be utilised if market rates rise over the next few years. However, it is important that the Riksbank has sufficient resources to be able to carry out its tasks independently, in all situations. The current amount of equity is presently deemed to be sufficient for the Riksbank to be able to carry out the complementary monetary policy measures already decided upon and also to adopt further measures without jeopardising the Riksbank's financial independence.

**Box 9 – Performance measures and seigniorage**

The Riksbank's financial result depends on the return on the Bank's assets, the costs of its liabilities and the its operating costs. However, there are several ways of calculating the result of the Riksbank's operations.

The broadest measure of the result can be termed *total result* and describes how the Riksbank's equity (including the financial result for the year and the revaluation accounts) has changed over the year. In 2017, equity decreased by SEK 2,464 million. In that equity fell by SEK 2,500 million when the Riksbank made dividend payments to the government over the year, the total result for 2017 amounted to  $-2,464 + 2,500 = \text{SEK } 36$  million.

The total result can be divided up into different components. For example, a distinction can be made between realised and unrealised results. Realised results arise, for example, when the Riksbank earns interest on its bank balances and securities, when it sells previously purchased securities or when it pays wages. Unrealised results arise when the value of assets that the Riksbank still owns changes, for example if the price of gold changes. Another way of dividing up the Riksbank's result is to separate items relating to interest rates and securities holdings from items relating to gold and currency holdings.

In Table 9, the total result for 2017, that is SEK 36 million, has been divided into four parts. The realised result from interest rates and securities amounted to SEK 3,589 million. This includes the Riksbank's interest income and interest expenditure and the net result of all transactions and write-downs relating to securities. It also includes the item 'Other income', which largely consists of dividends on the Riksbank's shares in the BIS and fees from users of the RIX payment system, and costs for personnel, administration and depreciation. The realised result from gold and currency transactions, including write-downs, amounted to SEK 337 million. The unrealised result as a result of rising interest rates amounted to SEK  $-2,317$  million, while the result relating to changed gold prices and exchange rates was SEK  $-1,573$  million.

**Table 9 Result matrix, SEK million**

	<b>Interest and securities</b>	<b>Gold and currency</b>
Realised result	3,589	337
Unrealised result	$-2,317$	$-1,573$

Source: The Riksbank.

The Riksbank's *reported result*, that is the result taken up in the Riksbank's income statement, comprises all the realised results stemming from interest rates and securities transactions as well as from gold and currency transactions. The Riksbank's reported result for 2017 amounted to  $3,589 + 337 = \text{SEK } 3,926$  million.

The *result on which the dividend to the State is based* comprises both realised and unrealised results linked to interest rates and securities, but excludes

all results relating to gold and currency. In 2017, this result amounted to 3,589 – 2,317 = SEK 1,272 million.

The size of the dividend itself is arrived at by calculating the average of the result over the past five years and multiplying it by 80 per cent. A compilation of how the different results relate to each other is presented in Table 10.

**Table 10 Result measures 2017, SEK million**

	<b>Total</b>	<b>Reported</b>	<b>Basis for dividend</b>
<b>Interest income</b>	<b>6,015</b>	<b>6,015</b>	<b>6,015</b>
<b>Interest expense</b>	<b>-3,091</b>	<b>-3,091</b>	<b>-3,091</b>
<b>Net result of financial transactions and write-downs</b>	<b>321</b>	<b>321</b>	<b>-16</b>
of which, sale of securities	830	830	830
and gold and currency respectively	337	337	–
of which, write-downs of securities	-846	-846	-846
and gold and currency respectively	–	–	–
<b>Net result of changes in value (unrealised result)</b>	<b>-3,890</b>	<b>–</b>	<b>-2,317</b>
of which, changes in value of securities	-2,317	–	-2,317
and gold and currency respectively	-1,573	–	–
<b>Other income</b>	<b>1,544</b>	<b>1,544</b>	<b>1,544</b>
<b>Total net income</b>	<b>899</b>	<b>4,789</b>	<b>2,135</b>
<b>Personnel and administration costs and depreciation</b>	<b>-863</b>	<b>-863</b>	<b>-863</b>
of which, costs for managing banknotes and coins	-191	-191	-191
other costs	-672	-672	-672
<b>Result for the year</b>	<b>36</b>	<b>3,926</b>	<b>1,272</b>

Source: The Riksbank.

### *What is seigniorage?*

The Riksbank's *seigniorage* is the part of the Bank's reported result that arises from the right to issue banknotes and coins. The value of all banknotes and coins in circulation is reported as a liability on the Riksbank's balance sheet. At year-end 2017, this value amounted to SEK 57,988 million. The Riksbank does not pay interest on this liability but incurs costs for managing banknotes and coins. Of the Riksbank's total costs for personnel, administration and depreciation of SEK 863 million, SEK 191 million were costs for managing banknotes and coins.

By issuing banknotes and coins the Riksbank can finance assets of the same value, but the Riksbank has no earmarked assets that exactly correspond to the

item banknotes and coins. A standard calculation is therefore used when estimating the earnings from these assets. As the stock of banknotes and coins averaged 6.7 per cent of the balance sheet, it is assumed that 6.7 per cent of the earnings come from the assets corresponding to banknotes and coins. Calculated in this way, SEK 258 million of the Riksbank's total interest income from assets of SEK 3,868 million (SEK 6,015 million excluding interest income regarding deposits from the Riksbank's counterparties of SEK 2,147 million) can be said to come from these assets. Similarly, SEK 78 million of the total net result of financial transactions, excluding write-downs, of SEK 1,167 million can be said to come from the assets corresponding to banknotes and coins. The net amount of the Riksbank's earnings and costs that can be related to banknotes and coins thus amounted to  $258 + 78 - 191 = \text{SEK } 145$  million. It is this sum that is referred to as the Riksbank's seigniorage.



# BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

## Accounting principles

The balance sheet and the profit and loss account for the Riksbank have been prepared in accordance with the Sveriges Riksbank Act and in accordance with the Rules for Bookkeeping and Annual Accounts at Sveriges Riksbank adopted by the Executive Board on 14 December 2016 (Ref. no. 2016-00854), which came into force on 31 December 2016.

The rules for current recording of transactions refer to the Bookkeeping Ordinance (2000:606) and the rules for annual accounts refer to the Guideline of the European Central Bank on the Legal Framework for Accounting and Financial Reporting in the European System of Central Banks (ECB/2016/34). Under Chapter 10, Article 3 of the Sveriges Riksbank Act the Riksbank must apply the accounting guidelines of the European System of Central Banks (ESCB) where relevant.

### *Changes in accounting principles*

No changes in accounting policies were made in 2017.

### *Fundamental accounting principles*

The following fundamental accounting principles have been applied:

- The accounting shall reflect financial reality and be characterised by transparency.
- The valuation of assets and liabilities and for income recognition shall be carried out prudently.
- Deviations from the accounting policies may only occur if such deviations can reasonably be considered immaterial on the whole in light of the Riksbank's year-end accounts.
- The criteria for measuring balance sheet items and for income recognition must be applied consistently.
- Assessment of assets and liabilities must be made on the assumption of a going concern.
- Income and expenditure shall be recognised as income and expenditure in the accounting period in which they were earned or arose, regardless of when payment is made.
- Assets and liabilities shall be adjusted to take into account events that occur between the end of the financial year and the date the annual accounts are adopted by the Executive Board, provided that these events have affected the value of the assets or liabilities on the closing date.

*Recognition of assets and liabilities*

Assets and liabilities are only recognised in the balance sheet if it is probable that any future economic benefit associated with the asset or liability item will flow to or from the Riksbank and that substantially all of the risks and rewards associated with the asset or liability have been transferred to the Riksbank.

*Trade-date accounting*

Foreign exchange transactions and securities transactions are recognised in the balance sheet on the settlement date. Realised gains and losses from net sales are registered on the trade date.

*Balance sheet valuation rules*

Gold and securities are recorded at the exchange rates and prices applying on the closing date. The exchange rates below are used for revaluation at year-end. In the table below the exchange rates have been rounded off to four decimals:

	31.12.2017	31.12.2016
EUR/SEK	9.8422	9.5824
USD/SEK	8.2032	9.1092
GBP/SEK	11.0862	11.2431
AUD/SEK	6.4001	6.5732
CAD/SEK	6.5214	6.7815
SDR/SEK	11.6824	12.2458
NOK/SEK	0.9991	1.0544
JPY/SEK	7.2798	7.7927

Receivables, balances and liabilities are recorded at their nominal amount. Amounts in foreign currency are translated at the closing rate with the exception of receivables and payables reported under the items 'Other assets' and 'Other liabilities'. These are recorded at the exchange rate on the trade date.

Shares and participations are recorded at cost of acquisition.

Tangible and intangible assets are recorded at cost of acquisition and depreciated according to plan. Buildings are depreciated over a period of 50 years, other fixed assets over 5–25 years. Machinery and equipment, including computers, is depreciated over 3–7 years. Land and art are not depreciated. Direct staff costs attributable to IT investments developed in-house are included in the asset's cost of acquisition.

Repurchase agreements Repurchase agreements are reported as loan transactions and therefore do not affect the holdings of securities and gold. A repurchase agreement is an agreement to sell assets, such as securities or gold, whereby the seller simultaneously undertakes to repurchase the assets at a specified price on a specific date in the future.

Assets pledged by the Riksbank as collateral for repos continue to be reported in the balance sheet and are recorded in accordance with the applicable rules for the Riksbank's other holdings of securities and gold. An amount equivalent to the purchase sum received is reported as a liability, while the transferred assets are reported as memorandum items.

Assets received by the Riksbank under reverse repurchase agreements are not reported in the balance sheet because they constitute loan collateral. An amount equivalent to the purchase sum paid is reported as a receivable. The difference between the two payments in a repurchase agreement (spot and forward) is allocated over the term of the agreement.

Transactions carried out within the framework of agreements on automatic repurchase agreements are only reported in the balance sheet if collateral is pledged in the form of cash paid into an account at the Riksbank.

### *Banknotes and coins*

The balance sheet item 'Banknotes and coins in circulation' is equivalent to the nominal value and calculated by deducting from the value of the banknotes and coins received by the Riksbank from the manufacturers both the value of the banknotes and coins included in the Riksbank's depots and the value of the banknotes and coins the Riksbank has destroyed and cancelled. Banknotes and coins in circulation that are no longer legal tender are recognised in the profit and loss account at the latest when they are no longer redeemed by the Riksbank. However, they must be recognised in profit or loss earlier if only a small amount is expected to remain to be redeemed and a provision is made at the same time for this amount. Commemorative coins and commemorative banknotes in circulation must be recognised in profit or loss when the issue has been in circulation for more than ten years.

Recognition of income Realised gains and losses are transferred to the profit and loss account.

Unrealised gains are transferred to a revaluation account in the balance sheet.

Unrealised losses are recognised in the profit and loss account if they exceed unrealised gains that may have been previously posted in the corresponding revaluation account. Unrealised losses recognised in profit and loss may not be reversed in later years to offset new unrealised gains. Unrealised losses in a particular security, a particular currency or gold are not netted against unrealised gains in other security, currencies or gold.

Premiums and discounts on securities purchased are calculated and reported as part of interest income and are written off during the security's remaining time to maturity.

### *Cost of transactions*

With regard to gold, instruments in foreign currencies and securities, the average method is used daily to establish the cost of acquisition of items sold when

calculating effects of exchange rates and prices. When acquisitions of currency and gold are netted, the average cost of acquisition for the day's acquisition with regard to each individual currency and gold is added to the previous day's holdings to obtain a new weighted average of the exchange rate or the gold price respectively. To calculate net sales, the realised gain/loss is calculated on the basis of the average cost of acquisition on the previous day for the holding in question.

### *Derivative instruments*

Derivative instruments are recorded contract by contract within each group of derivative instruments. Groups with a positive value are recorded as assets and groups with a negative value as liabilities.

FX forwards are recorded in the amount corresponding to the contract's forward amount multiplied by the difference between closing day rates and trade date rates (spot). The difference between the trade date exchange rate (spot) and the contracted forward exchange rate is allocated as interest over the term of the contract. The currency sold is booked on the trade date, multiplied by the difference between the trade date exchange rate (spot) and the average acquisition rate, as realised gains/losses.

The spot legs of FX swaps are booked on the settlement date at the trade date rate (spot). The forward legs of FX swaps are booked the same way as FX forwards, that is at a value corresponding to the contract's forward amount multiplied by the difference between the closing day rate and the trade day rate (spot). The difference between the trade date exchange rate (spot) and the contracted forward exchange rate is allocated as interest over the term of the contract. Unlike foreign exchange forwards, no net foreign exchange gains/losses arise when recording FX swaps.

Interest rate swaps are booked, for both the incoming and outgoing transactions, at an amount corresponding to the difference between the nominal amount of the contract and the nominal amount translated at the closing day rate. The resulting amount is translated to SEK at the closing day exchange rate.

Gold options are booked on the trade date in an amount corresponding to the premium paid or received. On the closing day the book value is adjusted to a value corresponding to the number of troy ounces in the contract translated at the closing day option price and exchange rate. The option price is calculated on the basis of a recognised calculation model.

Futures contracts are booked daily as realised gains/losses in an amount corresponding to the value calculated in the daily settlement.

# Balance sheet

SEK million

<b>Assets</b>		31.12.2017	31.12.2016
<b>Gold</b>	Note 1	43,190	42,412
<b>Claims on residents outside Sweden denominated in foreign currency</b>			
Receivables from the IMF	Note 2	28,653	29,063
Balances with banks, loans and security investments	Note 3	436,093	466,970
		464,746	496,033
<b>Lending to credit institutions in Sweden related to monetary policy operations denominated in Swedish kronor</b>			
Marginal lending facility	Note 4	20	0
		20	0
<b>Securities of residents in Sweden denominated in Swedish kronor</b>	Note 5	353,874	298,645
<b>Other assets</b>			
Tangible and intangible fixed assets	Note 6	677	667
Financial assets	Note 7	522	522
Derivative instruments	Note 8	–	–
Prepaid expenses and accrued income	Note 9	6,391	6,268
Other assets	Note 10	217	265
		7,807	7,722
<b>Total assets</b>		<b>869,637</b>	<b>844,812</b>

## Liabilities and equity

		31.12.2017	31.12.2016
<b>Banknotes and coins in circulation</b>			
Banknotes	Note 11	55,215	57,535
Coins	Note 12	2,773	4,858
		57,988	62,393
<b>Liabilities to credit institutions in Sweden related to monetary policy operations denominated in Swedish kronor</b>			
Deposit facility	Note 13	284	198
Fine-tuning operations	Note 14	27,055	144,143
		27,339	144,341
<b>Debt certificates issued</b>	Note 15	391,203	220,771
<b>Liabilities to residents outside Sweden denominated in Swedish kronor</b>	Note 16	6,589	232
<b>Liabilities to residents in Sweden denominated in foreign currency</b>	Note 17	237,905	256,723
<b>Liabilities to residents outside Sweden denominated in foreign currency</b>	Note 18	3,481	11,264
<b>Counterpart of Special Drawing Rights allocated by the IMF</b>	Note 19	26,273	27,540
<b>Other liabilities</b>			
Derivative instruments	Note 20	528	910
Accrued expenses and prepaid income	Note 21	1,584	1,424
Other liabilities	Note 22	39	37
		2,151	2,371
<b>Provisions</b>	Note 23	498	503
<b>Revaluation accounts</b>	Note 24	56,423	60,313
<b>Equity</b>			
Capital	Note 25	1,000	1,000
Reserves	Note 26	54,861	50,351
		55,861	51,351
<b>Result for the year</b>		3,926	7,010
<b>Total liabilities and equity</b>		<b>869,637</b>	<b>844,812</b>

Memorandum items, See Note 38

# Profit and loss account

*SEK million*

		2017	2016
Interest income	Note 27	6,015	5,829
Interest expense	Note 28	-3,091	-2,431
Net result of financial transactions and write-downs	Note 29	321	4,152
Fees and commissions income	Note 30	79	53
Fees and commissions expense	Note 31	-24	-17
Dividends received	Note 32	62	44
Other income	Note 33	1,427	293
<b>Total net income</b>		4,789	7,923
Staff costs	Note 34	-403	-403
Administrative expenses	Note 35	-385	-368
Depreciation of tangible and intangible fixed assets	Note 36	-61	-54
Banknote and coin expenses	Note 37	-14	-88
<b>Total expenses</b>		-863	-913
<b>Result for the year</b>		<b>3,926</b>	<b>7,010</b>

# Cash flow statement

*SEK million*

<b>OPERATING ACTIVITIES</b>	<b>31.12.2017</b>	<b>31.12.2016</b>
<i>Cash flow from operating activities, profit and loss</i>		
Interest received	5,825	4,525
Interest paid	-2,827	-2,195
Net received from financial transactions	1,167	5,360
Fees and commissions received	79	53
Fees and commissions paid	-24	-17
Other income	123	29
Administrative expenses paid	-817	-919
	<b>3,526</b>	<b>6,836</b>
<i>Cash flow from operating activities, assets</i>		
Receivables from the IMF	1,965	3,207
Securities in foreign currency	-1,534	-14,994
Securities of residents	-55,170	-129,417
Other assets	32	-5
	<b>-54,707</b>	<b>-141,209</b>
<i>Cash flow from operating activities, liabilities</i>		
Banknotes and coins in circulation	-3,101	-10,366
Liabilities to credit institutions in Sweden related to monetary policy operations denominated in Swedish kronor	-117,002	73,419
Debt certificates issued	170 432	77,351
Liabilities to residents outside Sweden denominated in Swedish kronor	6,357	-8,060
Liabilities to residents in Sweden denominated in foreign currency	68	1,109
Liabilities to residents outside Sweden denominated in foreign currency	-7,674	9,932
Other liabilities	-1,932	2,575
	<b>47,148</b>	<b>145,960</b>
<b>Cash flow from operating activities</b>	<b>-4,033</b>	<b>11,587</b>

*The table continues on the next page.*



	31.12.2017	31.12.2016
<b>INVESTING ACTIVITIES</b>		
Acquisition and disposal of tangible and intangible fixed assets	-71	-51
Acquisition and disposal of financial assets	-	-
Dividends received	62	44
<b>Cash flow from investing activities</b>	-9	-7
<b>FINANCING ACTIVITIES</b>		
Transfer to the Treasury	-2,500	-2,800
<b>Cash flow from financing activities</b>	-2,500	-2,800
<b>Cash flow for the period</b>	-6,542	8,780
<b>Cash and cash equivalents at beginning of period</b>	25,426	11,082
Cash flow from operating activities	-4,033	11,587
Cash flow from investing activities	-9	-7
Cash flow from financing activities	-2,500	-2,800
Exchange rate difference on cash and cash equivalents	66	5,564
<b>Cash and cash equivalents at end of period</b>	18,950	25,426
<b>Specification of cash and cash equivalents</b>		
	31.12.2017	31.12.2016
Bank accounts, bank lending and reverse repurchase agreements denominated in foreign currency, see Note 3	18,930	25,426
Marginal lending facility	20	0
<b>Total cash and cash equivalents</b>	18,950	25,426

The cash flow statement shows incoming and outgoing payments during the period as well as cash and cash equivalents at the beginning and end of the period. The cash flow statement is divided into payments from operating activities, investing activities and financing activities.

### *Operating activities*

Cash flows attributable to operating activities originate from the Riksbank's main operations. Cash flow from operating activities is based on operating profit. Adjustments are made for items that do not affect cash flow or do not belong to operating activities. In addition, cash flow includes changes that affect cash flow from such balance sheet items as those which are included in operating activities.

*Investing activities*

Investing activities consist of the purchase and sale of tangible and intangible fixed assets, as well as those shares and participations that are reported under Financial assets. Dividends received from holdings of shares and participations are also included.

*Financing activities*

Financing activities consist of changes in equity that usually occur through dividends, also known as transfer to the Treasury.

# Notes

*SEK million*

Figures in brackets refer to 2016.

## Note 1 Gold

	31.12.2017	31.12.2016
Quantity		
Troy ounces (million)	4.0421	4.0421
Price		
USD/troy ounce	1,302.5453	1,151.8454
SEK/USD	8.2032	9.1092
Book value	43,190	42,412

As of 31 December 2017 the Riksbank holds 4 million troy ounces (troy/oz) of gold (4), which is equivalent to 125.7 tonnes. No gold was sold in 2017. However, due to the upgrading of 15.6 tonnes of gold in 2017 the holding was reduced by 99 ounces.

## Note 2 Receivables from the IMF

	31.12.2017	31.12.2016
Special Drawing Rights	24,049	24,399
Reserve position in the IMF		
Capital contributions (quota)	51,753	54,249
IMF krona account	-50,281	-53,184
PRG-HIPC lending	218	228
NAB New Arrangements to Borrow	2,914	3,371
Total	28,653	29,063

The Riksbank's holding of Special Drawing Rights amounts to SDR 2 059 million (1 992). An amount corresponding to the total SDR allocated by the International Monetary Fund (IMF) is reported as a liability (see Note 19).

The Riksbank's capital contribution (quota) to the IMF amounts to SDR 4 430 million and is booked net of the IMF's account for Swedish kronor under the item 'Reserve position in the IMF'. The IMF's account in Swedish kronor is a liabilities account that shows how large a share of capital contribution the Riksbank has paid into the IMF by utilising the overdraft facility of this account. Because these items are reported net, only the part of the capital contribution used by the IMF for lending to member countries is reported as a receivable from the IMF.

The item 'PRG-HIPC lending' refers to an interest-free deposit with the IMF as manager of contributions to the IMF's share of the debt relief initiative

HIPC (Heavily Indebted Poor Countries) and to the Fund's concessional lending. The deposit of a total of SDR 18.6 million shall be repaid by 1 January 2019.

At the close of 2017 the Riksbank's NAB lending amounted to SDR 249 million (275).

At the close of 2017 the Riksbank also had a receivable from the IMF of SDR 12.8 million (12.8) for funds that the IMF may use for interest and credit losses due to delays. The IMF has made deductions from interest payments on the Riksbank's reserve position in the IMF to transfer the funds. The Riksbank has booked these deductions in the profit and loss account. Consequently they are not included as receivables from the IMF on the Riksbank's balance sheet.

### **Note 3 Balances with banks, loans and security investments**

	31.12.2017	31.12.2016
Bank accounts	128	4,128
Bank lending	15,321	10,034
Reverse repurchase agreements	3,481	11,264
Bonds	416,756	437,901
Short-term securities	407	3,643
<b>Total</b>	<b>436,093</b>	<b>466,970</b>

Bank deposits and securities are issued in euro, US dollars, Pounds sterling, Australian dollars, Canadian dollars, Norwegian kroner and Japanese yen. The distribution is shown in the table below. The securities have been recorded at quoted prices.

	31.12.2017	31.12.2016
Euro	152,331	154,725
US dollars	229,891	257,740
Pounds sterling	18,121	18,298
Australian dollars	22,523	22,483
Canadian dollars	13,227	13,724
Norwegian kroner	0	0
Japanese yen	0	0
<b>Total</b>	<b>436,093</b>	<b>466,970</b>

The distribution of balances with banks and security investments is shown in the table below.

Maturity	Balances with banks	Securities
Up to 1 month	14,429	19,771
Over 1 month, up to 3 months	4,501	38,180
Over 3 months, up to 1 year	–	113,796
Over 1 year, up to 5 years	–	202,181
More than 5 years	–	43,235
<b>Total</b>	<b>18,930</b>	<b>417,163</b>

The Riksbank did not participate in any automatic securities lending programmes in 2017.

#### **Note 4 Marginal lending facility**

This item is used to report overnight loans to banks on their RIX accounts at the Riksbank.

#### **Note 5 Securities of residents in Sweden denominated in Swedish kronor**

In 2012 the Riksbank started to acquire SEK-denominated securities as a contingency plan to enable future purchases of Swedish securities at short notice, either to secure financial stability or to contribute to a better functioning transmission mechanism, in the event of a crisis in the financial system. In 2017 the Riksbank acquired further securities in SEK in order to make monetary policy even more expansionary.

The securities have been recorded at quoted prices.

The breakdown of SEK-denominated securities by time to maturity is shown in the table below:

Maturity	Securities
Up to 1 month	–
Over 1 month, up to 3 months	–
Over 3 months, up to 1 year	–
Over 1 year, up to 5 years	200 124
More than 5 years	153,750
<b>Total</b>	<b>353,874</b>

**Note 6 Tangible and intangible fixed assets**

	31.12.2017	31.12.2016
<b>Land and buildings</b>		
Cost of acquisition, 1 January	597	594
Acquisitions during the year	15	3
Divestments during the year	–	–
Cost of acquisition, 31 December	612	597
Acc. depreciation, 1 January	–226	–209
Depreciation for the year	–20	–17
Divestments during the year	–	–
Acc. depreciation, 31 December	–246	–226
Book value	366	371
<b>Machinery and equipment</b>		
Cost of acquisition, 1 January	641	605
Acquisitions during the year	56	48
Divestments during the year	–37	–12
Cost of acquisition, 31 December	660	641
Acc. depreciation, 1 January	–345	–320
Depreciation for the year	–41	–37
Divestments during the year	37	12
Write-down for the year	–	–
Acc. depreciation, 31 December	–349	–345
Book value	311	296
<b>Total book value</b>	<b>677</b>	<b>667</b>
<b>Tax assessment value</b>		
Buildings	–	–
Land	–	–

The item 'Land and buildings' includes two properties: the head office in Stockholm and the cash provision office in the municipality of Sigtuna (Broby). The properties are classified as special units and are therefore not taxable.

Acquisitions in 2017 include IT applications of SEK 42 million (39).

The item 'Book value, machinery and equipment' includes intangible fixed assets in the form of application systems in an amount of SEK 145 million (122).

**Note 7 Financial assets**

	31.12.2017	31.12.2016
<b>Shares and participations</b>		
Bank for International Settlements		
17 244 shares at a par value of SDR 5,000, of which 25% are paid up	441	441
European Central Bank		
Value of participation EUR 9,226,559.46	80	80
Swift		
16 shares at a par value of EUR 125	1	1
<b>Total</b>	<b>522</b>	<b>522</b>

Central banks in the European System of Central Banks (ESCB) that are not part of the euro system are obliged to pay in 3.75 per cent of their capital subscription in the ECB. The Riksbank's capital subscription amounts to 2.2729 per cent and the ECB's total subscribed capital amounts to EUR 10 825 007 069.61. The capital subscription is based on the respective country's GDP and number of inhabitants and is calculated every fifth year. The subscription paid is to cover some administration costs of participation in the ESCB. Central banks in the ESCB that are not included in the euro system are not entitled to any allocation of profit from the ECB, and have no obligation to cover any losses in the ECB.

At 1 January 2014, the latest adjustment was made to Riksbank's capital subscription and subscription amount due to the capital keys being updated, which takes place once every five years. Following this adjustment, the Riksbank's capital subscription is thus 2.2729 per cent and the paid-up subscription amount is EUR 9 226 559.46.

**Note 8 Derivative instruments**

Derivative instrument groups with a positive value are reported under this item.

**Note 9 Prepaid expenses and accrued income**

	31.12.2017	31.12.2016
Receivables from the IMF	33	10
Bank accounts and bank lending	0	0
Reverse repurchase agreements	3	4
Bonds in foreign currency	2,469	2,808
Derivative instruments	–	–
Bonds in Swedish kronor	3,813	3,423
Fine-tuning operations	1	2
Debt certificates issued	60	9
Other	12	12
<b>Total</b>	<b>6,391</b>	<b>6,268</b>

**Note 10 Other assets**

	31.12.2017	31.12.2016
Staff loans	196	250
Accounts receivable	2	3
VAT recoverable	5	8
Balances with banks	14	4
Other	0	0
<b>Total</b>	<b>217</b>	<b>265</b>

**Note 11 Banknotes**

Value of banknotes in circulation, by denomination

	31.12.2017	31.12.2016
1,000 krona	3,494	3,299
500 krona	33,943	37,940
200 krona	6,243	6,513
100 krona	3,008	5,171
50 krona	981	988
20 krona	1,014	1,032
Invalid banknotes	6,532	2,592
<b>Total</b>	<b>55,215</b>	<b>57,535</b>

The item 'Invalid banknotes' contains banknotes in circulation that ceased to be legal tender at the end of 2013, in June 2016 and in June 2017. Banknotes that have been invalid for more than ten years are normally written off from the liability for banknotes in circulation. At the same time, a provision is made for the outstanding amount that is expected to be redeemed, and the remainder is recognised as income. The Riksbank may redeem invalid banknotes if there are particular grounds.

**Note 12 Coins**

Value of coins in circulation, by denomination

	31.12.2017	31.12.2016
10 krona	2,101	2,320
5 krona	332	1,191
2 krona	182	61
1 krona	129	1,249
Commemorative coins	29	37
<b>Total</b>	<b>2,773</b>	<b>4,858</b>

At the beginning of December 2017, the items 1, 2 and 5 krona were written off by a total of SEK 1 299 million following the Riksbank's decision that, after 30 November 2017, it would no longer redeem the coins that became invalid after 30 June 2017. An equivalent amount was recorded in 'Other income' (see Note 33).



In 2017 the item ‘Commemorative coins’ was also written off by SEK 5 million (21) referring to issues of commemorative coins that are older than ten years, which was recorded in ‘Other income’, see Note 33.

### **Note 13 Deposit facility**

Overnight deposits from the banks in their RIX accounts at the Riksbank are reported here.

### **Note 14 Fine-tuning operations**

This item is used to report deposits for the purpose of fine tuning liquidity in the financial system.

### **Note 15 Debt certificates issued**

This item is used to report the Riksbank’s issuance of debt certificates aimed at absorbing liquidity from the financial system. These deposits are done at the Riksbank’s most important policy rate, the repo rate, as a rule with a maturity of one week.

### **Note 16 Liabilities to residents outside Sweden denominated in Swedish kronor**

Accounts in Swedish kronor that the Riksbank holds on behalf of other central banks and international organisations are reported here.

### **Note 17 Liabilities to residents in Sweden denominated in foreign currency**

As of June 2009, deposits of foreign currency from the Swedish National Debt Office are reported under this item. The deposits were for the purpose of strengthening the foreign currency reserve. The distribution of foreign currency deposits is shown in the following table.

	31.12.2017	31.12.2016
Euro	53,938	52,514
US dollars	183,967	204,209
Total	237,905	256,723

### **Note 18 Liabilities to residents outside Sweden denominated in foreign currency**

Amounts corresponding to purchase amounts in foreign currency for deposit repos are recorded under this item.

The distribution of foreign currency deposits is shown in the following table.

	31.12.2017	31.12.2016
US dollars	3,481	11,264
Total	3,481	11,264

**Note 19 Counterpart of Special Drawing Rights allocated by the IMF**

The Riksbank's liability corresponding to the Special Drawing Rights (SDR) originally allocated by the IMF is reported here. The total allocation is SDR 2,249 million (2,249). The current holding of SDR amounts to SDR 2,059 million (1,992) and is reported under the item 'Receivables from the IMF' (see Note 2).

**Note 20 Derivative instruments**

	31.12.2017	31.12.2016
Foreign exchange forwards, USD	-18	-7
Foreign exchange forwards, NOK	19	17
	1	10
Foreign exchange swaps, USD	50	832
Foreign exchange swaps, NOK	477	68
	527	900
<b>Total</b>	<b>528</b>	<b>910</b>

The table above shows the valuation of the Riksbank's derivative instruments broken down by instrument group and currency.

The purpose of outstanding foreign exchange swaps is primarily to convert part of the Riksbank's exposure in US dollars to exposure to Norwegian kronor.

The nominal amounts of the derivative contracts, translated into SEK, are shown in the table below.

	31.12.2017	31.12.2016
Foreign exchange forwards, USD	774	1,002
Foreign exchange forwards, NOK	-773	-992
	1	10
Foreign exchange swaps, USD	22,706	23,388
Foreign exchange swaps, NOK	-22,179	-22,488
	527	900
<b>Total</b>	<b>528</b>	<b>910</b>

**Note 21 Accrued expenses and prepaid income**

	31.12.2017	31.12.2016
Fine-tuning operations	–	–
Debt certificates issued	–	–
Deposit repos	2	4
Derivative instruments	47	7
Deposits, Swedish National Debt Office	1,440	1,316
Counterpart of Special Drawing Rights	32	10
Other	63	87
<b>Total</b>	<b>1,584</b>	<b>1,424</b>

**Note 22 Other liabilities**

	31.12.2017	31.12.2016
Accounts payable – trade	23	19
Other	16	18
<b>Total</b>	<b>39</b>	<b>37</b>

**Note 23 Provisions**

	31.12,2017	31.12.2016
Pension provision	82	71
Banknotes and commemorative coins	415	432
Job Security Foundation	1	0
<b>Total</b>	<b>498</b>	<b>503</b>

The pension provision has been calculated by the National Government Employee Pensions Board (SPV). SEK 81 million (69) refers to PA-91 pensioners with a date of retirement prior to 2003, and SEK 1 million (2) refers to persons who have been granted a partial pension from 2003 onwards or pension compensation prior to the age of 65. As at 31 December 2002 the Riksbank redeemed its pension provision for those persons who on that date were employed by or were entitled to annuity from the Riksbank. As of 2017, the pension provision also includes special payroll tax of SEK 16 million. In 2016, the special payroll tax of SEK 17 million was recorded in ‘Accrued expenses and prepaid income’.

The item ‘Provisions’ also includes SEK 415 million (432) for the estimated future cost of banknotes and commemorative coins written off that the Riksbank still may redeem.

The item ‘Job Security Foundation’ refers to provisions for professional development and competence exchange in accordance with an agreement with the Job Security Foundation.

**Note 24 Revaluation accounts**

	31.12.2017	31.12.2016
Price effect	10,114	12,431
Exchange rate effect	14,916	17,267
Gold value effect	31,393	30,615
<b>Total</b>	<b>56,423</b>	<b>60,313</b>

With effect from 2004, unrealised gains and losses are reported in special revaluation accounts, which consist of the difference between the cost of acquisition value and the market value. At the transition to 2004 it was decided that the cost of acquisition values should correspond to the market values as at 31 December 2003. If the unrealised losses exceed the unrealised gains at the end of the year, the difference is reported in the profit and loss account. This calculation is made security by security and currency by currency.

The price effect consists mainly of unrealised securities gains. When calculating the Riksbank's allocation of profit, the reported profit is adjusted by the difference between the opening and closing value in the price effect.

Exchange rate effects are shown in the following table.

	31.12.2017	31.12.2016
Euro	9,881	7,757
US dollars	385	2,225
Pounds sterling	759	1,010
Australian dollars	1,984	2,582
Canadian dollars	891	1,424
Special Drawing Rights	191	191
Norwegian kroner	825	2,078
Japanese yen	0	0
<b>Total</b>	<b>14,916</b>	<b>17,267</b>

**Note 25 Capital**

The Sveriges Riksbank Act states that the Riksbank shall have capital in an amount of SEK 1 000 million.

**Note 26 Reserves**

	31.12.2017	31.12.2016
Reserve fund	500	500
Contingency fund	35,571	31,798
Balancing fund	18,790	18,053
<b>Total</b>	<b>54,861</b>	<b>50,351</b>

The Sveriges Riksbank Act states that the Riksbank shall have a reserve fund amounting to SEK 500 million and a contingency fund.

The contingency fund and the balancing fund have been used since 1988, according to guidelines for the 'allocation of the Riksbank's profit adopted that year. The contingency fund has also been used for entering the amounts

of asset write-ups. The Riksbank's gold reserve was written up to market value on 31 December 1998 and fixed assets were capitalised in the balance sheet in 1994 at cost of acquisition less depreciation. In 2017 a reposting was made of SEK 2 million (39) from the sub-item 'Write-up of fixed assets' to 'Allocation of profit', due to the year's depreciation of the written-up assets. The value of the BIS shares was written up in 1996 to correspond to the market value of the gold used as payment for the share allocation in that year.

The above-mentioned allocations and write-ups are shown in the table below.

	31.12.2017	31.12.2016
<i>Allocation of profit:</i>		
Exchange rate effect	1,312	-2,144
Gold value effect	7,356	7,356
Other allocation of profit	18,012	17,693
<i>Write-up of assets:</i>		
Gold reserve	8,604	8,604
Fixed assets	52	54
BIS shares	235	235
<b>Total</b>	<b>35,571</b>	<b>31,798</b>

The change in the items 'Capital', 'Reserves' and 'Profit for the year' is explained in the table below.

	Capital	Reserves	Result for the year
Balance, 31 December 2015	1,000	51,197	1,954
Transfer to the Treasury	-	-	-2,800
<i>Transfer to/from:</i>			
Balancing fund	-	-2,016	2,016
Contingency fund	-	1,170	-1,170
Result for the year	-	-	7,010
Balance, 31 December 2016	1,000	50,351	7 010
Transfer to the Treasury	-	-	-2,500
<i>Transfer to/from:</i>			
Balancing fund	-	737	-737
Contingency fund	-	3,773	-3,773
Result for the year	-	-	3,926
Balance, 31 December 2017	1,000	54,861	3,926

**Note 27 Interest income**

	2017	2016
<i>From foreign assets:</i>		
SDR	124	20
Reserve position in the IMF	2	0
NAB (New Arrangements to Borrow)	18	4
Bank accounts	2	12
Bank lending	86	38
Reverse repurchase agreements	19	16
Bonds	3,611	3,701
Short-term securities	1	18
Derivative instruments	0	20
	3,863	3,829
<i>From domestic assets and liabilities:</i>		
Fine-tuning operations	–	–
Marginal lending facility	2	2
Bonds	0	409
Other	2	24
Staff loans	3	4
Negative interest fine-tuning operations	504	559
Negative interest debt certificates issued	1,641	1,002
	2,152	2,000
Total	6,015	5,829

**Note 28 Interest expense**

<i>From foreign liabilities:</i>		
Deposits, Swedish National Debt Office	–2,755	–2,397
Deposit repos	–15	–11
Counterpart of Special Drawing Rights	–138	–23
Derivative instruments	–113	–
	–3,021	–2,431
<i>From domestic liabilities:</i>		
Bonds	–70	–
Fine-tuning operations	–	–
Debt certificates issued	–	–
Deposit repos	–	–
Bank accounts	–	–
Cash depots	–	–
	–70	–
Total	–3,091	–2,431

**Note 29 Net result of financial transactions and write-downs**

	2017	2016
Price effect	-16	696
Exchange rate effect	337	3,456
Gold value effect	0	-
<b>Total</b>	<b>321</b>	<b>4,152</b>

The price effect consists of realised gains and losses on securities of SEK 830 million (1 904) and unrealised losses on securities of SEK -846 million (-1 208), which have been transferred to profit and loss due to write-down of the securities holding.

The exchange rate effect includes realised exchange rate gains and exchange rate losses of SEK 337 million (3 456) that were recognised in the profit for the year due to write-down of the foreign currency holding. When calculating the Riksbank's allocation of profit, the exchange rate effect is excluded from reported profit.

**Note 30 Fees and commissions income**

The item includes annual and transaction charges for the RIX system of SEK 79 million (53).

**Note 31 Fees and commissions expense**

The item mainly consists of custody fees and transaction costs for management of the foreign currency reserve.

**Note 32 Dividends received**

In 2017, the Riksbank received a dividend from the BIS of SEK 62 million (44).

**Note 33 Other income**

	2017	2016
Reimbursement for the redemption of invalid banknotes	5	4
Unredeemed cash received	24	2
Reimbursement for discoloured banknotes etc.	0	0
Coins written off	1,299	-
Sold for scrap	86	18
Banknotes written off	-	241
Commemorative banknotes written off	-	2
Commemorative coins written off	5	21
Sida (Swedish International Development Cooperation Agency)	4	4
Other	4	1
<b>Total</b>	<b>1,427</b>	<b>293</b>

At the beginning of December 2017, the items 1, 2 and 5 krona were written off by a total of SEK 1 299 million following the Riksbank's decision that, after 30 November 2017, it would no longer redeem the coins that became invalid after 30 June 2017. The coins that became invalid in 2017, and which were returned to the Riksbank, are sold for metal recycling (sold for scrap). In 2017 sales were SEK 86 million (18), and will continue in 2018. In 2016 banknotes in circulation that have been invalid for over 10 years were written off by SEK 669 million, of which SEK 241 million was recorded as income and SEK 428 million as a provision. In 2017 the item 'Coins in circulation' was also written off by SEK 5 million (21) referring to issues of commemorative coins in circulation that are older than ten years.

The income from Sida refers to remuneration for technical assistance to central banks in some developing countries (see the box 'International commitments').

### Note 34 Staff costs

	2017	2016
Salaries and benefits	-242	-243
Salary recorded as assets	1	1
Social security contributions	-76	-77
	-317	-319
Pension premiums	-54	-50
Pension payments	-9	-10
Change in pension provision	6	9
Special payroll tax	-15	-15
	-72	-66
Training	-4	-6
Staff representation	-2	-2
Other	-8	-10
	-14	-18
<b>Total</b>	<b>-403</b>	<b>-403</b>

Pension premiums were paid in accordance with pension agreements for central government employees and others, PA 03 and PA-91.

The item 'Pension payments' refers to payments to pensioners retiring before 2003, and to persons who have been granted a partial pension from 2003 onwards or who have been granted a pension before the age of 65.

Staff representation expenses of SEK 1.9 million (1.7) refer to costs for board, lodging and activities in connection with internal courses, conferences, staff parties and information meetings.

Salaries and benefits to the members of the Executive Board in 2017 amounted to SEK 13.7 million, broken down as follows:



	2017	2016
Stefan Ingves	2.0	2.1
Kerstin af Jochnick	2.3	2.3
Martin Flodén	2.4	2.2
Per Jansson	2.3	2.3
Cecilia Skingsley	2.4	2.3
Henry Ohlsson	2.3	2.3
Total	13.7	13.5

In addition, the Governor of the Riksbank received a board fee in 2017 of SEK 0.9 million (0.6) from the Bank for International Settlements (BIS). In accordance with a decision of the General Council a deduction is made from the gross salary of the Governor of the Riksbank corresponding to the amount of the board fee from BIS.

The General Council decided on 28 October 2011 that during the statutory qualification period, members of the Executive Board shall receive a full salary for a maximum period of six months following the end of employment. However, deduction will be made for any income from other employment during this period.

The General Council has decided that the Ordinance on Severance Benefits for Certain Employees employed as Senior Government Officials (2003:55) shall be applied for all present Executive Board members.

The General Council has, however, decided on an exception for Stefan Ingves, such that if he receives a pension, before he turns 65 years of age, ensuing from the position he held with the IMF, which he had before he was appointed Governor of the Riksbank, there will be no reduction in the income guarantee. Neither shall the pension from the IMF involve any reduction in his salary, if the pension is paid out during the period in which he receives salary from the Riksbank.

Furthermore, under present arrangements, Stefan Ingves may also receive a pension from the BIS. This is paid to board members who have served on the board of the BIS for at least four years, but only when they have reached the age of 65. The pension is calculated on the basis of the board fees paid, amounting to 1.82 per cent of these fees.

The average number of employees (full-time equivalents, FTEs) in 2017 was 323 (336), of which 148 (149) women and 175 (187) men. The number of FTEs at the end of the year was 317 (320). Total sick leave in 2017 corresponded to 1.2 per cent (1.7 per cent) of employees' total working hours. Sick leave over a continuous period of 60 days or more in 2017 corresponded to 6.5 per cent (36.0 per cent) of total sick leave. Women's sick leave in relation to total regular working hours for women amounted in 2017 to 1.4 per cent (2.3), while the corresponding figure for men in 2017 was 0.9 per cent (1.3).

The table below shows sick leave for each age group in relation to the total regular working hours for the group.

	2017	2016
29 years or younger	1.6 %	1.7 %
30-49 years	1.0 %	1.5 %
50 years or older	1.3 %	2.1 %

### **Note 35 Administrative expenses**

	2017	2016
Information, representation	-18	-22
Transport, travel	-17	-15
Consulting assignments	-46	-42
Other external services	-111	-99
IT operations	-126	-120
Economics prize	-15	-13
Office and property maintenance	-42	-47
Other	-10	-10
<b>Total</b>	<b>-385</b>	<b>-368</b>

Information expenses include costs for the Riksbank's regular publications, such as the Monetary Policy Reports, the Financial Stability Reports and the Annual Report.

Representation expenses amounted to SEK 3.3 million (4.9).

The item 'Transport, travel' includes the cost of the Riksbank's transport of banknotes and coins as well as travel costs.

Consulting assignments amount to SEK 46 million (42). This amount includes the costs of IT consultants of SEK 23 million (16).

The cost of statistics deliveries of SEK 61 million (58) is the largest single item in 'Other external services'. It refers mainly to remuneration to Statistics Sweden for production of balance of payments statistics and financial market statistics. In addition audit fees to the Swedish National Audit Office and the General Council's auditors are included in the amount of SEK 2 million (2).

The 'IT operations' item includes licensing expenses of SEK 45 million (45) and IT services of SEK 78 million (71).

The 'Economics prize' item includes the prize sum of SEK 9 million (8) and administration costs for the prize of SEK 5.9 million (5.2).

The largest single items in the cost group 'Office and property maintenance' consist of refurbishment and maintenance of the Riksbank's premises of SEK 8 million (12), and rent of premises of SEK 7 million (7).

### **Note 36 Depreciation of tangible and intangible fixed assets**

This item is used to report scheduled depreciation of tangible and intangible fixed assets.

### Note 37 Banknote and coin expenses

Of the total cost of banknotes and coins of SEK 14 million (88), SEK 14 million (47) refers to circulation banknotes and SEK – million (41) to circulation coins. No commemorative coins were bought in 2017 (–).

### Note 38 Memorandum items

#### *Pledged assets*

At the close of 2017, securities equalling a market value of SEK 3 474 million were pledged in connection with foreign securities repos (11 228).

#### *Contingent liabilities*

Outstanding claims for compensation amounted to SEK 7 million (7) at the close of 2017.

Commitment to provide the Nobel Foundation with funds annually for the award of a prize in economic sciences in memory of Alfred Nobel and also administration expenses for this prize. This commitment amounted to SEK 14.9 million in 2017 (13.2).

A commitment to pay KPA Pensionsförsäkring AB supplementary compensation if so needed as a result of index-linking the pension benefits to which the insured is entitled. This commitment refers to personnel transferred from the Riksbank to AB Tumba Bruk (now Crane AB) in 1971.

#### *Contingent assets*

At the end of 2017 the Riksbank has no outstanding compensation claims (–).

#### *Lending and exchange commitments in relation to the IMF*

	31.12.2017	31.12.2016
Special Drawing Rights	54,772	58,223
Reserve position	50,281	53,184
GAB, NAB	23,441	24,256
Credit agreements	86,450	82,047
PRGT agreements	5,841	6,123
<b>Total</b>	<b>220,785</b>	<b>223,833</b>

The table above shows the Riksbank's remaining lending and exchange commitments under agreements in relation to the IMF in addition to what is reported on the balance sheet (see Note 2). The Riksbank's total commitment and utilised part of the commitment are shown below.

#### *Special Drawing Rights*

Under the IMF by-laws the commitment referring to Special Drawing Rights means that the Riksbank, through what is known as designation, may be obliged to buy Special Drawing Rights (SDR) in exchange for foreign

currency to such an amount that the Riksbank's total SDR holding is a maximum of 300 per cent of the ordinary allocation, i.e. 3 x SDR 2,249 million. This equals SEK 78,821 million (82,622). This commitment also includes the Riksbank's standing arrangement to, on the IMF's request, buy or sell SDR in exchange for payment in US dollars or euro within an interval of 50 to 150 per cent of the Riksbank's total net allocation of SDR. Because the Riksbank's SDR holding amounts to SEK 24 049 million (24 399), see Note 2, the outstanding commitment amounts to SEK 54 772 million (58 223).

### *Reserve position*

The commitment concerning the reserve position (capital contribution minus the IMF krona account) means that the Riksbank is obliged to exchange the balance in the IMF's krona account to foreign currency if the IMF needs such funds for lending to other countries.

At year-end the balance in the IMF's krona account was SEK 50 281 million (53 184), see Note 2.

### *GAB and NAB*

The commitment concerning GAB (General Arrangements to Borrow) and NAB (New Arrangements to Borrow) to provide the IMF with a credit facility means that the Riksbank is obliged to lend to the IMF an amount of up to SDR 2 256 million (2 256), which is equivalent to SEK 26 355 million (27 627). Because the Riksbank's NAB lending at year-end amounted to SEK 2 914 million (3 371), see Note 2, the outstanding commitment amounts to SEK 23 441 million (24 256).

These arrangements are only activated under special circumstances and are aimed at temporarily strengthening the IMF's lending capacity over and above the funds available under the capital contribution.

### *Credit agreement*

In April 2017 – after receiving the consent of the Riksdag – the Riksbank signed an agreement on credit to the IMF in the amount SDR 7 400 million. In order for the IMF to use the new agreement, the IMF's remaining funds for lending must be less than a lower limit of SDR 100 000 million. In addition, lenders that together hold 85 per cent of the committed loan resources must approve the activation of the agreements.

### *PRGT agreements*

In November 2016 the Riksbank entered an agreement regarding lending to the IMF to a maximum of SDR 500 million, equalling SEK 5 841 million (6 123), under a programme known as the Poverty Reduction and Growth Trust (PRGT). The funds which the Riksbank may lend in the context of the programme may be used by the IMF for lending to low income countries.

*Payment agreements*

A commitment to pay the BIS, three months after any demand, the remaining 75 per cent of the nominal amount of the Riksbank's shareholding in the BIS. This commitment amounted to SDR 65 million (65), equivalent to SEK 755 million (796) at the end of 2017.

*Deposit agreements*

BIS has issued a 'non-binding credit commitment', according to which BIS, upon the Riksbank's request and subject to a specific agreement, may lend foreign currency. This credit commitment was renewed in 2017 and is valid through 25 April 2018.

Agreement with BIS entailing that the Riksbank may, subject to a specific agreement, enter repurchase agreements with BIS regarding securities denominated in USD, EUR and GBP. This agreement was extended in 2017, and expires on 13 July 2018.

Swap agreement with the ECB implying that the Riksbank, subject to a specific agreement, may borrow euros in exchange for Swedish kronor.

## The profit and loss account and balance sheet by function

The table below shows the Riksbank's net income and expenses by function. The amounts are expressed in SEK million.

Function	2017			2016		
	Net income	Ex-penses	Results	Net income	Ex-penses	Results
Monetary policy	3	-185	-182	3	-185	-182
Financial stability	65	-181	-116	47	-191	-144
Payment system	79	-71	8	53	-65	-12
Cash provision	1,420	-191	1,229	288	-247	41
Asset management	3,216	-124	3,092	7,505	-118	7,387
Statistics	0	-93	-93	0	-90	-90
Economics prize and General Council, etc.	6	-18	-12	27	-17	10
<b>Total</b>	<b>4,789</b>	<b>-863</b>	<b>3,926</b>	<b>7,923</b>	<b>-913</b>	<b>7,010</b>

The breakdown should reflect as closely as possible the actual use of resources for each function. The principle used is for expenses and income to be allocated as far as possible directly to the respective function without use of any cost allocation key.

Payment system expenses are to be financed by fees from participants. Asset management is to generate a return that is as high as possible in relation to the task and the risk taken. For the other functions, there is no cost coverage requirement.

The allocation model is based on the format of the profit and loss account and the balance sheet, where the Riksbank's outcome for 2017 amounts to SEK 3,926 million (7,010) and assets and liabilities to SEK 869,637 million (844,812).

### Allocation of costs

#### *Staff costs, excluding IT personnel*

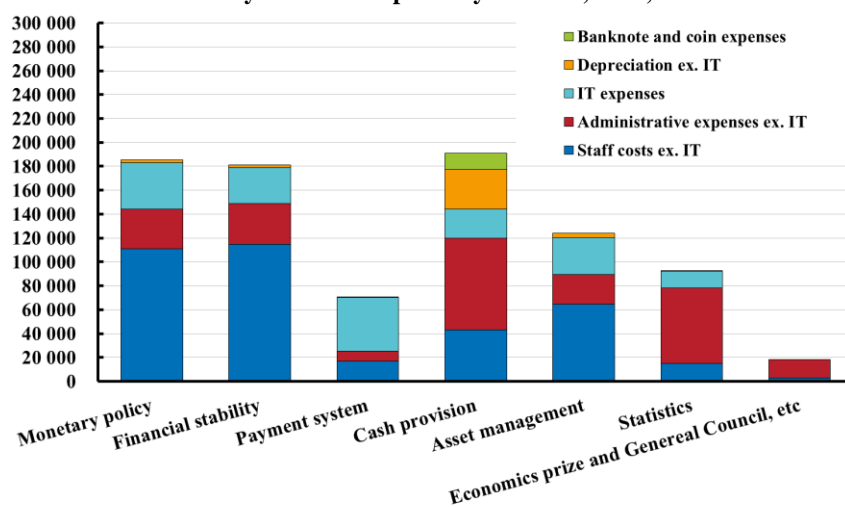
The actual payroll expense has been used when allocating staff costs for employees directly involved in a function. Payroll expenses for the employees included in the support functions have been allocated according to a cost allocation key. The most common key is the number of directly involved employees in relation to the total number of directly involved employees in all functions. Altogether about 210 employees, or 66 per cent of the total of 317, are directly involved in one of the functions. The other 107 employees are in support functions, mainly IT, communications and internal services.

### *Administrative expenses, excluding IT expenses*

The Riksbank's process accounting means that administrative expenses are directly allocated by function at the time of registration of invoices.

A large part of the Riksbank's costs are, however, common expenses, such as costs of premises, property maintenance, security and surveillance. These cannot be allocated directly but have been allocated using predefined keys, which usually consist of the number of employees directly involved per function in relation to the total number of directly involved employees in all functions.

**Chart 18 Allocation by nature of expense by function, 2017, SEK million**



Source: The Riksbank.

### *Depreciation, excluding IT-related investments*

Depreciation is directly allocated to the function which is supported by the respective facility or allocated on the basis of the number of directly involved employees per function in relation to the total number of directly involved employees.

### *Banknote and coin expenses*

Costs for purchasing banknotes and coins amounted to SEK 14 million (88) in 2017. The costs are allocated in their entirety to the Cash provision function.

### *IT expenses*

IT expenses refer to the costs of the IT operations. These operations are assigned to the Corporate Service Department. The model for allocation of IT expenses is primarily based on the following principles: Expenses for

workstations, data storage and basic systems are allocated on the basis of the number of directly involved employees per function in relation to the total number of directly involved employees in all functions. Expenses for application operation of business systems and server operation, and other IT expenses (staff, consultants, licences, etc.) are allocated on the basis of the fixed expense of the business system for application operation divided by the total fixed expense for application operation for all business systems. Depreciation for business systems belonging to one or more functions is allocated directly to each system.

### **Allocation of net income**

Allocation of net income by function has been done from an operational perspective. Income has been allocated to the function with the greatest potential to influence and manage it. Consequently, the fact that seigniorage derives from cash provision has not been taken into consideration. Instead, seigniorage income has been allocated to asset management. Seigniorage for 2017 amounted to SEK 145 million (560).

The net income in the Financial stability function mainly consists of dividend from the Riksbank's holding of BIS shares.

The net income for asset management reported in the profit and loss account amounted to SEK 3 216 million (7 505). Total return from the Riksbank's asset management for 2017 was SEK -674 million (24 445). See also table 6 in the 'Asset management' section of the Administration Report. The difference is explained by the change in the item 'Revaluation account in the balance sheet' (see table below).



	2017	2016
Interest income	6,010	5,801
Interest expense	-3,091	-2,431
Net result of financial transactions and write-downs reported in the profit and loss account	321	4,152
Fees and commissions expense	-24	-17
<b>Net income, asset management</b>	<b>3,216</b>	<b>7,505</b>
Net result of financial transactions reported in revaluation accounts in the balance sheet	-3,890	16,940
<b>Total return, asset management</b>	<b>-674</b>	<b>24,445</b>
Net interest earnings on administration	5	28
Income from administration	1,568	390
Cost of administration	-863	-913
<b>Profit/loss including income recognised in the balance sheet</b>	<b>36</b>	<b>23,950</b>
Reversal of income recognised in the balance sheet	3,890	-16,940
<b>Reported result</b>	<b>3,926</b>	<b>7,010</b>

Net interest earnings on administration in the table above consist of interest income from the Riksbank's staff loans of SEK 3 million (4) and loro interest income of SEK 2 million (24).

The net result of financial transactions reported in revaluation accounts in the balance sheet corresponds to the change during the year to the 'Revaluation accounts' item.

### Allocation of assets and liabilities

The table below shows the Riksbank's assets and liabilities by function in millions of kronor.

Function	31.12.2017		31.12.2016	
	Assets	Liabilities	Assets	Liabilities
Financial stability	441	-	441	-
Cash provision	-	58,403	-	62,825
Asset management	868,209	688,250	843,346	662,886
Unallocated	987	122,984	1,025	119,101
<b>Total</b>	<b>869,637</b>	<b>869,637</b>	<b>844,812</b>	<b>844,812</b>

The assets in the Financial stability function consist of the shareholding in the BIS. The unallocated assets mainly contain tangible and intangible fixed assets and other assets. The unallocated liabilities mainly contain equity, revaluation account and result for the year.

## Five-year overview

The five-year overview presents the balance sheet and profit and loss account restated according to current accounting policies. No restatement has been necessary for the last four years.

### Balance sheet

<i>SEK million</i>	<b>31.12.2017</b>	<b>31.12.2016</b>	<b>31.12.2015</b>	<b>31.12.2014</b>	<b>31.12.2013</b>
<b>ASSETS</b>					
<b>Gold</b>	43,190	42,412	36,241	37,529	31,425
<b>Claims on residents outside Sweden denominated in foreign currency</b>					
Receivables from the IMF	28,653	29,063	34,115	34,684	32,873
Balances with banks, loans and security investments	436,093	466,970	422,854	414,156	352,911
	464,746	496,033	456,969	448,840	385,784
<b>Lending to credit institutions in Sweden related to monetary policy operations denominated in Swedish kronor</b>					
Marginal lending facility	20	0	–	33	–
	20	0	–	33	–
<b>Securities of residents in Sweden denominated in Swedish kronor</b>					
	353,874	298,645	163,762	11,126	9,534
<b>Other assets</b>					
Tangible and intangible fixed assets	677	667	670	671	690
Financial assets	522	522	522	522	522
Derivative instruments	–	–	–	–	–
Prepaid expenses and accrued income	6,391	6,268	4,900	3,323	3,314
Other assets	217	265	317	357	358
	7,807	7,722	6,409	4,873	4,884
<b>TOTAL ASSETS</b>	<b>869,637</b>	<b>844,812</b>	<b>663,381</b>	<b>502,401</b>	<b>431,627</b>

	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
<b>LIABILITIES AND EQUITY</b>					
<b>Banknotes and coins in circulation</b>					
Banknotes	55,215	57,535	68,193	77,887	80,294
Coins	2,773	4,858	5,258	5,337	5,406
	57,988	62,393	73,451	83,224	85,700
<b>Liabilities to credit institutions in Sweden related to monetary policy operations denominated in Swedish kronor</b>					
Deposit facility	284	198	96	130	580
Fine-tuning operations	27,055	144,143	70,826	14,673	21,085
	27,339	144,341	70,922	14,803	21,665
<b>Debt certificates issued</b>	391,203	220,771	143,420	35,004	24,989
<b>Liabilities to residents outside Sweden denominated in Swedish kronor</b>					
	6,589	232	8,292	1,983	707
<b>Liabilities to residents in Sweden denominated in foreign currency</b>					
	237,905	256,723	240,537	228,331	193,117
<b>Liabilities to residents outside Sweden denominated in foreign currency</b>					
	3,481	11,264	–	–	–
<b>Counterpart of SDR allocated by the IMF</b>					
	26,273	27,540	26,310	25,504	22,265
<b>Other liabilities</b>					
Derivative instruments	528	910	1,619	2,905	197
Accrued expenses and prepaid income	1,584	1,424	1,174	1,063	763
Other liabilities	39	37	39	64	48
	2,151	2,371	2,832	4,032	1,008
<b>Provisions</b>	498	503	93	112	169
<b>Revaluation accounts</b>	56,423	60,313	43,373	53,111	25,677

	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
<b>Equity</b>					
Capital	1,000	1,000	1,000	1,000	1,000
Reserves	54,861	50,351	51,197	52,030	57,341
	55,861	51,351	52,197	53,030	58,341
<b>Result for the year</b>	3,926	7,010	1,954	3,267	-2,011
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>869,637</b>	<b>844,812</b>	<b>663,381</b>	<b>502,401</b>	<b>431,627</b>

### Profit and loss account

<i>SEK million</i>	2017	2016	2015	2014	2013
Interest income	6,015	5,829	4,936	4,193	4,113
Interest expense	-3,091	-2,431	-2,164	-1,761	-1,684
Net result of financial transactions and write-downs	321	4,152	-45	1,631	-3,784
Fees and commissions income	79	53	53	64	65
Fees and commissions expenses	-24	-17	-18	-15	-12
Dividends received	62	44	45	39	55
Other income	1,427	293	34	33	26
<b>Total net income</b>	<b>4,789</b>	<b>7,923</b>	<b>2,841</b>	<b>4,184</b>	<b>-1,221</b>
Staff costs	-403	-403	-379	-361	-375
Administrative expenses	-385	-368	-338	-322	-316
Depreciation of tangible and intangible fixed assets	-61	-54	-51	-62	-48
Banknote and coin expenses	-14	-88	-119	-172	-51
<b>Total expenses</b>	<b>-863</b>	<b>-913</b>	<b>-887</b>	<b>-917</b>	<b>-790</b>
<b>Result for the year</b>	<b>3,926</b>	<b>7,010</b>	<b>1,954</b>	<b>3,267</b>	<b>-2,011</b>

# INTERNAL CONTROL

The Executive Board is responsible for the Riksbank's activities and shall ensure that they are conducted efficiently and in accordance with applicable laws, that they are reported in a reliable and fair manner and that the Riksbank is economical with public finances. This is regulated in Chapter 9, Section 1 a of the Sveriges Riksbank Act. The Executive Board shall ensure that the requirements are met with reasonable certainty by ensuring that the Riksbank has a process for internal control that includes risk analysis, control measures, follow-up and documentation. In the Annual Report, the Executive Board shall present an assessment of whether internal control is considered satisfactory. This is regulated in Chapter 10, Section 3 of the Sveriges Riksbank Act.

## The Executive Board's assessment of the Riksbank's internal control

The Executive Board has assessed whether the Riksbank's internal control in 2017 has met the requirements in the Sveriges Riksbank Act and its conclusion is that the internal control is satisfactory.

Stockholm, 15 February 2018

Stefan Ingves  
Governor

Kerstin af Jochnick  
First Deputy Governor

Martin Flodén  
Deputy Governor

Per Jansson  
Deputy Governor

Henry Ohlsson  
Deputy Governor

Cecilia Skingsley  
Deputy Governor

ANNEX 1

## The departments of the Riksbank and their tasks

### **Cash and Payment Systems Department**

The Cash and Payment Systems Department is responsible for cash provision, the RIX payment system and the coordination of crisis preparedness in the central payment system.

### **Financial Stability Department**

The Financial Stability Department is responsible for analysing the stability and efficiency of the financial system. It provides a basis for the decisions made to fulfil the task of promoting a safe and efficient payment mechanism. The department regularly analyses the risks and threats to the stability of the Swedish financial system. In addition, it coordinates the Riksbank's international work.

### **Markets Department**

The Markets Department manages the Riksbank's gold and foreign currency assets. It administers and settles transactions in the management of the Riksbank's financial assets, and regularly evaluates and measures the results and risks in this management. The department conducts monetary and foreign exchange policy transactions in accordance with the monetary policy decisions. In addition, the department is responsible for the ongoing monitoring of the markets.

### **Monetary Policy Department**

The Monetary Policy Department is responsible for the economic analysis that provides a basis for the decisions made to meet the price stability target. The department monitors and analyses economic and price developments, and is responsible for financial market and balance of payments statistics. This department also contains the Riksbank's Research Division.

### **Corporate Services Department**

The Corporate Services Department is responsible for the Riksbank's work on IT support, personnel development and recruitment, procurement support, office and property services, transport, security, budget documentation, bookkeeping and payroll administration.

### **General Secretariat**

The General Secretariat coordinates day-to-day operations and supports the Executive Board's governance and control, as well as strategic development of the Bank's activities. The department also provides secretariat services for the General Council, the Executive Board and the Management Group. The General Secretariat coordinates the Riksbank's communications work and work on operational and financial risks. The department also contains functions for regulatory compliance assurance, business continuity coordination and legal support and the Riksbank's Communications Division.

### **Internal Audit Department**

The Internal Audit Department examines and assesses whether risk management and the governance and management processes fulfil their purpose with regard to the objectives established for the Riksbank's activities. The department also contributes to the effectiveness and improvement of these activities.

ANNEX 2

## Consultation work of the Riksbank

Every year, the Riksbank responds to a large number of consultation documents. All consultation responses from the Riksbank have been published on the Riksbank's website ([www.riksbank.se](http://www.riksbank.se)). The heads of department are responsible for handling consultation requests within the department's area of responsibility. The responsibility of the head of department includes providing background information for assessing whether a consultation response should be decided by the Executive Board or the head of department. If the response is to be decided by the Executive Board, the head of department shall present a draft consultation response to the Executive Board. Responsibility for overall coordination and administration of consultation work lies with the General Secretariat.

In 2017, the Riksbank answered 41 consultation responses, concerning, among other matters, supervision in the financial area and proposed measures to strengthen the stability of the financial system. Most consultation responses were issued by the head of the appropriate department.

### **The Executive Board's consultation responses**

Over the year, the Executive Board has responded to 7 consultation documents of special importance and in one case the General Council has also presented its own consultation response. The consultation responses are listed below:

- En översyn av överskottsmålet (SOU 2016:67) (A review of the surplus target)
- FI:s kapitalbedömningsmetod vid värdepapperisering inom pelare 2 (FI's Pillar 2 capital assessment method for systemic risk associated with securitisation)
- Betänkandet Skatt på finansiell verksamhet (SOU 2016:76) (Report: Financial activities tax)
- Promemorian Ett ökat avgiftsuttag till resolutionsreserven (Memorandum: An increased contribution to the resolution fund)
- Promemorian Ytterligare verktyg för makrotillsyn (Consultation response to the memorandum on further tools for macroprudential policy)
- Utkast till lagrådsremiss Riksbankens finansiella oberoende och balansräkning (Consultation response to the report on the Riksbank's financial independence and balance sheet)
- Förslag till ett skärpt amorteringskrav för hushåll med höga skuldkvoter (Proposal for tighter amortisation requirements for highly indebted households)

For information on the content of the responses, see the Riksbank's website.



ANNEX 3

## The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017

*The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for 2017 was awarded to Richard H Thaler for his contributions to behavioural economics. Thaler has developed the analysis of economic decision-making on well-founded psychological premises. By investigating the consequences of limited rationality, social preferences and a lack of self-control, he has demonstrated how these human characteristics govern both individual decision and outcomes on the market in a predictable way.*

The Sveriges Riksbank Prize in Economic Sciences was established in connection with the Riksbank's 300th anniversary in 1968. In making its donation, the Riksbank committed itself to giving the Nobel Foundation each year in perpetuity the prize money and an amount corresponding to 65 per cent of the prize money to cover the Foundation's expenses for administration and awarding the prize. The Government has established the statutes for the prize.

The prize is awarded every year to a person or persons who have produced work of outstanding importance in the field of economic sciences. The Royal Swedish Academy of Sciences selects the prize-winner(s) according to the same principles as for the Nobel Prizes. The prize amount is also the same. In 2017, the prize money amounted to 9 million Swedish kronor. This money is paid by the Riksbank. If there is more than one winner, the prize amount is shared equally between them.

The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel has been awarded every year since 1969. All of the previous laureates are listed on the Riksbank's website ([www.riksbank.se](http://www.riksbank.se)).

ANNEX 4

# Glossary

**Settlement**

Final regulation of debt when money or securities are transferred from one party to another, usually payment from one account to another.

**Basel III**

International regulatory framework for financial institutions that mainly regulates banks' capital adequacy, i.e. how much capital a bank must hold in relation to the risk it takes, and the way they manage liquidity.

**Basel Committee**

Global forum for cooperation on issues relating to bank supervision for supervisory authorities and other bodies responsible for financial stability work.

**Balance of payments**

Statistical report of a country's economic transactions with the rest of the world. Consists of the current account, capital account and financial account. The total is always zero, i.e. the payments are in balance.

**Retail payments council**

The Riksbank has established the retail payments council for the purpose of promoting the functioning of the Swedish market for payment services. The council is a forum for consultation and dialogue and its chairperson is Cecilia Skingsley. Members include both public authorities and private actors.

**BIS, Bank for International Settlements**

Coordinating body for central banks with its headquarters in Basel.

**GDP, Gross Domestic Product**

The value of all goods and services produced in a country to be used for consumption, exports and investment during a period, usually one year or one quarter.

**Leverage ratio**

A measure that specifies the bank's capital in relation to its total assets and off-balance-sheet commitments. The measure is used as a complement to the risk-based capital adequacy requirements.

**CCP, central counterparty**

Financial company that acts as an intermediary in financial transactions and assumes responsibility for ensuring that commitments are fulfilled.

**CPMI, Committee on Payments and Market Infrastructures**

A committee within the Bank for International Settlements (BIS) that was previously known as the Committee on Payment and Settlement Systems (CPSS).

**Derivative instruments**

Financial instrument that entails agreements on commitments, rights or other prerequisites at a given future point in time. The value of a derivative instrument is linked to an underlying asset. The most common derivative instruments are options, futures and swaps.

**EBA, European Banking Authority**

Authority that establishes joint regulatory and supervisory standards in the EU and conducts stress tests of European banks.

**ECB, European Central Bank**

Joint central bank for the EU Member States that have adopted the euro, with its head office in Frankfurt. The Bank's duties are stipulated in a statute that is part of the EU -Treaty.

**ECB General Council**

Consultative body within the European System of Central Banks (ECBS) consisting of the governors of all the EU central banks as well as the President and Vice President of the ECB.

**ESCB, the European System of Central Banks**

Forum for cooperation between the ECB and the national central banks in all the EU Member States.

**EFC, EU Economic and Financial Committee**

Advisory body to the ECOFIN Council and the European Commission. Monitors, among other things, economic and financial developments in the EU and the euro area.

**Ecofin Council**

The Ecofin Council consists of the economic and finance ministers of all EU countries and is responsible for economic policy, financial markets, movement of capital and economic links with countries outside the EU.

**ESRB, European Systemic Risk Board**

Independent EU body responsible for the macroprudential policy of the financial system within the EU.

**Euroclear Sweden**

Organisation that holds registers of almost all shares and debt securities traded in the Swedish financial markets. Also performs clearing and settlement of transactions with Swedish shares and debt securities.

**Eurosystem**

The Eurosystem consists of the ECB and the national central banks in the EU member states that have the euro as currency.

**Extraordinary measures**

Measures taken by the Riksbank during the financial crisis to help the banks gain access to liquidity, ease the workings of the money market and strengthen the impact of monetary policy on the economy.

**Financial markets**

Collective term for the markets where financial assets are bought and sold. The four most important markets are the foreign exchange market, the fixed income market, the stock market and the derivatives market.

**Financial Stability Council**

A discussion forum for matters of financial stability. Representatives of the Government, Finansinspektionen, the Swedish National Debt Office and the Riksbank participate in the Council. The Council meets regularly and discusses questions of financial stability and how imbalances can be counter-acted.

**Finansinspektionen (Swedish financial supervisory authority)**

Central government agency with the task of monitoring the activities of banks, credit market companies, securities companies, securities brokers, fund management companies, stock exchanges, authorised marketplaces, clearing organisations, insurance companies and insurance brokers.

**Riksdag Committee on Finance**

Parliamentary committee that prepares matters concerning economic issues, including the activities of the Riksbank and the central government budget.

**Fine-tuning transactions**

Transactions that the Riksbank uses to even out fluctuations in the banking system's loan or investment needs with the Riksbank. As a rule, these deposits are made overnight at an interest rate equal to the repo rate minus 0.10 percentage points.

**FSB, Financial Stability Board**

Coordinates the work of national authorities and international regulatory bodies in the field of financial stability.

**Main transactions**

Transactions at the repo rate that the Riksbank normally carries out each week. If the banking system has a need to deposit money, the Riksbank issues Riksbank Certificates. If the banking system instead needs to borrow money from the Riksbank, monetary policy repos or loans (against collateral) are used.

**IMF, International Monetary Fund**

International organisation that works to ensure the stability of the global financial system and to prevent international financial crises. Monitors and analyses the economic development of the 188 member countries, provides technical assistance and lends money to countries carrying out economic adjustment programmes.

**Inflation**

General price increases that lead to a reduction in the value of money, a situation when fewer goods and services can be bought for the same amount of money. Inflation is measured as the change in the CPI and CPIF, for example.

**Deposit facility**

See Standing facilities.

**IOSCO, International Organization of Securities Commissions**

An international organisation dealing with the oversight of securities.

**Cash Handling Advisory Board**

The Cash Handling Advisory Board was established by the Riksbank in 2006 and is headed up by First Deputy Governor Kerstin af Jochnick. The purpose of the council is to function as a forum for discussing issues concerning cash management in society. Besides the Riksbank, the Board is made up of representatives of banks, cash depot companies, cash-in-transit companies, the retail trade, trade unions and the authorities involved.

**CPI, Consumer Price Index**

Statistical measure of the price level. The CPI is calculated every month by Statistics Sweden (SCB).

**CPIF, the CPI with a fixed mortgage rate**

See CPI. Unlike the CPI, the CPIF is not directly affected by changes in mortgage rates.

**LCR, Liquidity Coverage Ratio**

Measure of a bank's ability to handle a liquidity outflow over a period of 30 days. In simple terms, an LCR of 100 per cent means that a bank's liquidity reserves are adequate to enable the bank to manage an unexpected liquidity outflow for 30 days without collapsing.

**Liquidity**

Measure of the ability of a company or organisation to meet its payment obligations in the short term. Also a measure of how quickly it is possible to convert an asset into money.

**Medieakademin**

Cooperation project between Göteborgs-Posten newspaper, the University of Gothenburg, Forsman & Bodenfors and TNS Gallup (formerly NFO Infratest) that investigates confidence in social institutions, individual companies and the mass media.

**Modified duration**

Measure of how sensitive the value of a debt security is to changes in the interest rate. Expressed as a percentage change in the price of the security if the interest rate falls or rises by one percentage point.

**Bond**

A fixed-interest debt instrument that can be issued by a government, municipality, credit market company, mortgage institution or large company. A bond has a maturity of at least one year.

**Monetary policy**

Measures adopted by a central bank to influence the development of the economy and to maintain price stability.

**Monetary policy repo**

Main transaction in which the Riksbank lends money by purchasing securities from monetary policy counterparties. At the same time, the Riksbank undertakes to sell back these securities on a set date at a slightly higher price, where the difference in price corresponds to the repo rate. The Riksbank then receives back the funds, and the securities are returned to the original owner.

**Monetary policy transactions**

The main, fine-tuning and structural transactions as well as standing facilities that the Riksbank uses to steer the overnight rate, the shortest market rate on the money market.

**Price stability**

Condition where the prices of goods and services increase only moderately or not at all. The price stability objective is defined as an increase in the CPIF of 2 per cent.

**Repo rate**

The Riksbank's most important policy rate, see Main transactions.

**Riksbank Certificates**

Main transaction, see the section Balance sheet and profit and loss account, note 15.

**Net interest income**

Interest income from lending less interest expenditure for funding and deposits.

**Interest rate swap**

See Swap agreement.

**Statistics Sweden**

Central administrative agency for official statistics and other government statistics in Sweden.

**Sharpe ratio**

Measures return per unit of risk. The measurement is calculated by dividing the return in excess of the risk-free rate by the return's standard deviation.

**Staff memo**

Publications for civil servants that include more detailed analyses of issues relevant to the Riksbank. These publications are to be free of policy conclusions and individual stances on current policy issues.

**Standard deviation**

Statistical measure that describes the extent to which the different values for a variable deviate from the mean value.

**Stress test**

Analysis of different scenarios to assess the resilience of banks, for example, to unexpected and negative events.

**Structural transactions**

Transactions that, as a rule, have longer maturities than main transactions and fine-tuning operations in order to meet longer-term financing requirements in the financial sector and to adjust the structural position of the Riksbank vis-à-vis the financial sector.

**Policy rates**

Interest rates that a central bank sets for monetary policy purposes.

**Standing facilities**

Banks and certain other financial participants may borrow money from or deposit money with the Riksbank overnight at the repo rate  $\pm 75$  basis points. The interest the counterparty receives when it deposits money with the Riksbank overnight is known as the Riksbank's deposit rate. Correspondingly, the counterparty pays the Riksbank's lending rate if the bank borrows funds from the Riksbank overnight.

**Swap agreement**

Bilateral agreement to exchange a specific currency or interest rate in return for another currency or interest rate for a predetermined period according to specific conditions.

**Covered bonds**

Bonds in which the bond holder has collateral in certain assets.

**Transmission mechanism**

The process through which monetary policy affects inflation and the economy in general. The process includes interest rate, credit and exchange rate channels.

**Banknotes and coins in circulation**

The total amount of banknotes and coins actually in circulation in society outside the Riksbank. A decrease of this amount means that the banks have returned banknotes and coins to the Riksbank and been paid for this via deposits in their accounts in the Riksbank's payment system RIX. The liabilities item banknotes and coins thereby decreases at the same time as the liabilities item in Swedish kronor to the Riksbank's counterparties (deposits via fine-tuning transactions or Riksbank Certificates) increases to a corresponding degree.

**Lending facility**

See Standing facilities.

**Currency swaps**

See Swap agreement.